

**Indian Medicines Pharmaceutical Corporation Ltd.****CORRIGENDUM -01****THE REVISED DATE OF SUBMISSION OF BIDS IS 27.05.2013 by 16:00 HRS.**

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

Sl.No.	Ref to Tender	Bidder's queries	MoHFW/HLL Clarifications
<b>1</b>			
1.1	General Instruction to Bidder, Clause-a. 2 Page-2	Please Clarify that Third Party Inspection cost is in Contractor Scope or HLL Scope.	The cost of Third Party Inspection if required shall be borne by the client.
1.2	Technical Specification for 500 KVA Silent DG Set ,Clause-2.3.4	Silencer shall be as per Engine manufacturer Standard. i.e. Hospital Grade.	The description under para 2.3.4 of Vol-III : Technical Specifications ,page no.23 under sub head 2.3 Exhaust System may be read as follows: <b>Hospital Grade Silencer.</b>
1.3	Technical Specification for 500 KVA Silent DG Set ,Clause-3.5	Alternator Insulation shall be Class H.	The description under para 3.5 of Vol-III : Technical Specifications ,page no.24 under sub head 3.0 Alternator:- mention make & model may be read as follows: <b>Alternator insulation: Class'H' with temperature rise limited to class 'H' insulation limit.</b>
1.4	Technical Specification for 500 KVA Silent DG Set ,Clause-5.1	700 Ltrs. Standard Daily Service Tank provided inside the enclosure, however separate 990 Ltrs External Day Tank will be provided as per BOQ Item No:Item no 5.3.	In the BOQ Item at Sr. No. 5.1 the capacity of Day Tank to be read as "700Ltrs" instead of "990 Ltrs"
1.5	Technical Specification for 500 KVA Silent DG Set ,Clause-8 A)	Generator Control Panel Shall be 2 Nos for 500 KVA DG Set instead of 3 Nos.	The description under para 8.1 A of Vol-III : Technical Specifications ,page no.26 under sub head 8.0 Control Panels for DG sets may be read as follows: <b>Generator Panel-2 Nos.(One each for two sets)</b>

1.6	Technical Specification for 500 KVA Silent DG Set ,Clause-12	Whether It is part of DG or not. If Yes than please Specify the distance from Alternator to LT Panel, Auxiliary Panel, & Synchronizing Panel for Cable measurement.	Control cables are part of DG sets . DG sets shall be installed in the DG set Area as shown in the site plan (attached) and Panels shall be placed suitably in the existing substation building.
1.7	BOQ Item No: 1.4 (e & f)	Rubber mat shall be as per latest IS 15652 - 2006.	Terms & conditions as per tender remain unchanged.
1.8	BOQ Item No: 2.1	Main LT Panel Board : Outgoing ACB (800A 4P) is MDO or EDO and type of release. Please confirm.	Outgoing ACB (800A 4P) shall be MDO type and microprocessor type release.
1.9	BOQ Item No: 2.2/2.3	KA rating and type of release of Incomer & Outgoing MCCB's. Metering is required or not in Incomer feeder. Please clarify.	Please refer Appendix-V Page-115 to 117,General Specifications for Electrical Works Part-IV Sub Stations-2007 of CPWD. Metering is not required in the incomer feeder.
1.10	BOQ Item No: 2.4	Busbar material is aluminium or copper. Please clarify	The existing LT panel has Aluminium Bus Bar.
1.11	BOQ Item No: 2.5	KA rating and type of release of Incomer MCCB(800A). Type of release of Outgoing MCCBs. Please clarify	Please refer Appendix-V Page-115 to 117,General Specifications for Electrical Works Part-IV Sub Stations-2007 of CPWD.
1.12	BOQ Item No: 7.5	KA rating and type of release of Incomer & outgoing MCCBs. Please clarify.	Please refer Appendix-V Page-115 to 117,General Specifications for Electrical Works Part-IV Sub Stations-2007 of CPWD.
1.13	BOQ Item No: 3.1	Please Confirm that all required cables are only Aluminium Conductor, Strip Armoured.	The description of BOQ Item no. 3.1 is modified as follows: <b>Supply of following sizes of XLPE/ PVC insulated Aluminum conductor strip/ wire Armoured, overall PVC sheathed 1.1 KV grade cables conforming to relevant IS code and technical specifications.</b>
1.14	BOQ Item No: 3.2.1	Whether Double Compression Gland or Single Compression Gland required, Please confirm.	The item shall be executed as per CPWD specifications .
1.15	BOQ Item No: 5.1	Anti vibration Pads Shall be as per manufacturer standard i.e. Cummins.	The description " <b>Gerb make antivibration pads</b> " under para 5.1 of Vol-IV :BOQ ,page no.18 under sub head 5 :DG & PANEL is modified as follows: <b>Anti vibration Pads shall be as per standards of approved manufacturers.</b>

