

Tender no. - TPCODL/CCG/24-25/1000001795 (Tender Ref: One-year Rate Contract for Supply of 33& 11 kV Outdoor VCB for TP Odisha DISCOMs)					
Sl. No.	Clause/ Page No.	Tender Reference (Document name/Page no./Clause no./Clause name)	Pre-Bid Query raised by Bidder	CEG/ CCG Response	
1	Caluse no. 7.1, Page 17 of 25 : Routine tests 4. Tightness Tests & Caluse no. 7.2/Page 17 of 25 : Type tests: 9. Tightness Tests	Caluse no. 7.1, Page 17 of 25 : Routine tests 4. Tightness Tests & Caluse no. 7.2/Page 17 of 25 : Type tests: 9. Tightness Tests	As per IEC, the tightness test is not applicable for the offered product. In line with the amendment received from the previous NIT No. TPCODL / CCG /2023-24 /1000000536. Kindly confirm the same	Noted	
2	Caluse no. 7.2/Page 18 of 25 : Type tests: 13. Double earth fault tests	Caluse no. 7.2/Page 18 of 25 : Type tests: 13. Double earth fault tests	The specification calls for a VCB suitable for an earthed system, and according to IEC 62271-100, only the single-phase earth test is applicable for such systems. This test applies to non-effectively earthed neutral systems, as IEC 62271-100 excepts enclosed systems (Annex. 1). Kindly confirm the same.	Noted	
3	Caluse no 5.8, Page 14 of 25 PRIMARY TERMINALS: Primary terminals shall be suitable for wedge type connectors with Panther conductors. Successful bidder shall supply connectors. It should have Primary - terminals (connected at Fixed contact) on single side at top in case of by passing CB.	Caluse no 5.8, Page 14 of 25 PRIMARY TERMINALS: Primary terminals shall be suitable for wedge type connectors with Panther conductors. Successful bidder shall supply connectors. It should have Primary - terminals (connected at Fixed contact) on single side at top in case of by passing CB.	We propose using Panther connectors With Bolt and Nut Type for the 11kV VCB, in line with the amendments received from the previous NIT No.: TPCODL / CCG / 2023-24 / 1000000536. Kindly confirm the same.	Panther/Zebra (ACSR) Shall be decided during Detailed Engineering	
	Caluse no 7.2, Page 18 of 25 7.2 Type Test 14. Static Terminal Load (Calculation to be submitted)		We shall be submitted the structural load calculation sheet of VCB, So request you to accept the same.		
4		Caluse no 7.2, Page 18 of 25 7.2 Type Test 14. Static Terminal Load (Calculation to be submitted)	We shall be submitted the structural load calculation sheet of VCB, So request you to accept the same.	Ok ,Noted	
Sl. No.		Tender Reference (Document name/Page no./Clause no./Clause name)	Pre-Bid Query raised by Bidder	TP Odisha DISCOMs	
1		Caluse no. 7.1, Page 17 of 25 : Routine tests 4. Tightness Tests & Caluse no. 7.2/Page 17 of 25 : Type tests: 9. Tightness Tests	As per IEC, the tightness test is not applicable for the offered product. In line with the amendment received from the previous NIT No. TPCODL / CCG /2023-24 /1000000536. Kindly confirm the same	Noted	
2		Caluse no. 7.2/Page 18 of 25 : Type tests: 12. Double earth fault tests	The specification calls for a VCB suitable for an earthed system, and according to IEC 62271-100, only the single-phase earth test is applicable for such systems. This test applies to non-effectively earthed neutral systems, as IEC 62271-100 excepts enclosed systems (Annex. 1). Kindly confirm the same.	Noted	
3		Caluse no 5.8, Page 14 of 25 PRIMARY TERMINALS: Primary terminals shall be suitable for wedge type connectors with ZEBRA conductors. Successful bidder shall supply connectors. It should have Primary - terminals (connected at Fixed contact) on single side at top in case of bypassing CB.	We propose the use of Zebra connectors With Bolt and Nut Type for the 33kV VCB, in line with the amendment received from the previous NIT No. TPCODL / CCG / 2023-24 / 1000000536. Kindly confirm the same.	Panther/Zebra (ACSR) Shall be decided during Detailed Engineering	
3		Caluse no. 4 page 6/25 GENERAL TECHNICAL REQUIREMENTS 4.6 Rated normal current 1250 A / 2000 A	Kindly clarify the requirement of rated normal current is 1250A or 2000A.	Check the Tendered Item for more clarification	
4		Caluse no 7.2, Page 18 of 25 7.2 Type Test 14. Static Terminal Load (Calculation to be submitted)	We shall be submitted the structural load calculation sheet of VCB, So request you to accept the same.	Noted	

	Sl. No.	Tender Reference (Document name/Page no./Clause no./Clause name)	Description as per Bid Document	Pre-Bid Query raised by Bidder	TP Odisha DISCOMs	
		33kV Outdoor VCB				
	1	Technical Specification Clause no. 5.1.1	Pre and Post circuit Supervision relay should also be provided and is required in both circuit.	Provision will be provided.	Noted	
	2	Technical Specification Clause no. 5.1.3	The terminal pad shall be made up of electrolytic copper and shall be silver plated.	The terminal pad shall be made up of Aluminium and shall not be silver plated.	As per Type Tested Design it is accepted	
	3	Technical Specification Clause no. 5.1.6	Bidder shall have to supply a suitable adapter/transducer as per TPCODL/TPNODL/TPWODL/TPSODL/TPAL/TPC-M/TPDDL. Operational analyzer, so that the offered circuit breaker can be used with the operational analyzer.	Scope of supply of Operational Analyser and adapter/ transducers shall be excluded from our scope of supply.	Only Provisions for the same to be provided	
	4	Technical Specification Clause no. 5.4.2.	Spring_ charging motor shall be universal type with overload protection and overload relay with contacts for annunciation.	Spring_ charging motor shall be universal type with overload-protection-and-overload-relay- MCB/Fuses will be provided	Suitable ratings of MCB along with add on block and suitable ratings of Fuse is required for O/L protection	
	5	Technical Specification Clause no. 5.6	All contacts shall be silver coated (with thickness of 15 micron)	All contacts shall be silver coated (with thickness of 8 to 12 micron)	As per Type Tested Design it is accepted	
	6	Technical Specification Clause no. 5.7	All current carrying contact surfaces shall be silver-plated. Silver plating shall not be less than 15 Micron. Thickness.	All contacts shall be silver coated (with thickness of 8 to 12 micron)	As per Type Tested Design it is accepted	
