

RASUWAGADHI HYDROELECTRIC PROJECT
Lot 1 – Civil and Hydro-mechanical Works
Pre-Bid Meeting | Questions and Answers



**RASUWAGADHI HYDROPOWER
COMPANY LIMITED**

No.	Vol.	Clause Ref	Page Ref	Bidder Query	Employer Response
1	1	Bid Data Sheet, ITB 22.3 Submission of Bids	3	For preparing a satisfactory and fully responsive tender document, we hereby apply for the feasibility study report and CAD version bidding drawings for Rasuwagadhi Hydroelectric Project.	<p>The technical sections of the Detailed Project Report prepared by the Employer will be provided as supplementary Information to Bidders. This is provided as “Information Only” and the Contractor shall form his own interpretation of the data; the Employer shall not be held responsible for any assumptions made by the Contractor on the basis of this information.</p> <p>The AutoCAD DWG files will be made available to the Contractors to assist them with preparation of their Bid. However, the Employer shall not accept any responsibility for the accuracy of any quantities take-off by the Contractor using these AutoCAD DWG files for the purposes of their Bid.</p>
2	1	Bid Data Sheet, ITB 22.3 Submission of Bids	3	We would like to apply for one month extension of Bidding documents submission date. The original submission date is 7 July 2013; the submission date shall be extended to 7 August 2013.	Please refer to Addendum No.2.
3	1	Bid Data Sheet, ITB 22.3 Submission of Bids	3	In order to have a reasonable time to better prepare the bid and make a competitive bid, we hereby sincerely hope that you can extend the deadline to 7 August 2013; an extension of 30 days.	Please see Employer’s Response to Question 2.
4	1	Bid Data Sheet, ITB 22.3 Submission of Bids	3	Since the deadline for submission of bids for Rasuwagadhi Hydroelectric Project (111MW) Lot 1 is 8 July 2013, and the pre-tender meeting will be held on 16 June, therefore, the time left for bidding preparation will not be sufficient for a satisfactory and fully responsive tender document. We hereby apply for extending the bid submission deadline minimum to 8 August 2013.	Please see Employer’s Response to Question 2.

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5	1	Bid Data Sheet, ITB 22.3 Submission of Bids	3	As above mentioned contract is based on EPC model which take considerable long time for detail preparation of said Bidding Documentation works and time limit provided by you is not enough; hence we hereby kindly request you to extend the Bid Submission time by 30 (thirty) more days from 8 July 2013, i.e. til 7 August 2013.	Please see Employer's Response to Question 2.
6	1	Bid Data Sheet, ITB 22.3 Submission of Bids	3	Considering the EPC contract, we are required to complete entire pre-tender engineering prior to start of cost estimation. In order to prepare and submit a techno-commercially competitive bid, we would request you to consider extension of at least 45 days from the date of issuance of pre-bid clarifications. Please confirm.	Please see Employer's Response to Question 2.
7	1	ITB Clause 19		ITB Clause 19 asks for a Bid Security issued by a "A" class commercial bank in Nepal. Under what rating Agency is the "A" ranking determined? (Standard & Poors', Fitch or else ?)	The classification is determined by the Nepal Rastra Bank in accordance with the Banks and Financial Institutions Act, 2063.
8	1	ITB Clause 19		Bid Security issued by a Foreign Bank owing the "A" class rating cannot be accepted as valid for the purpose of the bid?	ITB Clause 19.2 and 19.3 clearly state that the Bid Security shall be "an unconditional bank guarantee issued by an 'A' class commercial bank in Nepal." Accordingly, the Bidder may need to arrange for the unconditional bank guarantee to be issued by a reputable international commercial bank, so long as it is counter guaranteed by an 'A' class commercial bank in Nepal, in accordance with ITB 19.3. Such supporting counter guarantees shall need to satisfy the requirements of the Nepalese 'A' class commercial bank issuing the counter guarantee required for the Bid Security.