1.16	BOQ Item No: 5.1	Internal Day Tank Shall be 700 Ltrs as per manufacturer standard.	Please refer reply at Sr. No.1.4
1.17	BOQ Item No: 5.1	Lockable doors shall be Steel Type.	Terms & conditions as per tender remain unchanged.
1.18	BOQ Item No: 5.1	Please confirm that all fuel piping are covered in the BOQ Item No:Item 5.4.	Terms & conditions as per tender remain unchanged.
1.19	BOQ Item No: 5.3	Thickness of Sheet shall be 2 mm. and also please confirm that PCC Foundation to be considered or not.	Terms & conditions as per tender remain unchanged.
1.20	BOQ Item No: 5.6	DG Synchronizing Scheme not cleared, whether Power Circuit Required or only Logic required for the DG set. For proper understanding Please Provide the Complete SLD.	Please refer revised SLD with Switchgear ratings.
		Please clear whether Al Busbar Required or Copper.	The Description " The Panel fabricator shall provide Al./Copper Bus-bars link from Breakers wherever more than two nos. of cables"under BOQ item No. 5.6,page no. 21 is modified as follows:" <b>The Panel fabricator shall provide Aluminium Bus-bars and Copper link from Breakers wherever more than two nos. of cables"</b>
		We offered PC 3.3 Controller for Synchronizing not Woodward controller.	The Description "Synchronising Module Easygen3200 with Woodward -2 Nos" under BOQ item No. 5.6 page no.21 is modified as follows:" <b>Controller for Synchronizing shall be acceptable as per standards of approved manufacturers."</b>
		Whether Individual Protection Required or inbuilt in PC 3.3 Controller.	Terms & conditions as per tender remain unchanged.
1.21	BOQ Item No: Item No: 1.2	Please confirm the Losses required for the transformer.	The relevant parameter is clearly specified in the BOQ.
1.22	Technical Specifications, 4.1.4	Please confirm Temp Rise- Whether (Wdg/Oil) 55/45 DegC or 50/40 DegC	The relevant parameter is clearly specified in the BOQ.
1.23	Technical Specifications, 4.1.8 & 4.5.14B	Required tapping range +5% to -15% in steps of 1.25% or +5% to -5% in steps of 2.5%.	The relevant parameter is clearly specified in the BOQ.

1.24	Technical Specifications, 4.5.14 & 4.5.14D	Required Taps ON Load or OFF Circuit	On Load Tap Changer is required
1.25	Technical Specifications, 4.2.2	Whether you require Cable Box for HV/LV Side or Bushings	Please refer clause 8.(Discrepancies and Adjustment of errors" at page no. 4, Section-1 "Conditions of Contract ". Other Terms & conditions as per tender remain unchanged.
1.26	GCC & SCC, Clause 37	Kindly confirm if IMPCL/HLL can issue form C for facilitating "Sale - in Transit".	No. Form C shall not be issued by client.
1.27	GCC & SCC, Clause 10B	We request you to waive off Interest on Advance paid to contractor.	Terms & conditions as per tender remain unchanged.
1.28	GCC & SCC, Clause 2	We request you to consider LD @ 0.5% per month subject to a maximum of 5% of unexecuted contract value.	Terms & conditions as per tender remain unchanged.
1.29	General Points	Please clarify whether approval of loads is in Contractor's scope or Client's scope	Terms & conditions as per tender remain unchanged.
1.30		Please clarify whether dismantling of existing works is in Contractor's scope or Client's scope	Please refer new item at Annexure-A.
<b>2</b>			
2.1	BOQ, Item No: 2.1	It is suggested that the 1600A bus-coupler be considered without protection release.	Terms & conditions as per tender remain unchanged.
		In Outgoing feeders, please specify breaking capacity required for 630A/ 800A MCCB to be either 50KA or 65KA.	Please refer Appendix-V Page-115 to 117,General Specifications for Electrical Works Part-IV Sub Stations-2007 of CPWD.
		Please specify Breaking capacity & type of release required for 800A Outgoing ACB.	Please refer Appendix-V Page-115 to 117,General Specifications for Electrical Works Part-IV Sub Stations-2007 of CPWD.
		The depth of 1000mm for Main Panel is less for housing 1600A breakers & bus bar. It is suggested that the same may be increased to 1200mm.	The panel shall have 1000mm depth(minimum) .
		Please mention breaking capacity & type of release required for all MCCB's.	Please refer Appendix-V Page-115 to 117,General Specifications for Electrical Works Part-IV Sub Stations-2007 of CPWD.