	7	Technical Specification Clause no. 5.8	Primary terminals shall be Silver plated copper	The terminal pad shall be made up of Aluminium and shall not be silver plated.	As per Type Tested Design it is accepted	
	8	Technical Specification Clause no. 5.9	Zinc Coating Thickness & No of Dips Min. 100 Micron at every point with 6 Dips	Hot dip galvanized with Minimum thickness 70 to 90 micron.	As per TS	
	9	Technical Specification Clause no. 5.11	All hardware, nuts, bolts, washers & spring washers shall be of Hot Dip Galvanized with minimum 86 micron thickness	All outdoor hardware, nuts, bolts, washers & spring washers shall be of Hot Dip Galvanized with minimum 40 micron thickness	As per TS	
	10	Technical Specification Clause no. 8.	All the tests shall be conducted at CPR/ERDA/CESI/KEMA/KERI/PEHLA as per the relevant standards.	All the tests shall be conducted at CPR/ERDA/CESI/KEMA/KERI/PEHLA/NEC as per the relevant standards.	As per TS	
	11	Technical Specification Clause no. 17.	SPECIAL TOOLS & GAUGES	Not required for offered Outdoor VCB, hence not offered.	As per TS	
	Sl. No.	Tender Reference (Document name/Page no./Clause no./Clause name)	Description as per Bid Document	Pre-Bid Query raised by Bidder	TPCCG Response	
		11kV Outdoor VCB				
	1	Technical Specification Clause no. 4.3	Electrical Endurance (E2 with Auto-reclosing)	We will supply breaker with electrical endurance without auto reclosing. Kindly confirm.	As per TS	
	2	Technical Specification Clause no. 5.1.1	Pre and Post circuit Supervision relay should also be provided and is required in both circuit.	Provision will be provided.	Noted	
	3	Technical Specification Clause no. 5.1.3	The terminal pad shall be made up of electrolytic copper and shall be silver plated.	The terminal pad shall be made up of Aluminium and shall not be silver plated.	As per Type Tested Design	
	4	Technical Specification Clause no. 5.1.6	Bidder shall have to supply a suitable adapter/transducer as per TPCODL/TPNODL/TPWODL/TPSODL/TPAL/TPC-M/TPDDL. Operational analyzer, so that the offered circuit breaker can be used with the operational analyzer.	Scope of supply of Operational Analyser and adapter/ transducers shall be excluded from our scope of supply.	As per TS	
	5	Technical Specification Clause no. 5.4.2.	Spring_ charging motor shall be universal type with overload protection and overload relay with contacts for annunciation.	Spring_ charging motor shall be universal type with overload-protection-and-overload-relay- MCB/Fuses will be provided	Suitable ratings of MCB along with add on block and suitable ratings of Fuse is required for O/L protection	
	6	Technical Specification Clause no. 5.6	All contacts shall be silver coated (with thickness of 15 micron)	All contacts shall be silver coated (with thickness of 8 to 12 micron)	As per Type Tested Design	
	7	Technical Specification Clause no. 5.7	All current carrying contact surfaces shall be silver-plated. Silver plating shall not be less than 15 Micron. Thickness.	All contacts shall be silver coated (with thickness of 8 to 12 micron)	As per Type Tested Design	
	8	Technical Specification Clause no. 5.8	Primary terminals shall be Silver plated copper	The terminal pad shall be made up of Aluminium and shall not be silver plated.	As per Type Tested Design	
	9	Technical Specification Clause no. 5.9	Zinc Coating Thickness & No of Dips Min. 100 Micron at every point with 6 Dips	Hot dip galvanized with Minimum thickness 70 to 90 micron.	As per TS	
	10	Technical Specification Clause no. 5.11	All hardware, nuts, bolts, washers & spring washers shall be of Hot Dip Galvanized with minimum 86 micron thickness	All outdoor hardware, nuts, bolts, washers & spring washers shall be of Hot Dip Galvanized with minimum 40 micron thickness	As per TS	
	11	Technical Specification Clause no. 17.	SPECIAL TOOLS & GAUGES	Not required for offered Outdoor VCB Panels, hence not offered.	As per TS	
Sr. No	Clause ref.	Page no	Requirement as per Tender	Amendment proposed	Justification	CEG Response

1	1.1	4 of 32	Annual Spares		Vacuum interrupter is part of pole assembly hence no need to procure VI separately as same is not possible to replace as site. Also please specify that whether spares shall be supplied with each breaker or to be supply separately ? Also confirm that as we quoted spares separately hence same shall not be part of RA.	1)If Vacuum Interrupter(VI) is an integral part of Pole Assembly then, please offer the complete Pole assembly as a spare item in place of VI. If VI is not an integral part of Pole assembly and if it is easy to replace at site ,then vendor can Supply Vacuum Interrupter as spare. 2)Quantity shall be as per TS. 3)Tender Terms & Conditions shall prevail
2	2	7 of 32	Technical Experience /Performance	performance feedback of internal user group shall be considered against our past supply to TP Discoms		Bidder shall provide the performance certificate
3	3.1	8 of 32	Price shall be fixed and firm during the contractual period.	Prices shall variable as per PV formula. Base date for calculation of PV shall be 1 month prior to tender opening date.	Since this is rate contract for 1 year hence variable basis price will help suppliers & Tata Power to limit adverse impact of commodity fluctuations. Thereby suppliers can quote best possible price.	Tender T & Cs shall prevail
4	5.1.2.1	10 of 32	The type tests specified in technical specifications should have been carried out within five years (unless otherwise explicitly stated) prior to the date of opening of technical bids.	The type tests specified in technical specifications should have been carried out within TEN years for 33kV PCVCB and FIFTEEN years for 11kV PCVCB (unless otherwise explicitly stated) prior to the date of opening of technical bids.	Since we have not done any changes in the basic design of the offered CB hence we do not envisage repetition of any type test.	as per CEA latest guideline
