

Chhattisgarh Energy Consortium (India) Pvt. Ltd., (CECPL)
(A subsidiary of Ramky Enviro Engineers Ltd.)

MANDER-I (24.75 MW) AND MANDER-II (24.75 MW) SMALL HYDROELECTRIC PROJECTS, CHHATTISGARH

AMENDMENT NO. 3

TO SPECIFICATION NO. TCE.6204A-F-200-401

CIVIL AND HYDRO-MECHANICAL WORK PACKAGE

Sl. No.	Section part/ page no.	Item No.	Description of work	Clarification Sought	Ramky Clarifications
1.	Volume-III Part 2 of BOQ of Civil Works of Mander-I Project	Item No. 4.1.5 & 5.3	Welded wire mesh / chain link mesh	Kindly specify mesh gauge & wt. per Smt.	The gauge has been already specified in tender drawing no. TCE.6204A-256-RC-6007. Further it is to mention that the welded wire mesh Gauge is 5mm and weight 3.08kg/ Sq m.
2.		Item No. 10.3.1	Supply & installation of PVC pipes (plain or slotted) including fittings and accessories	Kindly provide diameter of PVC pipes.	Depending on various locations of Installations, the diameter of PVC pipe shall vary from 35mm to 100 mm.
3.		Item No. 11.1.1	Contact grouting behind tunnel liner (concrete or steel)	Kindly clarify, whether the quantity provided is grouting length or tunnel length.	The quantity of grouting is the length of Grouting, not tunnel length.
4.		Item No. 13.1	Supply and installation of steel pipes or cast iron pipes	Kindly provide diameter of steel / cast iron pipes, alternatively quantity be provided in tons.	Depending on various locations of Installations, the diameter of steel/cast iron pipe shall vary from 125 mm to 200 mm.
5.		Item No. 13.10	Rail	Kindly provide type of rail.	The type of rail is 'CR-90', conforming to the relevant Indian Standard specification.
6.		Item No. 14.1.3.1	Providing flooring with polished stones..... for power house, generator floor, control room etc.	Kindly provide type of flooring..... Granite / marble / vitrified / ceramic.	Please refer Annexure-I.

7.		Item No. 14.1.3.1 & 14.1.6.1	Supply & fixing aluminium glazed doors..... Supply & fixing aluminium windows.....	Kindly specify glass thickness.	It has been already mentioned in Technical specification volume. Kindly refer Clause No.16.7.4 of Volume II/Part 2/section I-civil.
8.		Item No. 3.3	Chain link fabric / welded wire mesh	Kindly specify mesh gauge & wt. per Smt.	The welded wire mesh Gauge is 5 mm and weight 3.08kg/Sqm.
9.		Item No. 10.1.1	Contact grouting behind tunnel liner (concrete or steel)	Kindly clarify, whether the quantity provided is grouting length or tunnel length.	The quantity is related to the length of Grouting, not of the structures involved.
10.	Volume-III Part 2 of BOQ of Civil Works of Mander-II Project	Item No. 11.1	Supply and installation of steel pipes or cast iron pipes	Kindly provide diameter of steel / cast iron pipes, alternatively quantity be provided in tons.	Depending on various locations of Installations, the diameter of steel/cast iron pipe shall vary from 125 mm to 200 mm.
11.		Item No. 11.10	Rail	Kindly provide type of rail.	The type of rail is 'CR-90', conforming to the relevant Indian Standard specification.
12.		Item No. 12.1.3.1	Providing flooring with polished stones..... for power house, generator floor, control room etc.	Kindly provide type of flooring..... Granite / marble / vitrified / ceramic.	Please refer Annexure-II.
13.		Item No. 12.1.5.1 & 12.1.6.1	Supply & fixing aluminium glazed doors..... Supply & fixing aluminium windows.....	Kindly specify glass thickness.	It has been already mentioned in Technical specification volume. Kindly refer clause no.16.7.4 of Volume II/Part 2/section I-civil.