2.2	BOQ, Item No: 2.2 & 2.3	It is suggested that the rating of 163A MCCB be converted to 160A as 163A breakers are not available in the manufacturing range of any of the switchgear manufacturers	The Description "Moulded Case Circuit Breaker(MCCB) ,163A, 4P " under BOQ item No. 2.2(b & c) and 2.3(b) at page no.12 is modified as follows:" <b>Moulded Case Circuit Breaker(MCCB) ,160A, 4P "</b> .
2.3	BOQ, Item No: 2.4	Please specify the breaking capacity of ACB as either 50 KA or 65 KA.	Please refer Appendix-V Page-115 to 117,General Specifications for Electrical Works Part-IV Sub Stations-2007 of CPWD.
2.4	BOQ, Item No: 2.5	Please specify the capacitors required should be MPPH or CLMD type	Terms & conditions as per tender remain unchanged.
		BOQ is asking for Copper bus bars whereas item no. c) i is asking for 800A Aluminium bus bar. Please clarify which type of bus bar is required.	Description of BOQ item at Sr. no. 2.5 under sub Head CAPACITOR PANEL ,page no.13 of Vol-IV BOQ is modified as follows:"Supply Erection, testing, and commissioning of 350 KVAR Automatic Power Factor correction capacitor panel with MPPH /CLMD Series capacitors 350 KVAR in ratio of (1*100+3*50+4*25) and 800 A Switch MCCB as incomer Auto / Manual option type with metering selector switch, indicating light set, fuse internal wiring with suitable capacity of <b>copper wires</b> , front and back openable with hinges & lockable. The Switch shall be completed with cable end boxes, reserve entry boxes, cables lead lug socket compression cable gland of cable size etc.
2.4		Incomer MCCB is 800A TPN, please specify that the same should be TP MCCB with solid N Link.	The Description " INCOMER 1 No. 800A TPN MCCB" under BOQ item No. 2.5(a) i) at page no. 13 is modified as" <b>INCOMER 1No. 800A 4P MCCB"</b>
2.5	BOQ, Item No: 7.5.1/7.5.2/7.5.3/7.5.4	Please mention breaking capacity & type of release required for all MCCB's.	Please refer Appendix-V Page-115 to 117,General Specifications for Electrical Works Part-IV Sub Stations-2007 of CPWD.
2.6	Technical Specifications (List of Approved makes)	Bus Trunking/ L.T panel/ APFC Panel - ASPL make should be read as "Associated Switchgears & Projects Ltd."	Terms & conditions as per tender remain unchanged.
		Capacitors - Apcos make should be read as Epcos.	Terms & conditions as per tender remain unchanged.

