

ODISHA POWER TRANSMISSION CORPORATION LIMITED**CORRIGENDUM NO-03****NOTICE INVITING TENDER -NIT NO-CPC-24/2023-24****TENDER DOCUMENT No: Sr. GM-CPC-e-Tender-132kV SC UG Cable-Puri-24/2023-24.**

Name of the project:- Engineering, Supply, Erection, Testing and Commissioning of 132kV SC line through UG cabling with one spare cable from 220/132/33kV GSS Samagara to 132/33kV GSS Puri with one no 132kV bay extension at each end, Samagara & Puri ON TURNKEY CONTRACT BASIS

Reply to Pre bid queries for NIT No-CPC-24/2023-24

Sl. No	Clause reference (If any)	EXISTING CLAUSE & BIDDER'S QUERY	OPTCL's Reply
1	Technical specification of 132KV Cable-Clause 1.5.3.1 –	This clause specifies that electrical stress (a) equal to or less than 6kV/mm at the level of internal semiconductor (b) equal to or less than 3kV/mm at the level of external semiconductor and also mention a note that is (However supplier has to submit the stress calculation based on 18.0 mm insulation thickness), whereas technical specification of clause 1.5.3 and data sheet of s. no. 11 (b) clearly mentioned that nominal XLPE insulation thickness 18.0 mm and which is in line with IS 7098 Part 3. Please note that to meet the electrical stress a) equal to or less than 6kV/mm at the level of internal semiconductor b) equal to or less than 3kV/mm required higher XLPE insulation thickness i.e., more than 19 mm than specified in technical specification. So please confirm XLPE insulation thickness of 132 kV cables.	Cables should comply with all requirements specified in the TS.
2	Clause 1.5.7.3	This clause specify fiber used in the power cable or supplied separately in the OFC. Kindly confirm. Please confirm the technical specification of OFC Cable which is unavailable in the tender documents.	OFC cable to be laid separately. Refer to E27 of TS.
3	Clause 1.6.1 (Type test)	Please confirm whether fresh type test shall be carried out against subjected project of existing type test report will be valid as per IEC 60840	TTR to be evaluated as per clause no 1.4.1 of "Vol-I SBD"- "04-Annexure-A (BDS)_Qualification of bidder" and relevant IS/IEC.
4	Clause 1.6.2 (Routine & Acceptance Tests	This clause specifies Fiber continuity (For FIPC) & Optical loss measurement (for FIPC). Please note that these tests will applicable when optical fiber cable is embedded into power cable. Please confirm.	Not applicable.
5	Bonding System of 132KV Cabling.	Please confirm type of bonding system to be considered (Single End bonding, Both End bonding and Cross Bonding) for this project.	To be decided during detail engineering as per bonding calculation.
6	Technical specification Clause 1.7 (Testing)	Clause 1.7 (Testing) – 4 hours high voltage test has been amended as "The cable shall with stand without any failure the power frequency AC voltage of 2.5 times the rated voltage for 30 min between conductor and metallic screen at room temperature " from IS	As per TS & IS with latest amendments.

