

Format for Pre-Bid Queries				
Tender Reference No		TPCODL/P&S/23-24/ 100000398		
Tender Name		Supply of LA		
Note : Pre-Bid Query has to be sent in editable Excel file format only				
Sr. No.	Detailed Reference to TPCODL Technical Document. Please specify Document No / Clause No / Page No	Description as per Bid Document	Remarks - Query / Clarification	TPCODL Response dtd. 26.07.2023
1	2	3	4	5
1	Annexure I sr.no. 2	Lightning arrester 33kV 30kV 10kA	Kindly confirm the discharge class	SL Class-II
2	EHV-HV- 2015 , sr.no. 11.a	Standard rested short duration power frequency frequency withstand voltage (Dry/Wet) as per IS 2165	As per IEC 60099-4 2014, Dry power frequency withstand test is not applicable for station class arrester as per IEC 60099-4 2014	shall be as per tender specifications
3	EHV-HV- 2015 , sr.no. 13 a & b	Long duration current peak current :75A virtual duration of peak T 1000 micro sec	As per IEC 60099-4 2014, long duration current impulse changed to repetitive charge transfer rating Qrs .	shall be as per tender specifications
4	EHV-HV- 2015 , sr.no. 29	Material of insulating base - UV resistant fire retardant DMC	Insulating bracket material : ABS	shall be as per tender specifications
5	EHV-HV- 2015 , sr.no. 30 & clause 5.4	Disconnecter (optional)	Kindly confirm the requirement for disconnector , disconnector lead	Disconnecter is required & Bidder to quote with disconnector
6	EHV-HV- 2015 , sr.no. 31 clause 5.1	Insulating terminal cap- Polyolefin	Silicone polymer insulating terminal cap will be provided	Shall be as per TS
7	EHV- HV-205 , clause 5 & clause 5.5	This shall be self supporting type, structure mounting type	Kindly confirm whether requirement is for structure mounting or bracket type	Mounting bracket is required as per Tender specification
8	EHV-HV-2015 clause 7.1	The above mentioned test shall be made 100% of arrester to be supplied	As per IEC 60099-4, sampling is cube root of total quantity.	Accepted
9	EHV-HV-2015 clause 7.3	Internal partial discharge test	Not a type test as per IEC 60099-4 2014	shall be as per tender specifications
10		Seal leak rate test	Not applicable for polymer design B arresters as per IEC 60099-42014	shall be as per tender specifications
11	EHV-HV-2015 clause 8	Type test should have been conducted the period not exceeding 5 years	As per CEA guidelines type test validity is 10 years.	Shall be 5 years as per latest CEA guidelines
12	EHV-HV-2015 clause 13	One sample to be submitted	Kindly confirm whether sample is required	Not Required
	33kV 10kA			
13	ENG-HV-1021 sr.no. 11.b	Standard rested short duration power frequency frequency withstand voltage (Dry/Wet) as per IS 2165	As per IEC 60099-4 2014, Dry power frequency withstand test is not applicable for station class outdoor arrester as per IEC 60099-4 2014	shall be as per tender specifications
14	ENG-HV-1021 sr.no. 13a & b	Long duration current peak current :400A virtual duration of peak T 2000 micro sec	As per IEC 60099-4 2014, long duration current impulse changed to repetitive charge transfer rating Qrs . For SL surge arresters it is 1C	shall be as per tender specifications
15	ENG-HV-1021 sr.no. 22	maxim cantilever strength - 325kgf	For polymer Surge arresters 150kgf.	shall be as per tender specifications
16	ENG-HV-1021 sr.no. 29	Material of insulating base - UV resistant fire retardant DMC	Insulating base material IP: HDPE (High density polyethylene)	shall be as per tender specifications
17	ENG-HV-1021 sr.no. 30	Insulating terminal cap- Polyolefin	Silicone polymer insulating terminal cap will be provided	shall be as per tender specifications
	30kV 10kA SM			
18	ENG-EHV-1021 sr.no. 10	Standard rested short duration power frequency frequency withstand voltage (Dry/Wet) as per IS 2165	As per IEC 60099-4 2014, Dry power frequency withstand test is not applicable for station class outdoor arrester as per IEC 60099-4 2014	shall be as per tender specifications
19	ENG-EHV-1021 sr.no. 13 a & b	Long duration current peak current : virtual duration of peak T 2400 micro sec	As per IEC 60099-4 2014, long duration current impulse changed to repetitive charge transfer rating Qrs .	shall be as per tender specifications
20	ENG-EHV-1021 sr.no. 22	maxim cantilever strength - 325kgf	For polymer Surge arresters 150kgf.	shall be as per tender specifications