<b>3</b>			
3.1	BOQ, Item No: 2.2 & 2.3	KA rating and type of release of incomer & outgoing MCCB , metering is required or not in incomer.	Please refer Appendix-V Page-115 to 117,General Specifications for Electrical Works Part-IV Sub Stations-2007 of CPWD. Metering is not required at Sub Panel 1 & 2 incomer.
3.2	BOQ, Item No: 2.4	Bus bar material is aluminium or copper	The existing LT panel has Aluminium Bus Bar.
3.3	BOQ, Item No: 2.5	KA rating and type of release of incomer MCCB (800A). Type of release of outgiong	Please refer Appendix-V Page-115 to 117,General Specifications for Electrical Works Part-IV Sub Stations-2007 of CPWD. Type of Microprocessor based release.
3.4	BOQ, Item No: 7.5.1/7.5.2/7.5.3/7.5.4	KA rating and type of release of incomer . Type of release of outgiong	Please refer Appendix-V Page-115 to 117,General Specifications for Electrical Works Part-IV Sub Stations-2007 of CPWD. Type of Microprocessor based release.
3.5	BOQ Item No: 5.1	We are quoting insulation class H - H. Insulation class F - F generally used in HT DG sets and for LT DG set Insulation class H - H generally applicable.	The description under para 3.5 of Vol-III : Technical Specifications ,page no.24 under sub head 3.0 Alternator:- mention make & model may be read as follows: <b>Alternator insulation: Class'H' with temperature rise limited to class 'H' insulation limit.</b>
			The Description of BOQ item at Sr. No. 1.2 Distribution Transformer , page no. 5 is modified as "Supply, installation, testing and commissioning of Oil type , 1000 KVA, 11 KV/433V, 3 phase, 50 HZ, outdoor type , Distribution Transformer conforming to IS:2026 & IEC:726 & as detailed below . The Transformer shall follow Green House requirement for Energy Efficiency and Low Power Losses. The Efficiency of the Transformer shall be more than 98.2% & Impedance Voltage(%Z) shall be less than 5%
		IS:11171 is applicable for dry tvpe transformer	

3.6	BOQ Item No: 1.2	whereas IS:2026 is applied on OIL type , since in boq OIL type transformer is required IS 2026 should be applicable. Loss as per ECBC Norms.	11/0.433 KV, 1000 KVA, 3 phase, Oil type, Copper wound, Dyn11 having on load tap changer in the range of + 5% to -15% in steps +/-1.25%, impedance of 4.50 to 5%, HT side cable box suitable upto 11 KV, 3Cx185 sq mm XLPE cable, LT side cable box suitable suitable for 5 runs of 1.1 KV Grade 3.5 C x 300 sq mm conforming to IS 2026 etc. complete as required the temperature rise shall not exceed the limit of 55 degree centigrade ( measured by resistance) for T/F winding and 45 degree centigrade measured by thermometer when tested in accordance with IS: 2026.on suitable foundation as per direction of engineer incharge. The Transformer shall conform to ECBC/GRIHA Guidelines with respect to losses etc.
3.7	HT Panel BOQ Item No. 1.1	Is this is an RMU or HT panel with 1 incoming + 3 outgoing board.	Please refer revised BOQ item no.1.1 for HT panel at attached Annexure-A.
3.8	HT Panel BOQ Item No. 1.1	The breker should be VCB type instead of SF6 as only ABB/Schneider manufactures SF6 .As per List of make only Ambit is approved as a channel partner, Kindly approve Adlec, Sterling Powergen,Advance also for the same.	Please refer revised BOQ item no.1.1 for HT panel at attached Annexure-A. .Other Terms & conditions as per tender remain unchanged.
3.9	HT Cable BOQ Item No. 1.3	HT cable should be Earth type as availability for such a small quantity is very difficult for unearth cable.	In the BOQ item Description "11KV(UE)" is modified as "11KV(E)".
3.10	UPS Boq item no. 7.6	Specification not given.	Please refer Technical Specifications attached at Annexure-B .