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		7098 (Part-3), vide amendment no. 4. Hence AC voltage tests shall be carried out 2.5 times the rated voltage for 30 minutes only. So please confirm.	
7	Clause 7.3.1 (Acceptance tests - General)	Clause 7.3.1 (Acceptance tests - General) – In this clause reference of clause see 5.3.4 & 5.3.5 for Conductor examination & measurement of electrical resistance of conductor and of metallic screen receptively has been mention whereas we are not finding these clauses in the specification. So please review and update.	For detail test procedure refer to relevant IS/IEC with latest amendments.
8	Clause 1.6.1 (Type test)	As per present guideline May-2020 of Central Electricity Authority–Ministry of Power, Govt. of India Type Test of Cable and Cable accessories validity is 10-years from the last date of submission of bid. Kindly Confirm accordingly. We are having type test report of 132KV 1000Sqmm Cable system of Corrugated aluminium sheathed Copper conductor cable of dated within last five years as per IEC 60840 of CPRI ,Bangalore .Kindly confirm whether for this tender type test is again required or above type test report will be sufficient. But if the type test is required requesting you to kindly clarify regarding the type test procedure whether it will be happened choosing from a one sample of cable drum from the total lot of cable drum which have to supply. Please confirm regarding the additional cost of cable, type test charges, termination Kit in this case will be beared by OPTCL or contractor/manufacturer. Requesting you to allow all the cable can be dispatched immediately after successful completion of routine test & acceptance test otherwise we have to wait for the CPRI dates of type test keeping with all the other cable drum at plant which is practically uneconomical and also the CPRI dates of type test is out of anyone control.	TTR to be evaluated as per clause no 1.4.1 of “Vol-I SBD”- “04-Annexure-A (BDS) Qualification of bidder” and relevant IS/IEC.
9	Clause 7.3.6 (Acceptance tests – Short circuit test)	This clause calls the short circuit test for Power Cables will be conducted by the Supplier on the cable at CPRI Bangalore or at Manufacturer’s works having requisite facilities approved by KEMA Netherlands or at NABL (India) accredited laboratory. Kindly confirm whether short circuit test shall be performed on conductor or metallic sheath i.e., corrugated aluminium sheath.	As per TS, test to be conducted on conductor & Sheath.
10	Clause 7.3.6 (Acceptance tests – Short circuit test)	This clause calls the short circuit test for Power Cables will be conducted by the Supplier on the cable at CPRI Bangalore or at Manufacturer’s works having requisite facilities approved by KEMA Netherlands or at NABL (India) accredited laboratory. Kindly confirm whether existing short circuit test report will be valid for this project or fresh short circuit test shall be performed on offered cable.	SC test to be conducted in third party NABL accredited lab.

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		Please confirm if the cable manufacturer is already having short circuit test from external NABL accredited laboratory of same voltage grade and in same size & same type of construction of Cable then whether in that case repetition of short circuit test is required or not required.	
11	132KV Cable laying route	Kindly confirm regarding the 132KV Cable laying route whether it is in private land or Odisha Govt. Land or OPTCL acquired land. Land Purchase from Private bodies will be in OPTCL scope or in contractor scope.	As per clause no 3 of "Scope of work of transmission line".
12	Road Restoration charges and Corridor Charges	Kindly confirm regarding all type of road restoration charges, bank guarantees will be in OPTCL Scope or in contractor scope and Please confirm also Corridor Charges regarding permission of Cabling work from different authority like National Highway, PWD, Local Municipality, Irrigation dept, BSNL, Oil & GAS Lines will be in OPTCL scope or in Contractor Scope.	Refer "scope of work transmission line clause no 4.15, 4.16 & civil erection price schedule".
13	OPTCL inspector travelling expenditure	Requesting you kindly confirm regarding the OPTCL inspector travelling expenditure with lodging & boarding for the supply material inspection at manufacturer premises, at outside laboratory inspection like CPRI ,Bangalore will be in OPTCL scope or in bidder scope.	As per clause no 19 of GCC (Vol-I, Section-IV) all the travelling expenses for inspection of materials to be borne by bidder. Separate Corrigendum containing details will be uploaded.
14	Technical specification of 132KV UG Cable	Requesting you to kindly confirm regarding the permissible maximum drum length of 132KV 630Sqm Cable which can be supplied. Requesting you to kindly confirm regarding the bonding system of cable and please release us the bonding diagram which has been considered as per the price schedule.	It will be around 500 mtr depending on approval of cable schedule during detail engineering.
15	Make List required	In this tender requesting you to please confirm the OPTCL- make list of different supply materials.	Refer OPTCL approved vendor list available on https://optcl.co.in/vendor_list.aspx
16	Technical specification of 132KV Cable laying Method	Kindly clarify the 132KV Cable laying method and formation also. Whether it will be in open trench or HDD methodology and in trefoil condition or in flat formation. Please release the open trench civil drawing accordingly with RCC slab position, sand position etc.	Refer to "Price Schedule".
17	Power Requirement at site.	Requesting you to kindly provide power for the erection purpose at site in free of cost.	It will be on bidder's scope.
18	Technical specification of 132KV Cable laying	We would like to inform you that lots of obstacles in the 132KV Cable is there like Upcoming Fly over, Road extensions ,DP pole ,other utility cable (33KV or 11KV),Cannel, OFC Cable , pipe line etc. In the same 132KV Cable route trees is also there. Requesting you to please confirm the regarding the above route approval for cable laying and tree cutting, Cannel,	Refer "scope of work transmission line clause no 4.15 & 4.16 & price schedule".

