

Clarification No.6 on Bid Queries
Electricity Transmission Network Improvement Project
Procurement of Plant Design, Supply and Installation of Rehabilitation of Yerevan TPC 220/110/35 kV substation
(ICB No. ETNIP_YTPC_ICB_1/2015)

21 November, 2015

No.	Query by Bidder	Clarification from Employer
1.	<p>Consumtion PTR related to ONAN or ONAF? прошу подтвердить, что величина потерь короткого замыкания, указанная в п. 7 (8) документа «Technical Shedule –Main data, Losses» приведена к мощности ONAN</p>	<p>Yes, it is btought to ONAN. If the Bidder is familiar with other standards, then he should agree it with the Employer.</p>
2.	<p>Clarification No.4 on Bid Queries Item 39, scope / quantity Clarification No.4 on Bid Queries Item 39 and Price List Item line 1.1.3.7. regarding exact number of Current transformers. The exact quantity of the 110 kV current transformers following from the SLD and preliminary general layout drawings is 54 pcs. of single phase Current transformers.</p> <p>A. Please confirm us that the counted correct amount of 110 kV Current transformers including their foundations and relevant hardware material have to be included in the scope of supply of Bidder.</p> <p>B. Please advise as well if we are allowed to adjust the content of the Price List Item line 1.1.3.7. from 18 pcs. to 54 pcs. or the wording of pcs. to set, and if not than please advise how we should solve this issue in the Price List.</p>	<p>A. Yes, 110 kV Current transformers including their foundations and relevant hardware material have to be included in the scope of supply of Bidder.</p> <p>B. Yes, your understanding is correct. The number of 110kV transformers shall be 54. Please, correct the quantity in respective Price Schedules and submit your offer for 54 pieces of 110kV current transformers.</p>
3.	<p>Price List Item line 1.1.1.8, scope / quantity Price List Item line 1.1.1.8. regarding 220 kV insulators. The exact quantity of the 220 kV post insulators following from the SLD and preliminary general layout drawings is 24 pcs. and not 16 pcs. as mentioned in the Price List.</p>	<p>The number of 220kV insulators shall be 16. Please once again refer to SLD and the section drawing of respective drawing , which is attached to this Clarification No. 6. The Bidder shall implement the connection by means of loop line (stub).</p>

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	<p>A. Please confirm us that the counted correct amount of 220 kV post insulators including their foundations and relevant hardware material have to be included in the scope of supply of Bidder.</p> <p>B. Please advise as well if we are allowed to adjust the content of the Price List Item line 1.1.1.8. from 16 pcs. to 24 pcs. , and if not than please advise how we should solve this issue in the Price List.</p>	<p>A. Yes, 220 kV post insulators including their foundations and relevant hardware material have to be included in the scope of supply of Bidder.</p> <p>B. No, the exact number of 220kV insulators is 16.</p>
4.	<p>According the norms of contruction of High Voltage Substations access walkways to the HV equipment and in particular to 220 kV & 110 kV Circuit Breaker drives, 220 kV & 110 kV Disconnectors drives have to be foreseen (согласно нормам проектирования строительства подстанции на территории ОРУ для обслуживающего персонала для обеспечения подходов к оборудованию предусматривается устройство пешеходных дорожек).</p> <p>20.1 Please confirm that such access walkways have to be foreseen only for HV Equipment which have drives for operation (оборудование с приводами), i.e. Circuit Breakers, Disconnectors,</p> <p>20.2 Please advise what kind of access walkways as minimum have to be foreseen, for instance tiles with borders installed/stacked on concrete preparation (например на бетонной подготовке укладываются плитки с бордюрами).</p> <p>20.3 Please advise under which Price List Item line the access walkways have to be included.</p>	<p>20.1 Yes, we confirm.</p> <p>20.2 Concrete walkways shall be foreseen.</p> <p>20.3 The cost of walkways shall be included in the scope of civil works in respective Price Schedule.</p>
5.	<p>civil work site preparation</p> <p>Question regarding preparation civil works at 110 kV AIS construction side.</p> <p>After visiting and exploring the construction site of 110 kV switchyard in the territory a sludge sewage derivation have been identified.</p> <p>According strict requirements of the tender spec. regarding the quality of work in general and performance of high-quality construction works in particular, as well as according construction</p>	<p>Yes, your understanding is correct. Regarding the removing of soil-sludge and filling, please be noted that it depends on the results of soil investigation.</p>