5	13.1.2	16 of 32	Prices shall be on FOR Basis, inclusive of Transit Insurance/ Packing & Forwarding charges and shall be inclusive of unloading & stacking at DISCOM site / store locations.	Prices shall be on FOR Basis, inclusive of Transit Insurance/ Packing & Forwarding charges and shall be inclusive of unloading & stacking at DISCOM site / store locations.	Unloading & Stacking at DISCOM site / stores shall not be in suppliers scope.	Tender T & Cs shall prevail
6	13.1.4	16 of 32	Guarantee period shall be 48 months from the date of last supplies made under the contract.	Guarantee period shall be 48 months from the date of last supplies made under the contract.	Guarantee shall be linked to supply date of individual equipment instead of supply date of last supply made under contract.	As per TS
7	13.1.5	16 of 32	In case BA does not get necessary approvals for issuance of manufacturing clearances /CAT-A within mentioned mutually agreed timelines, then CCG/TP Odisha reserve the right to cancel issued rate contract / release order and also reserve the right to forfeit EMD/PBG.	In case BA does not get necessary approvals for issuance of manufacturing clearances /CAT-A within mentioned mutually agreed timelines, then CCG/TP Odisha reserve the right to cancel issued rate contract / release order and also reserve the right to forfeit EMD/PBG.	Since drawing approval/MFC is joint responsibility of supplier & CCG/TP Odisha hence EMD/PBG shall not be forfeited due to failure to do so within agreed time	Tender T & Cs shall prevail
8	13.1.6	16 of 32	Delivery Period shall be 90 days from date of receipt of release order / CAT-A issuance, whichever is later.	Delivery Period shall be 120 days from date of receipt of release order / CAT-A issuance, whichever is later. Maximum lot size per dispatch for 11kV VCB shall be 30 nos. per month only	Maximum lot size per dispatch for 11kV VCB shall be 30 nos. only	Tender T & Cs shall prevail
9	13.3	16 of 32	100% payment within 60 days of submission of error-free Invoice complete in all respects.	100% payment within 60 30 days of submission of error-free Invoice complete in all respects.	Payment terms shall be same as mentioned in GCC	Tender T & Cs shall prevail
10	ANNEXURE VII	25 of 32	ANNEXURE VII : General Conditions of Contract	GCC for TPNODL/TPCODL/TPWODL/TPSODL are attached, please confirm which GCC to be referred.		GCC for respective DISCOM to be referred for pre & post Award contract administration. For Tender fee, EMD BG format, etc. TPCODL GCC may be referred.
11	ANNEXURE VIII	26 of 32	ANNEXURE VIII : Safety Policy and Safety Terms & Conditions	As our scope is limited to supply only hence same annexure shall not be applicable.		Tender T & Cs shall prevail
GENERAL CONDITIONS OF CONTRACT –SUPPLY ORDERS						
12	5	6 of 44	Unless specified elsewhere in the contract document, the prices/rates are inclusive of cost of finished product for which MDCC will be issued by TPWODL, packaging and forwarding charges, freight and transit insurance charges covering loading at Associate's works, transportation to TPWODL store/site & unloading & delivery at TPWODL stores/TPWODL site, cost of documentation including all the relevant test certificates and other supportive documents to be furnished.	Unless specified elsewhere in the contract document, the prices/rates are inclusive of cost of finished product for which MDCC will be issued by TPWODL, packaging and forwarding charges, freight and transit insurance charges covering loading at Associate's works, transportation to TPWODL store/site & unloading & delivery at TPWODL stores/TPWODL site, cost of documentation including all the relevant test certificates and other supportive documents to be furnished.	Unloading at TPWODL site or stores; delivery to TPWODL stores/site & cost of documentation etc. shall not be in suppliers scope.	Tender T & Cs shall prevail
13	12.2	13 of 44	Goods/Material/Equipment delivered in condition physically damaged & incomplete as a product ordered, or not packed and transported as per the terms and conditions of the contract is liable to be rejected. Such item shall be lifted back by Associates within 15 days from receipt of rejection note from TPWODL and have to supply back the material within next 30 days or within the timeframe mutually decided by Associate and TPWODL.	Goods/Material/Equipment delivered in condition physically damaged & incomplete as a product ordered, or not packed and transported as per the terms and conditions of the contract is liable to be rejected. Rejection note for such rejected material shall be issued by TPWODL within 15 days from the date of receipt of material at site. Such item shall be lifted back by Associates within 15 days from receipt of rejection note from TPWODL and have to supply back the material within next 30 days or within the timeframe mutually decided by Associate and TPWODL.	Rejection note for rejected material shall be issued by TPWODL within 15 days from the date of receipt of material at site.	Tender T & Cs shall prevail
14	13.3	15 of 44	TPWODL will be at liberty to get the same done at Associate's risks and costs and recover all such expenses plus the TPWODL's own charges (@ 20% of expenses incurred), from the Associate or from the "Security cum Performance Deposit" as the case may be.	TPWODL will be at liberty to get the same done at Associate's risks and costs and recover all such expenses plus the TPWODL's own charges (@ 20% of expenses incurred), from the Associate or from the "Security cum Performance Deposit" as the case may be.	Only actual incurred expenses shall be recovered.	Tender T & Cs shall prevail
15	13.3	15 of 44	The Warranty period for such replaced parts shall be until the expiry of twelve months from the date of such replacement or renewal or until the end of original Guarantee period, whichever is later.	The warrantee period of replaced parts shall be same as that of original equipment.	No separate extended warrantee shall be provided for replaced parts.	Tender T & Cs shall prevail