3.11	OIL filtering machine Boq item no. 1.2	Details and Specification not given.	Please refer reply at Sr. No.3.6 above.
3.12	Approval.Clause no 5 of Sec -3 of ITB	We assume only electrical inspector approval for electrical related work should be in electrical Contractor scope.Liassing for Load enhancement is in client scope, Kindly clarify	Terms & conditions as per tender remain unchanged.
3.13	Performance BG 2.3.14 of ITB	It should be valid for execution period of 6 month.	Terms & conditions as per tender remain unchanged.
3.14	Dismantelling work.1 of Tech Specs	Kindy quantify the work to be done.	Please refer BOQ item for Dismantling at attached Annexure-A.
3.15	Mobilization Advance.10 b of GCC	We request you to realease mobilization advance 10 % of CV in one instalment without intrest.	Terms & conditions as per tender remain unchanged.
3.16	LD.1.25.1 of NIT	0.5% per month to max of 5 % of CV	Terms & conditions as per tender remain unchanged.
3.17	DG and Transformer	The foundation of DG and Transformr will be in civil contractor scope or Electrical contractor scope Kindly clarify	Terms & conditions as per tender remain unchanged.
3.18	LT Panel:Make List	Kindly approved the name of STERLING AND WILSON as LT and HT panel manufacturer.	Terms & conditions as per tender remain unchanged.
3.19	LT cable:Boq item no.3	Supply of XLPE/ PVC insulated ,Aluminium or Copper Conductor, Strip / Wire Armoured.Kindly clarify	The description of BOQ item at Sr. No. 3 (3.1-NSR) Sub Head "LT Cable & Terminations" is modified as " <b>Supply of following sizes of XLPE/ PVC insulated Aluminum conductor strip/ wire Armoured, overall PVC sheathed 1.1 KV grade cables conforming to relevant</b>
3.20	LT cable Tremination:Boq item no.3.2.1	Gland should be Double Compression or single compression Plz Clarify.	Terms & conditions as per tender remain unchanged.
3.21	Earthing:Boq item no.4.1 and 4.2	Watering Pipe Should be 25 mm/ 40 mm Size Plz Clarify	Terms & conditions as per tender remain unchanged.
3.22	AMF panel:Boq item no.5.6	Only Logic is Given.Switchgear Rating is not given.	Please refer revised SLD with switchgears ratings.

3.23	SCC:Clause 31 of SCC pg 54	<p>1. We presume that only new installation work which include , HT panle , 2 nos Txmer, Two DG sets , LT panels and certain cabling needs to be operated as entire system and equipments.</p> <p>2 . plz clarify the no of hours DG needs to be operated as SEB supply is already available.</p>	Terms & conditions as per tender remain unchanged.
3.24	Capacitor panel:Boq item no.2.5	Plz clarify the type of capacitor whether MPPH / CLMD type.	Terms & conditions as per tender remain unchanged.
3.25	HT Termination:Boq item no.2.5	Plz clarify as cable size and termination description is not matching for HT 3cx 185 sq mm cable.	Terms & conditions as per tender remain unchanged.
3.26		<p>We request for extension of tender submission date with respect to following issues faced currently:-</p> <p>1) We are waiting for reply of queries raised by us and other contractors the response to our technical queries will be forwarded to vendors for incorporating in their offers. We need additional time for getting vendor offers after receipt of clarifications.</p> <p>2) Also on all major items we require more time to evaluate and compile our offer since all quotations are not yet received to enable us offer a competitive quote to you. Vendor response on certain technical aspects is still awaited.</p> <p>We once again request you to grant us time extension till 31 May 2013 to enable us submit a competitive bid.</p>	<p><b>THE REVISED DATE OF SUBMISSION OF BIDS IS 27.05.2013 by 16:00 HRS.</b></p>

<b>4</b>			
4.1	BOQ Item No:1.1	Cable termination should be from back instead of front.	As per standards of approved manufacturers
		As it is HT Panel & not RMU, load break switch specified may be deleted.	Please refer revised BOQ item no.1.1 for HT panel at attached Annexure-A and its Technical specifications at Annexure-B.
		CT Ratio for incomers & outgoings should be 120/5 A & 40/5 A as per manufacturing practice instead of 120/1 A & 40/1 A.	
		Please clarify that PT is required only with incomer & not with outgoing since it is not clear from BOQ.	
		We are of the view that SF6 is an obsolete technology for HT Panels. Hence HT Panel may please be kept with VCBs instead of SF6 breakers.	
4.2	BOQ Item No:1.2	BOQ of items needs to be corrected by deleting transformer filtering machine.	Terms & conditions as per tender remain unchanged.
		% impedance shall be 5%+tolerances as per IS 2026 instead of less than 5%.	Terms & conditions as per tender remain unchanged.
		350 MVA & UE system mentioned is not relevant to Transformer, it may be deleted.	Terms & conditions as per tender remain unchanged.
		Please clarify whether transformer is on load or off load tap changer type as BOQ and Technical specifications are contradictory. Also clarify steps of tap changer.	Transformer shall be on load tap changer . Steps of tap changer shall be as per BOQ .
4.3	BOQ Item No:1.3, 1.3.3(c&d)	The cable quantity being small, it may be changed from unearthed to earthed system.	Please refer reply at Sr. no. 3.9 above.
		3C x 240 sq mm end terminations may be changed to 3Cx 185 sq mm as per cable size	Terms & conditions as per tender remain unchanged.