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		crossing permission is in OPTCL scope or in bidder scope. Please confirm regarding cannel crossing cable laying method. If it is in cantilever structure requesting you to please amend the price schedule accordingly for the cantilever structure supply & erection .Kindly provide us the design drawing of this structure. ROW for the above land is in OPTCL scope or in bidder scope.	
19	Ground Level of 132KV Cable laying trench	We would like to inform you that the ground level of total route of 132KV Cable laying is not in the same platform. Hence requesting you kindly confirm regarding the ground level consideration so that we can able to consider the 132KV Cable trench accordingly.	As per TS.
20	Technical specification of 132KV Cable laying	Requesting you to kindly provide the details civil drawing of 132KV Cable joint bay showing the civil material details.	As per TS & Scope of work.
21	Bonding Cable	In the supply schedule you have mentioned 300Sqmm & in erection its has been mentioned 240Sqmm.Kindly clarify.	The bonding cable erection is to be 300 Sq mm.
22	Technical Qualification 1.4	<p>In the Technical qualification of underground cabling work we have understood that if the bidder is having experienced having successfully erected, tested & commissioned (including civil works) of UG cable of "110kV" or above voltage level as a prime contractor.</p> <p>"But if the bidder is not manufacturer he has to take authorisation who is having supplied the type tested EHV cable at least (**4.06 KM) of (rated 132KV**) of same or higher current rating single core insulated cable during last 07 (seven) years, which must be in satisfactory operation for at least 01 (One) year as on the originally scheduled date of bid opening. The manufacturer must supply the required cables from its manufacturing base in INDIA to the aforesaid projects" ----</p> <p>which we have understood that the manufacturer should having supply experience of 132KV or higher Voltage Grade of 630Sqmm or higher Size Single Core insulated cable at least 4.06 KM during last 07 (seven) years, which must be in satisfactory operation for at least 01 (One) year as on the originally scheduled date of bid opening. Please confirm the above understanding.</p> <p>Please also confirm the technical qualification requirement of Supply of 132KV Cable when the bidder is having both experience of manufacturer as well as contractor.</p>	<p>As per SBD "Annexure-A (BDS)_Qualification of bidder- Clause no 1.4.1".</p> <p>"The manufacturer should have supplied the type tested EHV cable at least (**16.67 KM) of (rated 132KV**) of same or higher current rating single core insulated cable during last 07 (seven) years, which must be in satisfactory operation for at least 01 (One) year as on the originally scheduled date of bid opening. The manufacturer must supply the required cables from its manufacturing base in INDIA to the aforesaid project.</p> <p>The above clause is applicable to all types of bidders, EPC firms as well as manufacturers.</p>
23	1.4.1 of Annexure-	The manufacturer should have supplied the type tested EHV cable at least (**4.06 KM) of (rated	The manufacturer should have supplied