16	13.3	15 of 44	In case the Associate is not able to rectify/ replace the faulty equipment/ material within the stipulated timelines as mentioned above, penalty shall be levied as per the Liquidated Damages clause mentioned in this document. The penalty amount shall be recovered from the payment due to the vendor or by encashment of the SPBG as the case may be.	Said clause shall be removed	LD/penalty on account of warantee failure shall not be in acceptable to us.	Tender T & Cs shall prevail
17	13.6	15 of 44	Hidden defects in manufacturing or design of the product supplied and which could not be identified by the tests conducted but later manifested during operation of the equipment are termed as latent defects.	Hidden defects in manufacturing or design of the product supplied and which could not be identified by the tests conducted but later manifested during operation of the equipment are termed as latent defects.	Only design defects shall be considered in latent defects. If manufacturing defects are included in the same then there is no change in normal warantee & latent defect warantee.	Tender T & Cs shall prevail
18	14	16 of 44	For delay of each week and part thereof from the delivery schedule specified in the contract, 1% of contract value corresponding to undelivered quantity, provided full quantity is supplied within 130% of the original contract time. If full contractual quantity is not delivered within 130% of contract time for delivery, TPWOODL has the right to levy LD on the entire contract value, subject to a maximum of 10% of the total contract value.	For delay of each week and part thereof from the delivery schedule specified in the contract, 0.5% of contract value corresponding to undelivered quantity, provided full quantity is supplied within 130% of the original contract time. If full contractual quantity is not delivered within 130% of contract time for delivery, TPWOODL has the right to levy LD on the entire contract value, subject to a maximum of 5% of the total contract value.	The limit of LD shall be 0.5% per week upto maximum 5% of undelivered portion.	Tender T & Cs shall prevail
19	14	16 of 44	liquidated damages	• LD shall be computed on the undelivered lot upto the max LD limit. • LD shall be exclusive remedy for delay and in full satisfaction. Under the contract, TPWOODL shall first exhaust the LD max limit before resorting to any other remedy available under the contract.		Tender T & Cs shall prevail
20	16.3	17 of 44	Title to technical specifications, drawings, flow sheets, norms, calculations, diagrams, interpretations of test results, schematics, layouts and such other information, which the Associate has supplied to the TPWOODL under the Contract shall be passed on to the TPWOODL.	Title Ownership to technical specifications, drawings, flow sheets, norms, calculations, diagrams, interpretations of test results, schematics, layouts and such other information, which the Associate has supplied to the TPWOODL under the Contract shall be passed on to the TPWOODL.	Ownership shall be passed on to TPWOODL for the documents.	Tender T & Cs shall prevail
21	17	17 of 44	Intellectual Property Rights	Any intellectual property developed or acquired by Associate during course of contract shall be owned by Associate. TPWOODL will such rights as granted by Associate in intellectual property so developed.		Tender T & Cs shall prevail
22	18	18 of 44	Indemnity	The Associate assumes responsibility for and shall indemnify and save harmless the TPWOODL from all liability, claims, costs, expenses, taxes and assessments including penalties, punitive damages, attorney's fees and court costs which are or may be required to be paid by the TPWOODL and its officers, directors, employees, affiliates, agents, successors and assigns arising from any breach of the Associate's obligations under any local or national law or laws, or in respect to all salaries, wages or other compensation for all persons employed by the Associate or his Sub-Associates or suppliers in connection with the performance of any work covered by the Contract.		Tender T & Cs shall prevail
23	19	18 of 44	Liability & limitations	Notwithstanding any provision to the contrary, Associate shall not be liable for any special, incidental, indirect, or consequential Damages or any loss of business Contracts, revenues or other financial loss (or equivalents thereof no matter how claimed, computed or characterized) arising out of or in connection with the Performance of the Work or supply of Goods unless caused by Associate's gross negligence, or willful misconduct		Tender T & Cs shall prevail
24	20	19 of 44	FORCE MAJEURE	safety measures against covid, quarantine restrictions shall be force majeure events.		OK
25	22.3	22 of 44	Termination for convenience of TPWOODL	In case of termination for convenience of TPWOODL, Associate shall also be paid for the cost of work in progress along with supplies/services rendered until date of termination.		Tender T & Cs shall prevail
Technical Specification for 11/33/66-KV Outdoor Circuit Breaker						
26	1	5 of 25	This specification covers technical requirements of design, manufacture, construction, performance, testing at manufacturer's works, packing, forwarding, supply and unloading at stores/site of 11kV, 33kV & 66kV Outdoor CB of 1250/1600/2000 Amps. Complete with all accessories for trouble free and efficient performance.	This specification covers technical requirements of design, manufacture, construction, performance , testing at manufacturer's works, packing, forwarding, supply and unloading at stores/site of 11kV, 33kV & 66kV Outdoor CB of 1250/1600/2000 Amps. Complete with all accessories for trouble free and efficient performance.	Please remove word performance from scope. Our scope shall be limited to supply of 11kV 1250A & 33kV 1600/2000A Outdoor PCVCB only.	As per TS : 11kV 1250A and for 33kV :1250/2000A
27	3.8	5 of 25	Wind pressure : 300 Km/hr	Wind Velocity : 180 km/hr	As per IS 875-3 (1987) appendix A the basic wind speed at 10 meter height (where autoecloser is getting mounted) for Bhubaneshwar is 50 meter per second.	Sometimes it may hit 200-250kmph during cyclone time .Please consider with this wind speed