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9	1	ITB Clause 19		Bid Security issued by an Insurance company is not acceptable?	A bid security issued by an Insurance company will not be accepted.
10	1	ITB Clause 19.6	14	The Joint Venture shall be legally constituted only after award of contract. We would therefore request you to consider multiple Bank Guarantees from the partners of Joint Venture in proportion to their respective share in JV. Please confirm.	Please refer to ITB Clause 19.6.
11		Exemption in VAT		While it is mentioned that VAT on imported Hydro-mechanical equipment shall be exempted from payment of VAT on the same, please clarify whether VAT will be exempted on construction materials viz. cement, steel and steel fiber, dwydag rock bolts etc. when imported from any foreign country.	Unless otherwise stated VAT will be applicable as per prevailing laws of Nepal.
12				Information of mechanical and electrical accounted for the EPC contract number and method of payment?	The question is not clear. The method of payment for all components of the Scope of Work under the Lot 1 Contract is explained in Volume 1, Part IV: Bid Price Schedules
13				As for contracting project in Nepal, is there any specific regulations and rules from the Government of Nepal, such as the requirement for the foreign staff and labour, the proportion between the foreign and local employees?	The Contractor is responsible for ensuring that his Bid conforms to all requirements stipulated by the laws and regulations of the Federal Democratic Republic of Nepal.



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14		General		Please confirm that Employer shall provide the land for infrastructure development like camp, workshops, store, labour, hutments on free of cost basis.	<p>The Employer is making land acquisition provisions for all of the areas indicated on Drawing No.RGHEP-GLP-11-03 and RGHEP-GLP-11-04, namely:</p> <ul style="list-style-type: none"> (i) Construction Yards and Borrow Area A at the Headworks area; (ii) Quarry Area A, Borrow Area B, Muck Disposal Area A near Construction Adit No.2; and (iii) Construction Yards and Quarry Area B at the Powerhouse area. <p>The areas pertaining to Lot 1 Contract, will be handed over to the successful Contractor, free of any charge, in accordance with PCC Sub-Clause 2.1.</p>
15				In the Bidding Document, only one muck disposal area is specified within the project site area, that is Muck Disposal A and it is located at the left bank of the river, therefore please clarify if there is other muck disposal areas for dumping the excavated material, especially for the excavated material from the Headworks?	<p>Muck Disposal Area A on Drawing No. RGHEP-GLP-11-03 is the only disposal area that has been identified by the Employer.</p> <p>If the Contractor believes that further areas are required for the efficient implementation of the Project, then he should clearly identify the proposed additional area(s) in their Bid and the Employer may assist in acquiring such lands if required.</p>
16				Are the site office and residential buildings for the Employer and the Representative of the Employer included in this Bid? If so, please provide the size, structure type and other specifications, and how to price this in the Price Schedule?	<p>The offices and accommodation for the Employer and Employer's Representative are not included in Lot 1 Scope of Works.</p>



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17		Site Infrastructure		Please confirm whether site infrastructure like Camp Office, Store, Workshop and other facilities shall be handed over to the Employer after completion of contract. If so, we shall consider the cost thereof accordingly. Please clarify and confirm.	As per Volume 3, Part II - General Requirements, Section 8, the office, store, etc. is to be removed and the area/land reinstated to the approval of the Employer.
18				Information of electricity for construction and household.	The Contractor should refer to the General Requirements (Volume 3, Part II, Sub-Clause 8.22.1: Power)
19			19	Is electricity supply available within the project area or in the vicinity of the project area? If available, then please specify the access point, power, voltage, power supply guarantee rate, power selling price and other necessary data about the electricity supply.	Please refer to the Employer's Response to Question 18. If the Bidders wish to make use of the existing power lines to the Rasuwagadhi village, they should make their own arrangements with NEA. However, the Contractor should consider the reliability of such power supply.
20				Who will be responsible for the power source of Headworks? Is diesel generator necessary to be provided?	The Contractor shall be responsible for the provision of power at the Headworks area during construction. For permanent power supply to the Headworks area, please refer to the Employer's Response to Question 21.
21				Does the scope of Electrical Work of Lot 1 only include supply of power for the Headworks gates?	Please refer to Volume 3, Part V, Clause 3.7: Areas Light and Power, which confirms that reliable power supply is to be provided for all of the Headworks operations.
22	3			Is earthing system of Headworks included in the work scope of Lot 1?	Whilst an earthing system is not explicitly mentioned in the Scope of Works, the design of the power distribution system at the Headworks area is to be designed by the Contractor and the design should include an appropriate earthing system.