21	ENG-EHV-1021 sr.no. 29	Material of insulating base - UV resistant fire retardant DMC	Insulating base material IP: HDPE (High density polyethylene)	shall be as per tender specifications

Sr. No.	Detailed Reference to TPCODL Technical Document. Please specify Document No / Clause No / Page No	Description as per Bid Document	Remarks - Query / Clarification	TPCODL Response dtd. 26.07.2023
22	ENG-EHV-1021 sr.no. 30 clause 5.1	Insulating terminal cap- Polyolefin	Silicone polymer insulating terminal cap will be provided inline with polymer housing.	shall be as per tender specifications
23	ENG-EHV-1021 clause 5.4 sr.no. f	RTV silicone sealant to be used	For surge counter enclosure material is ABS, Hence RTV silicone sealant not required.	shall be as per tender specifications
24	ENG-EHV-1021 clause 8	Type test should have been conducted the period not exceeding 5 years	As per CEA guidelines type test validity is 10 years.	Shall be 5 years as per latest CEA guidelines
	1.7 f) Qualification Criteria (page 7 of 85)	f) Bidder must have successfully executed the supply of Lightning Arrester within last 5 Year. Copy of completion certificates to be submitted in this regard.	Quantity is mentioned as sets (UOM). Clarify it is nos or sets	Kindly read this as EA (Nos)
	3.9 Type tests (page 11 of 85)	The type tests specified in TPCODL specifications should have been carried out within five years prior to the date of opening of technical bids and test reports are to be submitted along with the bids.	As per Central Electricity Authority (CEA) guidelines, validity of type test reports shall be 10 years	Shall be 5 years as per latest CEA guidelines
	Annexure I Schedule of Items (page 15 of 85)	Sl. no. 2 : LIGHTNING ARRESTER 33 KV, 30 KV 10 KA.	Clarify requirement is Class 2 or Class 3	SL Class-II
	Clause no. 4 GENERAL TECHNICAL REQUIREMENTS: Specification no. ENG-HV-2015	GENERAL TECHNICAL REQUIREMENTS: sl. no. 30 Disconnecter (optional) a. Disconnecter connecting lead - Insulated flexible tinned plated copper braid with lugs b. Size of Insulated Tinned copper braid - 25 sq.mm c. Length of Insulated Tinned copper braid - 300 mm	Disconnecter is mentioned as optional, clarify whether disconnecter is required or not Clarify whether disconnecter connecting lead is required or not since disconnecter is optional, requirement of lead is also not required. Not applicable if disconnecter is not required Not applicable if disconnecter is not required	Disconnecter is required & Bidder to quote with disconnecter
	Clause no. 5.1 Assembly Specification no. ENG-HV-2015	Assembly - a) The 12kV 10kA station class Lightning Arrester shall have L-shaped terminal clamp suitable for conductor size of 148 sqmm.	Normally arresters with bracket mounting are provided with studs on both ends of LA which will provide robust connection for line and ground leads. Also Insulating terminal cap will fit tightly on the LA with stud design on line side. Hence, L shaped terminal clamp is not applicable.	shall be as per tender specifications
	Clause no. 5.4 DISCONNECTORS (OPTIONAL): Specification no. ENG-HV-2015	5.4 DISCONNECTORS (OPTIONAL): Disconnecter shall be suitable for screwing directly to LA with terminal of M10.	Clarify whether disconnecter is required or not as it is mentioned as optional If disconnecter is applicable, terminal can be M12 also which is more robust than M10	Disconnecter is required & Bidder to quote with disconnecter
	Clause no. 6, Marking Specification no. ENG-HV-2015	A stainless steel rating plate, of at least 1 mm thickness, shall be fitted to each Lightning Arrester	Due to limitations in manufacturing, Name plate thickness will be 0.3mm	shall be as per tender specifications
	Clause no. 7.1 ACCEPTANCE TESTS Specification no. ENG-HV-2015	Acceptance tests : All acceptance tests shall be witnessed by TPCODL/TPWODL/TPNODL/TPSODL / the purchaser's or his authorized representative. The above mentioned tests shall be made on 100 % of arrestors to be supplied.	All acceptance tests shall be performed on the cuberoot of the lot quantity which is as specified in IS / IEC standard. Hence 100% testing as acceptance test is not applicable	Accepted
		i) Hot dip Galvanizing test on exposed steel parts.	Since our design uses Stainless Steel hardware and since no MS parts are used, this test is not applicable	Accepted if SS hardware is used instead of HDG Hardware. Same should be mentioned in the Type Test Reports.