4.4	BOQ Item No: 2.1	1600 A bus coupler ACB does not require TVM,CT & protection arrangement. Same may be deleted	Terms & conditions as per tender remain unchanged.
		1250/5A CT for APFC panel have been written twice. The same to be corrected.	Terms & conditions as per tender remain unchanged.
4.5	BOQ Item No: 2.2	Rating of outgoing MCCB's is not clear. Please clarify the same since 163A has been written twice.	The Description "Moulded Case Circuit Breaker(MCCB) ,163A, 4P " under BOQ item No. 2.2(b & c) and 2.3(b) at page no.12 is modified as follows:" <b>Moulded Case Circuit Breaker(MCCB) ,160A, 4P "</b> .
		Please clarify whether 163 A and 63 A MCCBs in sub panel I&II shall be of thermal magnetic or microprocessor type	Please refer Appendix-V Page-115 to 117,General Specifications for Electrical Works Part-IV Sub Stations-2007 of CPWD.
4.6	BOQ Item No: 3.1	BOQ writes Al/Cu conductor cables. Pls clarify that all LT cables shall be of Al conductor only.	The description of BOQ item at Sr. No. 3 (3.1-NSR) Sub Head "LT Cable & Terminations" is modified as " <b>Supply of following sizes of XLPE/ PVC insulated Aluminum conductor strip/ wire Armoured, overall PVC sheathed 1.1 KV grade cables conforming to relevant IS code and technical specifications."</b>
	BOQ Item No: 5.1	The radiator shall be water cooled instead of Air-Cooled mentioned in BOQ. Please amend.	In the BOQ item Description "Air Cooled radiator " is modified as "Water Cooled radiator ".
		The silencer shall be residential type as per manufacturer design instead of Hospital Grade. Please amend.	Terms & conditions as per tender remain unchanged.
		AVM Pads make shall be as per OEM instead of GERB Make since Cummins supply AVM Pads of 'Polybond Make' with their DG Set.	The description " <b>Gerb make antivibration pads</b> "under para 5.1 of Vol-IV :BOQ ,page no.18 under sub head 5 :DG & PANEL is modified as follows: <b>Anti vibration Pads shall be as per standards of approved manufacturers.</b>
		Please clarify whether 990 Ltr. Day Tank shall be inside or outside canopy.	Please refer reply at Sr. No. 1.4 above.
		BOQ specified HOT Air Canopy from DG to outside in open. Please clarify this since no such canopy is provided with DG Set.	The Description " <b>Hot air canopy from DG to outside in open "</b> given under BOQ item No. 5.1 at page no.18 stands <b>deleted.</b>

	Item - 5.2	1. Please clarify purpose of 125 mm dia exhaust pipe with 500 KVA DG Set.	Terms & conditions as per tender remain unchanged.
	Item - 5.3	1. The BOQ of item needs modification since the tank not require level controller for automatic operation of Pumps. There are no fuel pumps in tender.	The Description of BOQ Item no. 5.3 of Vol-IV BOQ is modified as follows:"Supply, fabrication, installation testing & commissioning of M.S. day oil tanks of following capacity fabricated out of min. 3mm thick sheet installed on steel frame with all associated accessories, filters, breathers and fittings including level indicator, complete as required. The tank shall be suitably treated with anti corrosive treatment on inside & outside surface complete with RCC/PCC foundation of suitable size to facilitate gravity flow of oil to DG set complete as per direction of EIC "
	Item - 2.2	90 Kg. quantity is too less which should be minimum 2000 Kg.	Please refer revised BOQ for item no. 2.2 at attached Annexure-A
	Item – 5.6	The item is incomplete & technically not workable Item has no incomer ACBs for receiving DG Sets supply & outgoing ACBs for feeding to Main LT Panel.Hence, 5 no. incomer & outgoing ACBs of 800 Amp. rating including one bus coupler may be included in BOQ for the purpose. (2 incomer + 2 outgoing + 1 coupler) Auto Synchronisation. The item of various sizes of copper control cable may be included now in the tender.	Please refer reply at Sr. No. 3.22 above.
			Please refer reply at Sr. No. 1.6 above.
	Item - 6.1 (a)	The quantity of CTs may be changed to 3 no. instead of 1 no. as per requirement.	The Description of BOQ item at Sr. No. 6.1(a) under sub Head HT Metering page no.23 may be read as follows:Current Transformers, Resin Cast, 3.75VA, Class : 0.5, 125/5 Amps or Suitable Ratio.3 Nos.
4.13	BOQ Item No: 7.1	Please clarify type of MCCBs thermal magnetic or microprocessor.	Please refer Appendix-V Page-115 to 117,General Specifications for Electrical Works Part-IV Sub Stations-2007 of CPWD.

