United Nations Development Programme

ITB-501/17 – Supply and Installation of 25MVA Mobile Substation for Ifraz Water Treatment Plant - Erbil Governorate, Iraq

Questions and Answers – 2

Date: 25 Sep 2018

No	Question	Answer
1	Please advise if the new 25 MVA Mobile Substation will replace the existing 2 mobile stations hooked to the same incoming 33 kV Take-Off Point as in attached pictures (The incoming Overhead 33 kV line cannot provide enough power for the 3 mobile substations working together).	Yes, the new substation will replace the existing 2 mobile substations and will be connected to the same incoming overhead line 33 KV, after (disconnecting and removing the Existing 2 mobile substations
2	Can we feed the new 25 MVA mobile substation from the existing Take-Off Point after disconnecting the existing 2 mobile substations?	Yes, the incoming Overhead 33 kV line is sufficient to feed the new 25 MVA mobile substation.
3	In Appendix A, Technical Compliance Sheet page 37, clause B3-Auxiliary and Earthing Transformer, Item 9 in the description column mentioned "Rated Continues Power" and in the UNDP required specifications column mentioned Vector group with "100 KVA Dyn11" while shall be " 100KVA ZNyn11", Please clarify.	Please refer to Appendix -A- Technical Compliance Sheet page 37 item 9 indicated UNDP required “Rated Power Continues” is 100 KVA Dyn11"
4	In Appendix A, Technical Compliance Sheet page 1, 33KV System in the last item, Earthing System, UNDP still keeping the "Earthed through Earthing TF" while in Addendum 1 , UNDP Earthing Transformer changed from 33/0.416KV to 11/0.416KV.	Please refer to Appendix -A- Technical Compliance Sheet page 25 B.2--33 kV Disconnecting Switch and Earthing Switch. Also discard last line of Earthing TF for 33 KV in page 1 of the same. While page 37 as indicated in the Addendum B.3 -100 kVA 11/0.416 kV Auxiliary and Earthling Transformer, please as per UNDP Addendum 11/0. 416KV.is UNDP requirement.

<table>
<tr>
<td>5</td>
<td>In Appendix A, Technical Compliance Sheet page 2, 11KV System in the last item, Earthing System , in the Column of "UNDP required specifications", UNDP mentioned "Earthed through earthing resistor" while in the Single line diagram showing clearly it is earthed through the Surge arrestor only, and also UNDP asking for the Auxiliary Earthing Transformer while here in this item UNDP asking about earthing resistor, please clarify.</td>
<td>Please submit offer as per required technical specs in both Appendix -A- Technical Compliance Sheet, and Appendix-D- SLD of which indicating the required Earthing resistor, Surge Arrester and Auxiliary Earthing Transformer are all required specs of the UNDP’s tender.</td>
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<tr>
<td>6</td>
<td>The transformers’ electrical specifications that appear in the GT are not the same as in the single line.

The characteristics of the single line are:

<table>
<tr><th colspan="8">CT's CHARACTERISTICS</th></tr>
<tr><th>IDENTIFICATION</th><th>DESCRIPTION</th><th>MANUF. TYPE</th><th>CORE</th><th>RATIO</th><th>VA</th><th>CLASS</th><th>QTY</th></tr>
<tr><td>-T1 (=H02)</td><td>TR FEEDER SWGR</td><td></td><td>1
2
3</td><td>600/5A
600/5A
600/5A</td><td>5
15
20</td><td>CL1
5P10
5P20</td><td>3</td></tr>
<tr><td>-T1 (=K04)</td><td>INCOMING SWGR</td><td></td><td>1
2
3</td><td>800-1600/5A
800-1600/5A
800-1600/5A</td><td>15
15
10-20</td><td>CL1
5P10
5P20</td><td>3</td></tr>
<tr><td>-T1 (=K01,02,03 05,06,07)</td><td>OUTGOING SWGR</td><td></td><td>1

2</td><td>150-300/5A

150-300/5A</td><td>10

15</td><td>CL05

5P10</td><td>18</td></tr>
<tr><th colspan="8">VT's CHARACTERISTICS</th></tr>
<tr><td>-T5 (=H01)</td><td>INCOMING SWGR</td><td></td><td>1
2</td><td>33/√3 kV / 0.11/√3 kV / 0.11/3 kV</td><td>50
50</td><td>CL 1
CL 3P</td><td>3</td></tr>
<tr><td>-T5 (=K04)</td><td>INCOMING SWGR</td><td></td><td>1
2</td><td>11/√3 kV / 0.11/√3 kV / 0.11/3 kV</td><td>50
50</td><td>CL 0.5
CL 3P</td><td>3</td></tr>
</table>

The characteristics of the GT are in pages:

Page 7 to 10 à 11kV

Page 27 to 29 à 33 kV

Please compare both documents and clarify which are the correct ones.</td>
<td>For 11 KV C.T and V.T, please refer to Appendix- A page 9 A.3- 11 kV Outgoing Feeder Current Transformers and page 10 A.2.3- 11 kV Voltage Transformers.

For 33 KV C.T and V.T refer to Appendix-A page 29 - B.4, and B5- 33 kV Current Transformers.

Also refer to pages 30, and 31 indicating required specs for B.4, and B.5- 33 kV Voltage Transformers</td>
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<tr>
<td>7</td>
<td>Question about the “Reconstruction existed Boundary wall”, do you have any details about the Boundary wall, length, height and materials?</td>
<td>Dimensions of Boundary wall (30m*30m*2.5m height)

Wall Materials concrete blocks with two side cement plastering and painting.

Please refer to attached photo from the site visit shows the existing boundary walls.</td>
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