Sr. No.	Detailed Reference to TPCODL Technical Document. Please specify Document No / Clause No / Page No	Description as per Bid Document	Remarks - Query / Clarification	TPCODL Response dtd. 26.07.2023
	Clause no. 7.3 TYPE TESTS Specification no. ENG-HV-2015	l) Seal leak rate test	As per IEC / IS standard, this test is applicable for arresters having an enclosed gas volume and a separate sealing system. Polymer arrester doesn't use any sealing / o ring (like in porcelain type) in the manufacturing and are directly moulded and doesn't have any gap between housing and blocks. Hence this test is not applicable.	shall be as per tender specifications
		m) Tests on arrester disconnectors- Time current characteristics (optional)	If disconnector is not applicable, then this test is also not applicable	Disconnector is required & Bidder to quote with disconnector
	Clause no. 7.4 SPECIAL THERMAL STABILITY TEST Specification no. ENG-HV-2015	Special thermal stability test	Since this is part of operating duty test and type test report (operating duty test) will be submitted, hence it is not applicable	Noted
	Clause no. 8 TYPE TEST CERTIFICATES: Specification no. ENG-HV-2015	8. TYPE TEST CERTIFICATES: Type tests should have been conducted during the period not exceeding 5 years from the date of opening the bid.	As per guidelines of Central Electricity Authority (CEA), validity of type test reports are for 10 years, hence the same is to be accepted	Shall be 5 years as per latest CEA guidelines
	Clause no. 11, Guarantee Specification no. ENG-HV-2015	Guarantee : The bidder shall further be responsible for ' free replacement' for another period of THREE years from the end of guarantee period for any 'latent defects' if noticed by the company.	Not applicable as lightning arresters are protective equipment and are subjected for surge stresses frequently. If the intensity of the surge is more than the arrester withstand capability, it will self sacrifice while protecting the equipment.	Noted
	Clause no. 13, TENDER SAMPLE Specification no. ENG-HV-2015	One sample to be submitted during technical bid submission. This shall be Non-returnable basis.	Since we are regular suppliers to TPCODL and have supplied 12kV 10KA Lightning Arresters, sample submission is not applicable	Not Required
	Clause no. 4, General Technical Requirements Sl. no. 22 (Technical Particulars Class SL Class - II & SM Class - III) - Specification no. ENG-EHV-1021	Max. Cantilever Strength - 325 KgF	Normally 325 KgF strength is applicable for Porcelain type LAs due to its high strength ceramic housing. Since Polymer LA housing is of Rubber type, cantilever strength will be > 150 KgF	shall be as per tender specifications
	Clause no. 5.4, Surge counter Specification no. ENG-EHV-1021	Surge Counter	Clarify whether surge counter is required or not for Class 2 & Class 3 LAs	Required
	Clause no. 5.4, Surge counter Specification no. ENG-EHV-1021 (If Surge Counter is applicable)	a) Cyclometric 5 digit, non-resetting type counter, dial type surge counter shall be provided for each lightning arrester	Our design has 6 digit counter which is better than 5 digits.	Accepted
		d) The connecting conductor from lightning arrester earth terminal to the discharge counter, Approved Make for this Cable is Polycab/KEI/KEC/Sterlite/Finolex/Havells.	As insulated cable / conductor is standard design with ISI marking, equivalent make will be supplied. Since ISI marking will be printed, the cable will be able to meet the requirements of the standard which is irrespective of the manufacturer.	Approved make shall be as per tender specifications
		d) Bimetallic strips must be provided along with Surge Counter for bimetallic connections.	There is no bi-metallic connection between arrester and surge counter, hence the same is not applicable	shall be as per tender specifications
	Clause no. 6, Marking Specification no. ENG-EHV-1021	A stainless steel rating plate, of at least 1 mm thickness, shall be fitted to each Lightning Arrester	Due to limitations in manufacturing, Name plate thickness will be 0.3mm	shall be as per tender specifications
	Clause no. 7.1, Acceptance tests Specification no. ENG-EHV-1021	g) Measurement of power-frequency voltage on the arrester at the reference current	This test is same as a) Measurement of reference voltage test. Hence not applicable	shall be as per tender specifications
		h) Lightning impulse residual voltage on the arrester at nominal discharge current (wet power frequency voltage test)	Wet Power frequency is different from impulse test. As per IEC / IS standard, dry power frequency is applicable, hence wet power frequency test is not applicable	shall be as per tender specifications

Sr. No.	Detailed Reference to TPCODL Technical Document. Please specify Document No / Clause No / Page No	Description as per Bid Document	Remarks - Query / Clarification	TPCODL Response dtd. 26.07.2023
	Clause no. 7.2, Routine tests Specification no. ENG-EHV-1021	e) The power-frequency voltage	This test is same as a) Measurement of reference voltage test. Hence not applicable	shall be as per tender specifications
	Clause no. 8, Type test certificates Specification no. ENG-EHV-1021	Type tests should have been conducted during the period not exceeding 5 years from the date of opening the bid.	As per guidelines of Central Electricity Authority (CEA), validity of type test reports are for 10 years, hence the same is to be accepted	Shall be 5 years as per latest CEA guidelines
	Clause no. 11, Guarantee Specification no. ENG-EHV-1021	Guarantee : The bidder shall further be responsible for ' free replacement' for another period of THREE years from the end of gurantee period for any 'latent defects' if noticed by the company.	Not applicable as lightning arresters are protective equipment and are subjected for surge streas frequently. If the intensity of the surge is more than the arrester withstand capability, it will self sacrifise while protecting the equipment.	Noted
	Checklist			Bidder to must submit the filled all Checklist for technical bid submission. (excel sheet attached)