28	4.7.1(b)	6 of 25	Rated Lightning impulse withstand voltage Across the isolating distance	Same shall not be applicable for outdoor circuit breaker	Since the said parameter is applicable for isolators hence same shall not be applicable for 33kV outdoor VCB	Noted
29	4.7.2(b)&(d)	6 of 25	Rated short duration power frequency withstand voltage To Earth and between Poles and across the isolating distance and open switching device	Same shall not be applicable for outdoor circuit breaker	Since the said parameter is applicable for isolators hence same shall not be applicable for 33kV outdoor VCB	Noted
30	4.10	6 of 25	Percentage DC component	for 11kV PCVCB DC Component shall be ≤35% for 33kV PCVCB DC Component shall be 40%	same shall be as per manufacturers type tested design	For 11kv if it is within <40 % and for 33kV if it is within <50 % ,then it is OK
31	4.14.4	7 of 25	Capacitor Banks with series reactors switching capacity	Offered CB is suitable for single capacitor bank switching application up to 400A only.	Offered CB is suitable for single capacitor bank switching application up to 400A only.	Noted
32	4.17	7 of 25	Opening time (max) : 60 ms	Opening time shall be 45 +15/-10 ms	same shall be as per manufacturers type tested design	Noted
33	4.18	7 of 25	Closing time (max) : 60 ms CO Time : 100msec	Closing time shall be 65 ± 15 ms CO Time :- shall be as per manufactures type tested design	same shall be as per manufacturers type tested design	As per TS
34	4.22	7 of 25	Clearance in air	Clearance in air shall be per shared GA drawings only.	same shall be as per manufacturers type tested design	same shall be as per manufacturers type tested design
35	4.28	8 of 25	Minimum Vertical clearance of live conductor from ground level	Minimum Vertical clearance of live conductor from ground level shall be as per shared GA drawings only.	same shall be as per manufacturers type tested design	same shall be as per manufacturers type tested design
36	4.3	8 of 25	Electrical Endurance : E2 with Autoreclosing	Electrical Endurance : E2 without Autoreclosing	same shall be as per manufacturers type tested design	As per TS

37	4.37	8 of 25	Panel illumination and space heating :- Shall be suitable for 240V AC±10% Space Heater – min. 80 W Thermostat – 300C to 1100C LED Lamp with holder – 5 W Door Limit Switch – 6A 3Pin Switch & Socket – 15 A Control Fuse with Base – 6A DP AC MCB – 6A, 10kA I/C AC & DC MCB rating should be 16 A	Panel illumination and space heating :- Shall be suitable for 240V AC±10% Space Heater – min. 80 W Thermostat – 300C to 1100C LED Lamp with holder – 5 W Door Limit Switch – 6A 3Pin Switch & Socket – 15 A Control Fuse with Base – 6A DP AC MCB – 6A, 10kA I/C AC & DC MCB rating should be 16 A	Rating of components shall be in line with recently supplied approved wiring scheme.	As per TS
38	5.1.1	9 of 25	_Provided with two independent trip coils and one closing coil for better reliability. _Breaker shall be supplied with Two Tripping Circuit. Pre & Post Trip Circuit supervision relay should also be provided and is required in both circuits. _There shall be separate contactor for each coil.	_Provided with two independent trip coils and one closing coil for better reliability. _Breaker shall be supplied with Two Tripping Circuit.Provision ofPre & Post Trip Circuit supervision relay should also be provided and is required in both circuits. _There shall be separate contactor for each coil.	Two trip coils shall be provided with Fuses and provision of TRIP CIRCUIT SUPERVISION as per past supplied approved wiring scheme.	Noted
39	5.1.3	9 of 25	The terminal pads shall be made up of electrolytic copper and shall be silver plated. The current density of the terminal pads shall not exceed 1.6A/sq.mm. The terminal pad shall have protective covers which shall be removed before interconnections.	Terminal pads shall be made up of extruded aluminium & silver plating shall not be applicable.	Shall be as per manufacturers type tested design	Noted
40	5.1.4	9 of 25	The height of manual operating handle shall not be more than 1500mm from ground level. The control cabinet shall be provided with "Pistol Grip" type T-N-C Switch for local operation and a Local/Remote Switch.	The height of manual operating handle shall not be more than 1700mm from ground standing pedestal level. The control cabinet shall be provided with "Pistol Grip" type T-N-C Switch for local operation and a Local/Remote Switch.	The height shall be calculated from standing pedestal instead of ground.	Noted.However standing pedestal to be provided
41	5.1.6	10 of 25	Provisions shall be made for attaching an operational analyzer after installation of circuit breakers at site to record contact travel, speed and making measurement of operating timings, synchronization of contacts in one pole. Bidder shall have to supply a suitable adapter/transducer as per TPCODL/TPNODL/TPWODL/TPSODL/TPAL/TPC-M/TPDDL. Operational analyzer, so that the offered circuit breaker can be used with the operational analyzer.	Provisions shall be made for attaching an operational analyzer after installation of circuit breakers at site to record contact travel, speed and making measurement of operating timings, synchronization of contacts in one pole. Bidder shall have to supply a suitable adapter/transducer as per TPCODL/TPNODL/TPWODL/TPSODL/TPAL/TPC-M/TPDDL. Operational analyzer, so that the offered circuit breaker can be used with the operational analyzer.	adapter/transducer/analyzer shall not be in our scope of supply.	As per TS , Only Provisions to be provided