ANNEXURE-I

BOQ of Civil Works of Mander-I Project

As per original Tender Document submitted in November 13, 2010				Current revision			
Item	Description of Work	Unit	Quantity	Item	Description of Work	Unit	Quantity
14.1.3	Floor and wall finish			14.1.3	Floor and wall finish (including Skirting & Dado)		
14.1.3.1	providing flooring with polished stones approved quality and shade, including skirting, preparation of surfaces to receive the mortar and laying base course if any including cost of all materials, labour polishing all operations, all leads and lifts etc.,complete for finished item of work for power house, generator floor, control room etc.	sqm	3500	14.1.3.1	Providing and fixing 80 mm thick interlocking precast blocks (of required shape and size) of cement concrete design mix M 35 (minimum cement @ 425 kg per Cum) smooth finish on top over 50 mm sand filling.	Sqm	400
				14.1.3.2	52 mm thick cement concrete flooring with concrete hardener topping under layer 40 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) and top layer 12 mm thick cement hardener consisting of mix 1:2 (1 cement hardener mix : 2 graded stone aggregate 6 mm nominal size) by volume. Hardening compound as approved by the Project Manager shall be mixed @ 2 litre per 50 kg of cement or as per manufacturer's specifications. This includes cost of cement slury, but excluding the cost of nosing of steps etc., if required, complete.	Sqm	1020
14.1.3.2	providing flooring with acid resistant tiles of approved quality and shade, including skirting, preparation of surfaces to receive the tiles and laying base course if any including cost of all materials, labour, all operations, all leads and lifts etc.,complete for finished item of work as per approved drawings and specification and as directed by the Project Manager for battery room.	sqm	75	14.1.3.3	Metallic hardener finish like ironite flooring 50 mm thick, complete as per specifications.	Sqm	1430
				14.1.3.4	Coloured Vitrified tiles of size 605 mm x 605 mm and 10 mm thick, otherwise specified, laid in 1 part Cement and 3 part coarse sand mix, complete as per specification.	Sqm	650
				14.1.3.5	Acid resistant tiles conforming to IS:4457 on horizontal & vertical surface	Sq m	75

BOQ of Civil Works of Mander-II Project

As per original Tender Document submitted in November 13, 2010				Current revision			
Item	Description of Work	Unit	Quantity	Item	Description of Work	Unit	Quantity
12.1.3	Floor and wall finish			12.1.3	Floor and wall finish (including Skirting & Dado)		
12.1.3.1	providing flooring with polished stones approved quality and shade, including skirting, preparation of surfaces to receive the mortar and laying base course if any including cost of all materials, labour polishing all operations, all leads and lifts etc., complete for finished item of work for power house, generator floor, control room etc.	sqm	3500	12.1.3.1	Providing and fixing 80 mm thick interlocking precast blocks (of required shape and size) of cement concrete design mix M 35 (minimum cement @ 425 kg per Cum) smooth finish on top over 50 mm sand filling.	Sq m	400
				12.1.3.2	52 mm thick cement concrete flooring with concrete hardener topping under layer 40 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) and top layer 12 mm thick cement hardener consisting of mix 1:2 (1 cement hardener mix : 2 graded stone aggregate 6 mm nominal size) by volume. Hardening compound as approved by the Project Manager shall be mixed @ 2litre per 50 kg of cement or as per manufacturer's specifications. This includes cost of cement slurry, but excluding the cost of nosing of steps etc., if required, complete.	Sq m	1020
12.1.3.2	providing flooring with acid resistant tiles of approved quality and shade, including skirting, preparation of surfaces to receive the tiles and laying base course if any including cost of all materials, labour, all operations, all leads and lifts etc., complete for finished item of work as per approved drawings and specification and as directed by the Project Manager for battery room.	sqm	75	12.1.3.3	Metallic hardener finish like ironite flooring 50 mm thick, complete as per specifications.	Sqm	1430
				12.1.3.4	Coloured Vitrified tiles (of size 605 mm x 605 mm and 10 mm thick otherwise specified; laid in 1 part Cement and 3 part coarse sand mix) complete as per specification.	Sqm	650
				12.1.3.5	Acid resistant tiles conforming to IS:4457 on horizontal & vertical surface	Sqm	75