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	A(BDS), page no. 9 of 20.	132KV**) of same or higher current rating single core insulated cable during last 07 (seven) years, which must be in satisfactory operation for at least 01 (One) year as on the originally scheduled date of bid opening. The manufacturer must supply the required cables from its manufacturing base in INDIA to the aforesaid projects. 1. (rated.... KV**): To be inserted as per tender requirement. 2. (**.....KM): At least 100% or more of the total scope length. As per our understanding bidder have to show supply and satisfactory operation of 01 year for 4.06km of (rated 132kv**) of same or higher current rating single core insulated cable during last 07 years.	the type tested FHV cable at least (**16.67 KM) of (rated 132KV**) of same or higher current rating single core insulated cable during last 07 (seven) years, which must be in satisfactory operation for at least 01 (One) year as on the originally scheduled date of bid opening”.
24	CL.NO.1.3.5 Sl. No. viii Vol-II, E-31-33 132KV Cable Spec P:39/86	However, the same has been indicated in Vol-III E3, System Data Document, Page: 2/3 as 31.5 KA/1Sec. Request clarification since it has the cost implication.	For 132kV cable it is to be >40 kA for 1 sec minimum. Refer to clause no 7.3.13 of Vol-II-TS-33/132/220kV cable, page number 58-59.
25	CL.NO.1.5.7 Vol-II, E-31-33 132KV Cable Spec P:42/86	Embossing is not possible due its non-measurable thickness. When printed, this may not last longer. We note that the Owner`s desire to have a contrasted coloured strip which is to be extruded having colours as R, Y, B for permanent phase identification and ease of installation methodologies. Please clarify / confirm.	Embossing required, while maintaining outer sheath thickness.
26	CL.NO.1.5.7.3 Vol-II, E-31-33 132KV Cable Spec P:43/86	Fiber specification for integration in power cable. Both shall have a cost implication. In order to have an equal base for cost comparison of the bids, request clarification whether integration in power cable or otherwise is to be considered for bidding.	FIPC not required. FO cable to be laid separately.
27	CL.NO.1.6.1 Vol-II, E-31-33 132KV Cable Spec P:46/86	Please clarify whether this is a mandatory condition for the successful bidder, though he holds the same, as it has the cost implication.	As per TS.
28	CL.NO.1.9 Vol-II, E-31-33 132KV Cable Spec P:47/86	Packing. In respect of Returnable Steel Drums, please clarify whether the Owner shall be returning these empty drums by duly paying freight or not within 1 month on completion of cable laying or not.	It is on bidder`s scope.
29	CL.NO.1.1.3 Vol-II, E-31-33 132KV Cable Spec P:49/86	We read DMRS RSS as OPTCL RSS.	As per TS.
30	CL.NO.1.1.5 Vol-II, E-31-33 132KV Cable Spec P:49/86	In respect of trefoil cables being tied, please clarify the following as it has the cost implication: 1.Locking belts or non-magnetic Al-Alloy trefoil clamps with neoprene lining is also permitted or not. 2. After 2 M interval, please specify the length.	As per TS.