42	5.1.7	10 of 25	The circuit breaker shall be designed to withstand the rated terminal loads, wind load/ earthquake load, short circuit forces. Supportive design calculation for the same shall be submitted along with bid documents. Floor clamps, Foundation bolts, Lifting hooks and one manually operated tank lifting & lowering device for framemounted tanks shall be provided. Exposed live parts shall be placed high enough above ground to meet the statutory requirements and safety codes. All Terminal blocks shall be stud type and ring type lugs. Bidder shall give suitable provision in CB such as space, auxiliary contact with wiring etc. for providing castle lock by TPCODL/TPNODL/TPWODL/TPSODL/TPAL/TPC-M/TPDDL. CB mechanism internals shall be easily accessible during maintenance troubleshooting.	The circuit breaker shall be designed to withstand the rated terminal loads, wind load/ earthquake load, short circuit forces. Supportive design calculation for the same shall be submitted along with bid documents. Floor clamps, Foundation bolts, Lifting hooks and one manually operated tank lifting & lowering device for framemounted tanks shall be provided. Exposed live parts shall be placed high enough above ground to meet the statutory requirements and safety codes. All Terminal blocks shall be stud type and ring type lugs. Bidder shall give suitable provision in CB such as space, auxiliary contact with wiring etc. for providing castle lock by TPCODL/TPNODL/TPWODL/TPSODL/TPAL/TPC-M/TPDDL. CB mechanism internals shall be easily accessible during maintenance troubleshooting.	Floor clamps, hooks,lifting device shall not be in our scope of supply. We understand that space for mounting the castle lock shall be provided and castle lock supply is not in our scope.	As per earlier supply all others to supply but Castle key and lock to be providedand for the same series details to be shared during GTP and Drawing approval .
43	5.1.8	10 of 25	Floor clamps, Foundation bolts, Lifting hooks and one manually operated tank lifting & lowering device for frame-mounted tanks shall be provided. All similar parts, particularly removable ones shall be interchangeable with one another. Exposed live parts shall be placed high enough above ground to meet the statutory requirements and local safety codes. All Terminal blocks shall be stud type. Bidder shall give suitable Provision in CB such as space, auxiliary contact with wiring etc. for providing castle lock by purchaser.	Floor clamps, Foundation bolts, Lifting hooks and one manually operated tank lifting & lowering device for frame-mounted tanks shall be provided. All similar parts, particularly removable ones shall be interchangeable with one another. Exposed live parts shall be placed high enough above ground to meet the statutory requirements and local safety codes. All Terminal blocks shall be stud type. Bidder shall give suitable Provision in CB such as space, auxiliary contact with wiring etc. for providing castle lock by purchaser.	Floor clamps, hooks,lifting device shall not be in our scope of supply. We understand that space for mounting the castle lock shall be provided and castle lock supply is not in our scope.	As per earlier supply
44	5.2.1	10 of 25	An indicator/means to indicate status of contact erosion should be provided, to know the residual life of vacuum interrupter.	Said clause shall be removed	The contacts of ABB make VI are made up of Copper Chromium which is a hard contact material, hence there is no contact wear and tear. Hence an indicator to indicate the status of contact erosion is not envisaged and hence shall not be provided.	Required as per TS
45	5.2.4	11 of 25	The metallic bellow or any other similar vacuum sealing arrangement should be provided at the moving contact and should have a long fatigue life. A pressure gauge to monitor positive pressure lower part of the pole is to be provided to protect ingress of moisture.	The metallic bellow or any other similar vacuum sealing arrangement should be provided at the moving contact and should have a long fatigue life. A pressure gauge to monitor positive pressure lower part of the pole is to be provided to protect ingress of moisture.	Pressure gauge shall not be in our scope of supply	As per TS
46	5.4.2	11 of 25	Spring_ charging motor shall be universal type with overload protection and overload relay with contacts for annunciation.	Spring_ charging motor shall be universal type with overload protection. and overload relay with contacts for annunciation.	Fuse shall be provided for sp. charging motor. Limit switch shall be provided to cut off sp. charging motor supply after completion of charging.	For O/L protection, suitable ratings of MCB along add on block & Fuse in series to be provided
47	5.4.3	11 of 25	A conveniently located manual tripping lever or button shall also be provided for tripping the breaker and simultaneously opening the reclosing circuit. A manual closing device that can easily be operated by one person standing on the ground shall also be provided for maintenance purposes.	ON/OFF push buttons shall be provided for manual on/off operation of CB.		Noted
48	5.4.5	11 of 25	A closing release shall operate correctly at all values of voltage between 70% and 110% of the rated voltage.	A closing release shall operate correctly at all values of voltage between 85% and 110% of the rated voltage.		Noted
49	5.4.8	12 of 25	Provision shall be made to enable electrical interlocking with the opening or closing of the isolator when breaker is closed. All electrical and mechanical interlocks, which are necessary for safe and satisfactory operation, shall be furnished.		Necessary contacts shall be provided for electrical interlocking with the isolators.	Noted

50	5.5.1	12 of 25	Control cabinets shall be of the dust, moisture, vermin proof and free standing floor mounting out door type. Control Cabinets shall be CRCA.	Control cabinets shall be of the dust, moisture, vermin proof and free standing floor mounting out door type. Control Cabinets shall be HRCA	Circuit breaker shall be housed in a weather proof & dust proof cabinet made of mild steel (HRCA), the thickness of which shall not be less than 2.5 mm.	Noted
51	5.5.2	12 of 25	Control cabinets shall be sheet steel enclosed and shall be dust, weather and vermin proof. Sheet steel shall be at least 3mm thick. 15mm thick neoprene gaskets shall be provided to ensure degree of protection of IP 55.	Control cabinets shall be sheet steel enclosed and shall be dust, weather and vermin proof. Sheet steel shall be at least 2.5mm thick with neoprene gaskets shall be provided to ensure degree of protection of IP 55. Doors and padlocking arrangement shall be as per manufacturers std offering	Circuit breaker shall be housed in a weather proof & dust proof cabinet made of mild steel (HRCA), the thickness of which shall not be less than 2.5 mm.	Noted
