

REQUESTS FOR CLARIFICATION / RESPONSES TO BIDDERS

(Up to December 12, 2020) Rev. 03

Project: WAPP-North Core/Dorsale Nord, Regional Power Interconnector Project

RFB: PQ/EPC-TL/WAPP-NC/WB#01

/ Lot 1-TL

CLARIFICATIONS N°2

N°	Section from Bidding documents	Part	Clause	Page	Questions	Answers / Clarifications												
1	Particular General Requirements		Particular Technical Requirements 7. Design Parameters 7.5 Loading assumptions 7.5.2 Dynamic wind speed and pressure		<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th colspan="2">Period of 3 seconds</th> <th colspan="2">Period of 10 seconds</th> </tr> <tr> <th>Speed(m/s)</th> <th>Pressure (N/m²)</th> <th>Speed(m/s)</th> <th>Pressure (N/m²)</th> </tr> </thead> <tbody> <tr> <td>46</td> <td>1323</td> <td>33</td> <td>681</td> </tr> </tbody> </table> <p>Please clarify: What should be the wind pressure on conductor and earth wire? Is it 3 second gust (1323N/ sq.m – clause 7.5.2) or 10 minutes average (681N/ sq.m)?</p>	Period of 3 seconds		Period of 10 seconds		Speed(m/s)	Pressure (N/m ²)	Speed(m/s)	Pressure (N/m ²)	46	1323	33	681	Clause 9.4.2 specifies that the wind loads on the line equipment and tower shall be calculated based on the reference wind speed of $V_{b,0} = 33$ m/s.
Period of 3 seconds		Period of 10 seconds																
Speed(m/s)	Pressure (N/m ²)	Speed(m/s)	Pressure (N/m ²)															
46	1323	33	681															
2	Particular General Requirements				Please clarify: Span factor of G_x and drag factor of C_x (clause 4.3.5) to be added extra or not to arrive at wind on tower components.	The wind force shall be calculated as in clause 4.3.5, i.e. span factor G_x and drag factor C_x are applied to peak wind pressure $q_p(h)$.												
3	Particular General Requirements		Particular Technical Requirements 7. Design Parameters 7.5 Loading assumptions 7.5.2 Dynamic wind speed and pressure		Please clarify: As per EN 50341 peak wind pressure $Q_p(h)$ to be multiplied by G_x and C_x and then by partial factors of the order 1.0 to 1.25 but the specification asks for safety factors of order 2.0 multiplied by partial factor 1.1. Thus please confirm if 10min average wind can be taken instead of 3 sec gust for the wind load calculations.	As per EN 504341-1 :2012 the peak wind pressure $Q_p(h) = [1+7 I_v(h)] * q_h(h)$ is to be multiplied by G_x and C_x to obtain the wind force on any component Q_{Wx} .												
4	Particular General Requirements		Particular Technical Requirements 9. Towers 9.4.3 Conductor tension loads 9.5.1 Normal load cases (N1 and N2)		Please clarify: The critical load case for normal conditions N1 and N2 is 30deg maximum wind as per 9.5.1 but as per 9.4.3 the critical load case is 10deg maximum wind. Please clarify which one to follow.	<p>Please correct the clause 9.4.3 as follows: “The maximum working stress of the conductors is based on:</p> <ul style="list-style-type: none"> The maximum design wind pressure condition <u>OR</u> The minimum design temperature condition” <p>Then the maximum wind pressure shall be used with maximum wind for normal conditions N1 and N2.</p>												

REQUESTS FOR CLARIFICATION / RESPONSES TO BIDDERS

(Up to December 12, 2020) Rev. 03

Project: WAPP-North Core/Dorsale Nord, Regional Power Interconnector Project

RFB: PQ/EPC-TL/WAPP-NC/WB#01

/ Lot 1-TL

CLARIFICATIONS N°2

N°	Section from Bidding documents	Part	Clause	Page	Questions	Answers / Clarifications
5	Particular General Requirements		Particular Technical Requirements 9. Towers 9.5.2 Anti-cascading normal load case (N3) 9.5.3 Broken Wire load case (E1)		For anti-cascade and broken cases the critical load cases is 10deg normal wind as per 9.5.2 and 9.5.3. Please clarify what is the meaning of normal wind in this case. Is it reduced wind pressure? If so what is the value in terms of percent of maximum wind pressure.	For the calculation of normal loads and exceptional loads, the reference wind speed of $V_{b,o} = 33$ m/s defined in clause 7.5 shall be used.
6	Particular General Requirements				Missing max temperature for earth wire & OPGW	Sagging temperature is 55°C (max air temperature) for earthwire & opgw
7	Particular General Requirements				Missing OPGW & earth wire properties	According to clause 8.2., the earthwire shall be ACS type with a minimum cross-section of 70 mm² and shall be compliant with standards EN 501382, IEC 61232, IEC 61395. The choice of OPGW is the responsibility of the Contractor. The OPGW shall have a design similar to the earthwire and shall have a good mechanical performance allowing proper sag co-relation with the phase conductor.
8	Particular General Requirements				In the BOQ, we notice that LIDAR survey needs to be used for 62 kms. As we know, the LIDAR survey is not so cost effective, and LIDAR survey is useful for environmental and social studies but this has already been completed. Could you please provide us the ESIA and RAP report?	Already replied under Clarifications 1
9	Particular General Requirements				We have also seen that the wind speed proposed is less only 33m/sec which is different from the TCN specifications. Also the creepage is 25mm/kV which is less than 31mm/kV in TCN specifications. Which one we shall follow.	Comply with the Particular Technical Requirements of the tender documents