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		3.Calculation details for dynamic forces for selecting the interval	
31	CL.NO.1.1.12 Vol-II, E-31-33 132KV Cable Spec P:51/86	Route Marker Please confirm whether the same are required to be provided on both sides or not along with the length of interval instead of at suitable intervals.	Along the length of line.
32	CL.NO.2.1.3 Vol-II, E-31-33 132KV Cable Spec P:51/86	Specifying 5 years' performance in India is not understood clearly as the same parameter for the corresponding cable is mentioned as 1 year. Please clarify. The shelf life of the components can be unlimited. Please clarify.	As per TS.
33	CL.NO.7.3.6 Vol-II, E-31-33 132KV Cable Spec P:55/86	Carrying short circuit test for power cables at manufacturer`s works is not possible. Hence, the same shall be carried out at any of the labs indicated before dispatching the cables. Please confirm acceptance.	As per TS.
34	CL.NO.7.3.6 Vol-II, E-31-33 132KV Cable Spec P:56/86	Please confirm whether the required Uo shall be provided by the Owner free of cost or not for completing this test.	It is on Bidder's scope as per TS.
35	CL.NO.1.2 Vol-II, E-31-33 132KV Cable Spec P:82/86	It is noted that the Owner prefers Dry Type Sealing Ends. However, for provision of optional price schedule for the same as the cost of Dry Type Sealing Ends are immensely higher than Oil Filled Sealing Ends, request provision of this option in the price schedule if it is not made available.	As per TS/BOQ
36	CL.NO.1.6 Vol-II, E-31-33 132KV Cable Spec P:85/86	Type test reports:- Please confirm that type tests in case of Concentric Co-axial sheath bonding cable is not required.	As per TS and relevant standards.
37	CL.NO.1.3 Vol-II, E-31-33 132KV Cable Spec P:82/86	Straight Through Joints In order for the manufacturer to use the proven technology, usage of copper casing + FRP body for bitumen compound filling is mandatory or not. Please confirm since it has a cost implication.	As per TS.
38	CL.NO.1.4 Vol-I Annexure-A BDS - QR P:7/20 & 8/20	The manufacturer should have supplied the type tested EHV cable at least (**22.90 KM) of (rated 132KV**) of same or higher current rating single core insulated cable during last 07 (seven) years, which must be in satisfactory operation for at least 01 (One) year as on the originally scheduled date of bid opening. The manufacturer must supply the required cables from its manufacturing base in INDIA to the aforesaid projects. In order to provide a wide base for participation, request inclusion of the following too in addition to the following: "As a prime contractor (independently or as a partner of JV)". To: "As a prime contractor (independently or as a partner of JV)". OR	As per TS.

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		"As a prime contractor / sub-contractor provided the work completion and performance certificate(s) are issued by the Owner I.e. Utility Directly".	
39	Pre-Bid Route Survey Requirement	Request please advise the contact details of the concerned executive of OPTCL to enable us to coordinate for conclusion of the required pre-bid site survey which is required as a part of tender to ensure competitive bid.	Details are provided on "scope of works".
40	Request for due date extension	Bid Submission End Date: 01.02.2024 up to 1700 Hrs The due date is requested for extension by 30 days from the date of providing the clarifications against the above queries.	As per TS.
41	Work Contract Tax(WCT), Labour cess.	Kindly confirm whether it is applicable for total turnkey package for supply & erection items or only for erection item. In that case supply order and erection order to placed separately. Please also confirm regarding the present WCT amount and Labour cess amount in supply & erection item.	WCT- It will not be deducted from the invoice. Labour cess- the agreement will cover both execution and supply of material and supply of materials are not a separate transaction and cannot exist in isolation to the contract execution, it will form part of cost of construction as per BOCW act and hence will be subject to levy of cess on the entire transaction value of the contract i.e. being inclusive of value of supply of goods.
42	Labour PF & ESI	Requesting you to kindly confirm regarding the PF & ESI declaration of engaged erection persons for the above project work whether it is mandatory to show PF & ESI of direct contractor of OPTCL or sub-contractor PF & ESI declaration will be allowed. Kindly confirm.	As per TS.
43	Draft format of Power of Attorney	Requesting you to kindly provide softcopy of power attorney format of the bidder particularly for this tender as this format has not been provided in the annexure of the tender in commercial portion.	As per TS.
44	Hardcopy of documents submission	Requesting you to kindly confirm regarding the hardcopy submission last date and time of EMD ,tender fees ,Power of Attorney .Kindly confirm the above details submission address.	As per TS.
45	Bank details	Kindly confirm the bank details of OPTCL (Bank account number, Branch address, IFSC Code) as it is required for the above tender EMD-Bank guarantee purpose.'	ICICI Bank Ltd, N5/535, IRC Village, Indradhanu Market, Nayapalli-751012, SB account No. 028401004346, IFSC- ICIC0000284

All other terms and condition of the tender remains unchanged.

K. S. S. S.
31.01.2024

CHIEF GENERAL MANAGER [C.P.C.]