4.14	BOQ Item No: 7.5.1 to 7.5.4	BOQ of item speaks Ammeter, Voltmeter, Frequency meter, KVG meter in main body. Please clarify the instruments actually to be provided in each panel as these are small panels	Terms & conditions as per tender remain unchanged.
		Please clarify protection realises of MCCBs thermal magnetic or microprocessor.	Please refer Appendix-V Page-115 to 117, General Specifications for Electrical Works Part-IV Sub Stations-2007 of CPWD.
		Bus Bar rating of each panel may be clarified	Please refer CPWD Specifications for Electrical Works (Internal) 2013 ,clause 7.2(iii), page no.79.
4.15	BOQ Item No:7.9 (a) & (b)	Item 7.9 (a) & (b) specifies Cat no. of Jabla Make fitting or equivalent, whereas Jabla Make is not a popular make. Moreover Jabla is not included under Acceptable makes. Hence Jabla Make may be deleted from BOQ & cat no. of some popular make amongst approved makes may be given.	Terms & conditions as per tender remain unchanged.
4.16	General Points	The completion period of 6 months is not realistic which may be amended to 12 months.	Terms & conditions as per tender remain unchanged.
		The date of submission of tender may be extended by giving at least 10 days times after issue of clarification to get competitive rates.	THE REVISED DATE OF SUBMISSION OF BIDS IS 27.05.2013 by 16:00 HRS.
<b>5</b>			
5.1	BOQ, Item No: 2.1	It is suggested that the 1600A bus-coupler be considered without protection release.	Terms & conditions as per tender remain unchanged.
		In Outgoing feeders, please specify breaking capacity required for 630A/ 800A MCCB to be either 50KA or 65KA.	Please refer Appendix-V Page-115 to 117, General Specifications for Electrical Works Part-IV Sub Stations-2007 of CPWD.
		Please specify Breaking capacity & type of release required for 800A Outgoing ACB.	Please refer Appendix-V Page-115 to 117, General Specifications for Electrical Works Part-IV Sub Stations-2007 of CPWD.

		The depth of 1000mm for Main Panel is less for housing 1600A breakers & bus bar. It is suggested that the same may be increased to 1200mm.	The panel shall have 1000mm depth(minimum) .
5.2	BOQ, Item No: 2.2 & 2.3	Please mention breaking capacity & type of release required for all MCCB's.	Please refer Appendix-V Page-115 to 117,General Specifications for Electrical Works Part-IV Sub Stations-2007 of CPWD.
		It is suggested that the rating of 163A MCCB be converted to 160A as 163A breakers are not available in the manufacturing range of any of the switchgear manufacturers	The Description "Moulded Case Circuit Breaker(MCCB) ,163A, 4P " under BOQ item No. 2.2(b & c) and 2.3(b) at page no.12 is modified as follows:" <b>Moulded Case Circuit Breaker(MCCB) ,160A, 4P "</b> .
5.3	BOQ, Item No: 2.4	Please specify the breaking capacity of ACB as either 50 KA or 65 KA.	Please refer Appendix-V Page-115 to 117,General Specifications for Electrical Works Part-IV Sub Stations-2007 of CPWD.
5.4	BOQ, Item No: 2.5	Please specify the capacitors required should be MPPH or CLMD type	Terms & conditions as per tender remain unchanged.
		BOQ is asking for Copper bus bars whereas item no. c) i is asking for 800A Aluminium bus bar. Please clarify which type of bus bar is required.	Description of BOQ item at Sr. no. 2.5 under sub Head CAPACITOR PANEL ,page no.13 of Vol-IV BOQ is modified as follows:"Supply Erection, testing, and commissioning of 350 KVAR Automatic Power Factor correction capacitor panel with MPPH /CLMD Series capacitors 350 KVAR in ratio of (1*100+3*50+4*25) and 800 A Switch MCCB as incomer Auto / Manual option type with metering selector switch, indicating light set, fuse internal wiring with suitable capacity of <b>copper wires</b> , front and back openable with hinges & lockable. The Switch shall be completed with cable end boxes, reserve entry boxes, cables lead lug socket compression cable gland of cable size etc.
		Incomer MCCB is 800A TPN, please specify that the same should be TP MCCB with solid N Link.	The Description " INCOMER 1 No. 800A TPN MCCB" under BOQ item No. 2.5(a) i) at page no. 13 is modified as" <b>INCOMER 1No. 800A 4P MCCB"</b>