TRACTEBEL



SEDEP Sarl

Services For Development Projects
Energy - Telecommunication - BTP - Adhesion Fees - Consulting

REQUESTS FOR CLARIFICATION / RESPONSES TO BIDDERS

Bulletin # 3

Project: WAPP-North Core/Dorsale Nord, Regional Power Interconnector Project

RFB: PQ/EPC-TL/WAPP-
NC/WB#01 / Lot 1-TL

N°	Section from Bidding documents	Part	Clause	Page	Questions	Answers / Clarifications
1.					Can the minimum thickness of a redundant members be adjusted to use 4mm instead of 5mm?	Yes, only for redundant members.
2.					Considering the national holiday of New year and Spring festival in China, in order to provide a good offer, we sincerely request the submission deadline to be extended	The submission deadline has already been extended to January 29, 2021, by amendment No.1.

					to February 26, 2021.	
3.	Section III - Evaluation and Qualification Criteria	2.4	Personnel		It is required to provide the appointment Program of missions to the Project Site for the Project Director . Please clarify the detail of this appointment, and shall we provide the appointment in the bidding stage?	It is mandatory to provide the project director's mission program and demonstrate that this program will allow effective and rigorous monitoring at all times.
4.	Section III - Evaluation and Qualification Criteria	2.4	Personnel		The Project Director and all the site personnel listed above must be fluent in English. The Bidder must certify this fact on the CV of the candidates presented. The subsequent acknowledgment by the Employer will be immediate replacement. Please clarify the detail what kind of documents are needed for certifying English ability.	The Director and the personnel at site and other key personnel must demonstrate their ability to communicate in English at all times, for any situation and provide the necessary proof, either by training received, work certificates from previous employers attesting to this fact or other document deemed appropriate.
5.	Section III - Evaluation and Qualification Criteria	2.5	Equipment Equipment Type:25 T metallic derrick Minimum Number required: 5 pcs		According to our knowledge, for 330kV transmission line installation, metallic derrick with lower tons such as 5 to 6 tons is enough. Please clarify the capability 25T of metallic derrick	The contractor will decide which equipment to use, depending on the pylon erection method he has chosen, whether it is with a metal lifting jib (metal derrick) or other crane type equipment. The lifting equipment that will be used must have sufficient capacity in all circumstances and the contractor must demonstrate this, through the specifications provided and the description of the methodology for use.
6.	Section IV – Bidding		Manufacturer’s Authorization		Please kindly provide the name of company who should be addressed	The manufacturer authorization should be addressed To

	Forms				as the recipient of Manufacturer's Authorization , Transmission Company of Nigeria or WAPP NORTH CORE, Regional Power Interconnector Project Nigeria, Niger, Benin and Burkina Faso?	West African Power Pool (WAPP).
7.	Section IV – Bidding Forms		2.6 Subcontractors Conditions on Subcontractors d) Subcontracting of works shall meet the following. The main contractor shall propose list of possible subcontractors for each of the works and submit their license, experience (reference lists, key personnel qualifications, financial standing and work in hand for Employer ' s evaluation, failure to do so may result in rejection of the bid.		Please kindly provide the details of requirement on financial standing and work in hand. Shall we provide audited balance sheet or credit line as financial standing? Shall we provide a list of work in hand only or shall we provide additional supporting evidence documents?	Comply with the item 2.6: All pertinent documents to reflect the clarity of the financial standing of subcontractors and as well to provide other documents listed in clause 2.6, as reference lists, key personnel qualifications, financial standing and work in hand, etc.
8.	BOQ		2.17 Foundation type Test 2.2.5 Tower type test 55 tower Type Tests		Please clarify : It is required to provide type tests in the BOQ and Technical Specification, is it OK for us to submit relevant report or we should find the designated laboratory to do the test again? If so, please provide the name and address of the laboratory	The tests should be carried by the contractors. The designated laboratory must be approved in advance by the Employer before the start of activities