52	5.5.4	12 of 25	All necessary cable terminating accessories such as glands, crimp type tinned copper lugs etc., for control cables shall be included in Bidder's scope of supply. Suitable double compressed brass cable glands shall be provided for cable entry.	Said clause shall be removed	Since the no. of cable glands required is not clear, hence the same shall not be in ABB scope	During Detailed engineering It will be shared
53	5.6.1	14 of 25	All contacts shall be silver coated (with thickness of 15 micron) and Contact materials should be as per Type tested design	All contacts shall be silver coated (with thickness of 15 micron) and Contact materials should be as per Type tested design	All contacts and Contact materials should be as per Type tested design	As per Type Tested design
54	5.8	14 of 25	Primary terminals shall be Silver plated copper suitable for wedge type connectors with (PANTHER for 11kv, ZEBRA for 33kV & 66kV) conductors. Connectors is in scope of the bidders. It should have Primary terminals (connected at fixed contact) on either side at top in case of bypassing CB.	Primary terminals shall be Silver plated copper suitable for wedge type connectors with (PANTHER for 11kv, ZEBRA for 33kV & 66kV) conductors. Connectors is in scope of the bidders. It should have Primary terminals (connected at fixed contact) on either side at top in case of bypassing CB. Primary terminals shall be made up of extruded aluminium only	Silver plating shall not be applicable.	As per Type Tested design
55	5.9	14 of 25	SUPPORT STRUCTURES: The minimum vertical distance from the bottom of the lowest porcelain part of the enclosures to the circuit breaker base, where it rests on the foundation pad shall be 2.55	SUPPORT STRUCTURES: The minimum vertical distance from the bottom of the lowest porcelain part of the enclosures to the circuit breaker base, where it rests on the foundation pad shall be 2.59m for 33kV PCVCB and 2.48m for 11kV PCVCB Material and galvanising of structure shall be as per manufactures type tested design only.	same shall be as per manufacturers type tested design	Noted
56	5.12	15 of 25		Suitable grounding terminals shall be provided on the circuit breaker on opposite sides, for connecting to earth pit. The earthing terminals shall be readily accessible and so placed that the earth connection of the circuit breaker is maintained even when the cover or any other movable part is removed. GI strip for earthing shall be of size 50 mm X 6mm, approx. The earthing terminals shall be of adequate size, be protected against corrosion and shall be metallically clean. The earthing terminal shall be identified by means of the symbol " " marked in a legible and indelible manner on case or frame to be earthed adjacent to the terminals.	Two separate earthing terminals suitable for connecting GI strip shall be provided on CB. Earthing strip shall not be in ABB's scope of supply.	Noted
57	5.13	15 of 25	PAINT & FINISH:	Control cabinet of CB shall be powder coated instead of painted.		Noted
58	5.14(d)	16 of 25	A local mechanical emergency trip device with necessary shrouds	ON/OFF push buttons shall be provided for manual on/off operation of CB.		Noted
59	5.14(f)	16 of 25	Castle key & lock (Series will be finalized during detail engineering)	Castle lock & keys shall not be in our scope as per point no. 5.1.18	We understand from point no. 5.1.18 that space for mounting the castle lock shall be provided and castle lock supply is not in our scope.	Castle key and lock shall be provided and during detailed engineering Series No to be submitted
60	5.14(g)	16 of 25	Electrical & mechanical interlocks with isolators	Necessary contacts shall be provided for electrical interlocking with the isolators.	Necessary contacts shall be provided for electrical interlocking with the isolators.	Noted
61	5.14(h)	16 of 25	Heater	A heater rated 240V±10% AC, 50 Hz		Noted
62	7	17 of 25	Tests	Routine tests shall be as per IEC std as applicable. Type tests which are mandatory as per IEC 62271-100 are performed on the offered CB & a copy of reports shall be provided for ref. purpose	We shall submit copies of type test reports not older than 10 years for 33kV and not older than 15 years for 11kV PCVCB for customers ready reference. In case customer wants to repeat any type test then same shall be done on chargeable basis only.	as per CEA latest guideline
63	11	18 of 25	In the event any defect is found by the Company up to a period of 60 months from the date of commissioning or 66 months from the date of last supplies made under the contract, whichever is earlier, bidder shall be liable to undertake to replace/rectify such defects at his own costs.	In the event any defect is found by the Company up to a period of 60 months from the date of commissioning or 66 months from the date of last supplies made under the contract, whichever is earlier, bidder shall be liable to undertake to replace/rectify such defects at his own costs.	The warrantee of equipment shall be linked with individual supply date instead of last supplies made under contract.	As per TS
64	11	19 of 25failing which the Company will be at liberty to get it replaced/rectified at bidder's risks and costs and recover all such expenses plus the Company's own charges(@ 20% of expenses incurred), from the bidder or from the " The bidder shall further be responsible for "Free Replacement" for another period of THREE years from the end of the guarantee period for any "Latent Defects" if noticed and reported by the company.Security cum Performance Deposit" as the case may be.failing which the Company will be at liberty to get it replaced/rectified at bidder's risks and costs and recover all such expenses plus the Company's own charges(@ 20% of expenses incurred), from the bidder or from the " Security cum Performance Deposit" as the case may be. The bidder shall further be responsible for "Free Replacement" for another period of THREE years from the end of the guarantee period for any "Latent Defects" if noticed and reported by the company.	Only actual incurred expenses shall be recovered.	Tender T & Cs shall prevail