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	<p>experts statement it will be needed to remove the soil-sludge (which prevents excavation works for the installation of foundations for equipment) from the bottom of sludge sewage, and then fill with new ground (indicative removal of soil from the site of the construction is approximately 1,000 cubic meters), followed by the rammer.</p> <p>After that it will be possible to prepare the territory of 110 kV outdoor switchgear for the start of construction work. Just doing the mentioned minimum actions it would be possible to maintain a quality basis for subsequent construction and installation works.</p> <p>Please confirm that our understanding about the concept of work on preparation of the construction site of 110 kV is right.</p>	
6.	<p>In view of the requirement of various submittals, interface with various suppliers and local resources, a large value and complexity of this tender as well a long festive holiday in India, we request you to kindly extend the due date of submission upto 30th December 2015 (by Four weeks) and oblige.</p>	<p>No further extension is possible.</p>
7.	<p>General</p> <p>The number of feeders on the 110 kV side are reduced from 21 numbers to 19 numbers in the revised /proposed modifications. As per our understanding, the number of Gen feeders are reduced from 7 to 2 number. Please confirm our understanding.</p>	<p>Your question is not clear.</p>
8.	<p>Line traps on line feeders</p> <p>No line traps are shown on the 220 kV Lines. Please confirm.</p>	<p>This question was answered several times.</p>
9.	<p>Marshaling Cabinets</p> <p>5 nos of marshaling cabinets are shown in the installation schedule while it is not included in the schedule of supply of materials (Schedule 1). Please clarify.</p>	<p>You are not correct. They are included in Price Schedule 1.</p>
10.	<p>Item numbers 1.3.4 to 1.3.8 and 1.3.10 in installation schedule</p> <p>As per the Description the quantities are mentioned against each item, however it is mentioned as Lump-sum in quantity column, please confirm whether the quantities mentioned in Description shall prevail or the same needs to be estimated by bidder i.e; Lump-sum.</p>	<p>Please refer to Item 37 of Clarification No.2.</p>

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11.	Spare bay in 220kV The middle beam and end towers for the future spare bay are not shown in the proposed layout drawing. Please confirm if the same is required.	Yes, they should be.
12.	6.6 kV proposed switchgear The SLD for the proposed 6.6 kV switchgear in the 35 kV switchgear room is not given in the drawing. Please provide the same.	We do not have 6.6kV equipment.
13.	Existing / old 220 kV SS As per the scope of work, the 220 kV substation needs to be rehabilitated, kindly clarify the removal foundations and other civil works included in the scope of the bidder.	Please, be informed that no second General Contractor shall work on this project.
14.	110/6.6 kV Transformer feeders In the scope of work Clause 1.2.1.1.4.2 the number of 110/6.6 kV Transformer feeders are mentioned as 4 nos. However, it is not clear whether they are generator transformers or they are the transformers supplying load. Nothing shown on the secondary 6.6 kV side, Please clarify	We do not have 6.6kV transformer feeders.
15.	Clause 1.2.4.2.1 The scope of work says “For 110 kV outdoor substation, the present contract comprises at least the Supply, installation and connection of the equipments listed hereafter on the Greenfield area near the existing 110 kV substation.” Please explain whether the 110 kV equipments are to be rehabilitated in the same locations where are at present or these are to be shifted to new location (Green field) as per this clause.	Please refer to our previous answers.
16.	1.2.1.4.1.1 and 1.2.1.4.1.2 The clause 1.2.1.4.1.1 says the circuit breaker shall be Tripolar Type whereas the clause 1.2.4.1.1.2 clause says the Circuit breaker shall be Single pole operated. The CB for Autotransformer is also mentioned as Single Pole operated. Generally, as per standard practice the Line Breakers are Single Pole operated while the Transformer CBs are group operated. Please clarify	Please follow the concept given in the Bidding Documents.
17.	Surge arrestors on 220 kV Lines	Please refer to Item 16 of Clarification No. 5

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	The surge arrestors are specified on 220 kV Autotransformers and 220 kV Busbars but not on 220 kV Line. Please confirm the requirement.	
18.	Surge Arrestors on 110 kV bus 3 nos are suggested on the 110 kV main bus 1 and 2 while only 1 no surge arrestor is specified on the 110 kV transfer bus We believe the same is not standard practice. Whether the lighting or switching surge will discriminate between main bus and transfer bus	Yes, your concept would be good if you could explain the meaning of "transfer bus".
19.	35 kV surge arrestors By installing the surge arrestors on the 35 kV switchgear side and not on the 35 kV line side, the 35 kV cables will be exposed to the surges. Please confirm if SA are to be installed on the outgoing line gantry structures	It depends on desing calculations to be made by Contractor.
20.	Protection system page 570 And 571 Please explain what is transformer type 9S and 10 S and similarly and S2 and S5 type. The description for the same is not present in the tender specification.	Why do you need the types of those transformers?
21.	Protection at other ends for 220 kV and 110 kV lines It is mentioned on page 566 that "Foresee one similar microprocessor based protection at each opposite end of the 220 kV lines "and the same is required for all 110 kV feeders. Please confirm if we need to consider at least one similar protection for other end substation also	This question was answered several times.
22.	TECHNICAL SCHEDULE – Data for Information Auto Transformer 220/110kV 200MVA. /3. Rated power, temperature rise and overload Please confirm if the unit of temperature rise of oil and winding is Kelvin or Degree Celsius.	Yes, you are right. The unit of temperature rise of oil and winding should be in Degree Celsius.
23.	"Armenia YTPC Substation_final_corrected_upd.pdf" page 111/691 Bid security Within the form for the Bid Security is a reference to "ICC Publication No. 458". Please confirm thta this reference / document is still valid or sent other advice.	Yes, you are right, the ICC Publication No. 458 has been replaced with ICC Publication No. 758. The Bid Security shall be issued as per ICC Publication No. 758.