5.5	BOQ, Item No: 7.5.1/7.5.2/7.5.3/7.5.4	Please mention breaking capacity & type of release required for all MCCB's.	Please refer Appendix-V Page-115 to 117, General Specifications for Electrical Works Part-IV Sub Stations-2007 of CPWD.
5.6	BOQ Item No:1.1	HT CB should be VCB encapsulated in SF6 chamber . Please consider VCB HT panels instaed of SF6 CB.	Please refer revised BOQ and technical Specifications for item 1.1 H.T. Panel attached at Annexure-A & Annexure-B respectively.
		Please give technical specifications of transformer filtration machine.	Please refer reply at 3.6 above.
5.7	BOQ Item No:1.3, 1.3.3(c&d)	Cable should be earthed and not unearthed.	Please refer reply at 3.9 above.
5.8	Technical Specifications (List of Approved makes)	Bus Trunking/ L.T panel/ APFC Panel - ASPL make should be read as "Associated Switchgears & Projects Ltd." It appears that you may have deleted the make of ASPL for LT panels which was originally there in the downloaded tender. We request you to please reinstate ASPL as it is a reputed make and working for many CPWD projects	Terms & conditions as per tender remain unchanged.
		Capacitors - Apcos make should be read as Epcos.	Terms & conditions as per tender remain unchanged.
		Make of accessories for HT panel and transformers shall be as per standard practice of the manufacturer.	Terms & conditions as per tender remain unchanged.
5.9	Technical Specification for 500 KVA Silent DG Set ,Clause-3.5	Alternator Insulation shall be Class H and not class F and accordingly the temperature rise should be in accordance to it..	The description under para 3.5 of Vol-III : Technical Specifications ,page no.24 under sub head 3.0 Alternator:- mention make & model is modified as follows: <b>Alternator insulation: Class'H' with temperature rise limited to class 'H' insulation limit.</b>
		Regarding service tax reimbursement, please clar	Terms & conditions as per tender remain unchanged.

5.10	General Points	As per CPWD norms, the PBG for award of work is 60 days beyond the stipulated time of completion. However your award criteria says 6 months beyond defect liability period. This must be 6 months from the stipulated date of completion.	Terms & conditions as per tender remain unchanged.
		Most of your rules mentioned in section III (pages 61-66), section IV (pages 67-73) are applicable for civil contractors and hence should not be applicable for substation works.	Terms & conditions as per tender remain unchanged.
		Consumables Consumables for operation and running of the entire system page 54 shall be provided by the client only.	Terms & conditions as per tender remain unchanged.
		There shall be no comprehensive automobile insurance provided as there is no use of vehicles for such works. It appears that the clause is applicable for civil works. We shall be providing with Erection all Risk Insurance Policy and Workmens Compensation Insurance.	Terms & conditions as per tender remain unchanged.
		All clauses or requirements which are not pertaining to sub station works shall not be applicable on this contract..	Terms & conditions as per tender remain unchanged.
		Payment terms as per CPWD norms for substation works, payments should be as per following: 85% of quoted rates against supply of materials at site, 10% against installation, 5% against testing & commissioning.	Terms & conditions as per tender remain unchanged.
		Completion time should be 9 months and not 6 months,.	Terms & conditions as per tender remain unchanged.

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

**\*\*\*\*\*END OF CORRIGENDUM-01\*\*\*\*\***