65	17	20 of 25	SERVICELIFE: Bidder need to provide life cycle support and supplies to ensure necessary support in terms of services and spares for next 25 years from date of supply.	SERVICELIFE: Bidder need to provide life cycle support and supplies to ensure necessary support in terms of services and spares for next 10 years from date of supply.		Tender T & Cs shall prevail
66	17.4	20 of 25	A local mechanical emergency trip device with necessary shrouds	ON/OFF push buttons shall be provided for manual on/off operation of CB.		Noted
67	17.5	20 of 25	Castle key & lock (Series will be finalized during detail engineering)	Castle lock & keys shall not be in our scope as per point no. 5.1.18	We understand from point no. 5.1.18 that space for mounting the castle lock shall be provided and castle lock supply is not in our scope.	Castle key and lock shall be provided and during detailed engineering Series No to be submitted
68	17.6	20 of 25	Electrical & mechanical interlocks with isolators	Necessary contacts shall be provided for electrical interlocking with the isolators.	Necessary contacts shall be provided for electrical interlocking with the isolators.	Noted
69	17.7	20 of 25	Heater	A heater rated 240V±10% AC, 50 Hz		Noted
70	17.8	20 of 25	Insulated spring charging handle along with additional sleeve	Spring charging handle is inbuilt part of Drive mechanism and same shall be as per manufactures type tested design only.		Noted
71	17	20 of 25	SPECIAL TOOLS & GAUGES	Said clause shall be removed	Our scope is limited to supply only.	Tender T & Cs shall prevail

72	17	20 of 25		Unit rate of spares shall be quoted by bidder. Order for supply of required spares shall be placed along with breaker it self.	does this mean that spares are not to be considered included in CB price?	As per scope, mandatory spares as per TS shall be supplied on FOC basis along with VCB. Additional spares price are sought only for contingency purpose and shall be utilized as per DISCOM requirement.
General						
73			Exclusion of Consequential Damages	Exclusion of Consequential Damages : Notwithstanding any other provision to the contrary, in no event shall ABB, its suppliers, sub-contractors, employees and Affiliates, be liable under this contract for any loss of profits, loss of use, loss of production, loss of contracts, loss of data or any indirect or other consequential losses/damages, whether in contract, warranty, tort, negligence, strict liability or caused otherwise.	knidty include the said clause.	Tender T & Cs shall prevail
74			Liability limitation	Notwithstanding anything contained in this Contract/PO and/or any of its parts, it is agreed between the parties hereto that the aggregate cumulative liability of the ABB under this Contract/PO (regardless whether the claim is based upon tort, negligence or strict liability) resulting in any way from the performance or non-performance, all indemnities, liabilities, loss, damages, expenses, claims, direct damages risk purchase etc. shall not exceed 100% of the Contract value/PO value.	knidty include the said clause.	Tender T & Cs shall prevail
75			Trade, Control and compliance	<p>*The Parties shall comply, and shall ensure that their employees, directors, officers, affiliates and third parties engaged in any manner in relation to the Agreement to comply, with all applicable laws (including anti-bribery and anti-corruption laws, human rights, and sanctions and trade control laws and regulations.</p> <p>*The Buyer further represents that it will not directly or indirectly sell, export, re-export, release, transmit or otherwise transfer any items received from ABB to any Restricted Parties, or parties that operate, or whose end use will be, in Russia, Belarus, or in a jurisdiction/region subject to comprehensive sanctions by the United States, European Union, or Switzerland. Restricted Parties refers to entities on a government list (incl. EU, Switzerland, and US) subject to blocking or asset freezes, or other trade or financial restrictions. Sanctions extend to entities that are directly or indirectly owned 50% or more, in the aggregate or individually, or controlled, by a Restricted Party.</p> <p>*Any violation of this clause shall constitute a material breach of the Agreement and, in addition to any other remedies under the law and/or this Agreement, non-infringing Party shall be entitled to unilaterally terminate this Agreement with immediate effect and without liability for any claim, losses or damages whatsoever related to the termination..</p>	knidty include the said clause.	Tender T & Cs shall prevail
76				The parties are aware of the shortage of raw material, electronic components worldwide which is likely to last for the foreseeable future, as well as of market fluctuations in the availability and cost of other raw materials, commodities, other critical components, and transport capacities. Notwithstanding anything to the contrary in the contract/terms and conditions/purchase order, if after the date of ABB's proposal/offer or during the term of the performance of the contract/purchase order there are any changes to availability and/or market conditions for electronic components, raw materials, commodities, and transportation capabilities directly or indirectly affecting ABB's performance, ABB shall be entitled to relief in the schedule of the performance or delivery of the directly or indirectly affected scope of work under the contract/purchase order. In such circumstances ABB may not be able to comply with the originally agreed delivery or completion schedule and that ABB shall not be liable for any liquidated or actual damages in connection thereto.	Looking into the current crisis going on with global supply chain request you to knidty include the said clause.	Tender T & Cs shall prevail