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23				The Computer Monitoring System of Headworks leads to powerhouse control room, are the monitoring devices in the powerhouse control room within the Contract scope of Lot 1?	The monitoring/control equipment located in the Powerhouse Control Room shall be provided under Lot 2. The Lot 1 Contractor shall provide and install the cable connection from the Headworks to the Powerhouse Control Room for connection to the monitoring/control equipment by the Lot 2 Contractor.
24				Please clarify if the Powerhouse drainage system is part of the contract scope for this bid?	Please refer to Volume 3, Part V, Clause 3.6: Powerhouse Drainage
25				In the Bidding Document Volume 1: Price Schedule, Milestone MS-1 to MS-19 is for pricing the Hydro-mechanical equipments delivered to site, whilst in the Note it says that the amounts stated above for Milestone MS-1 to MS-19 are the CIF prices (port of entry). Please clarify the above statements.	Refer to Addendum No. 3 issued by the Employer.
26				In the Bidding Document Volume 1: Price Schedule, Milestone MS-62 states a part of the Main Access Tunnel to the Powerhouse has already built up, and the remaining part of the access tunnel will be the responsibility of the Lot 1 contractor. Please provide the length and other dimensions of the already built up access tunnel?	The first 150m of the Main Access Tunnel has been excavated and the Contractors should base their Bid Price on this basis. The Contractor shall do all additional works to strengthen, improvement and enlargement (if necessary) of the already built up part of the access tunnel to Powerhouse, excavation and support of the remaining part of this tunnel for sufficient clearance for passage of Powerhouse equipment, cables, ventilation with all accessories completed and secured.
27				As we know, some work of the powerhouse access tunnel has been completed. Please clarify how to divide the completed work and the Contractor's work in Lot 1?	Please see the Employer's Response to Question 26.

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28	1	Schedule 2: Project Milestones		While we appreciate there can be maximum limit on payment to the extent based on the milestones proposed, there needs to be a provision of monthly payments to maintain the cash flow at work. Please clarify and confirm.	The Employer has included a substantial number of milestones for payment purposes. Furthermore, for milestones that relate to activities of a long duration, the Employer has made the provision for progressive partial payments (at 10% and 20% progress intervals). With these provisions and the advance payment, it is believed that the Contractor should be able to maintain a positive cash flow during construction.
29	1	Schedule 2: Project Milestones		There is not the items for pricing for All metal material and metal part of the equipment for the gantry crane for the tailrace outlet gate, gravel trap and stoplogs in the Price Schedule; please clarify.	Please refer to the Employer's Concept given in the Particular Technical Requirements (Volume 3, Part V) as follows: (i) Clause 1.5: Gravel Gates – these gates are proposed to be operated one at a time by a shared electro-hydraulic actuator power unit; by manually switching hydraulic selector. (ii) Clause 1.13: Tailrace Outlet Gate – this gate is counter-balanced; gate and concrete counter-weight are suspended from two plain rope drums on a common drive shaft that is driven by a geared electric actuator with back-up handwheel. Accordingly, no gantry cranes are proposed for these gates.



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30	1	Schedule 4: Breakdown of Rates for Major Items		What is the meaning of “Unit Quantity” in Schedule 4: Breakdown of Rates for Major Items (Part IV: Bid Price Schedules)? And how to fill this item?	<p>The purpose of Schedule 4 is to provide a cost breakdown of the Major Items of Work, which may then be used during the implementation of the Project as a basis for evaluating any variations that may be required.</p> <p>As each milestone item will comprise multiple components, it is accepted that the “Unit Quantity” is misplaced and does not have any relevance. The Contractor may disregard the “Unit Quantity” and a separate sheet shall be completed for each milestone.</p>
31	1	Schedule 2: Project Milestones		In Part IV Bid Price Schedules, can the Contractor fill the form with two lines or several lines combined for the Milestone prices?	<p>The Contractor is to show in the Price Schedule the complete price for a milestone, however, a breakdown of the milestone price is to be provided in Schedule 4. Furthermore, a full breakdown of the Bid shall be provided on separate supporting sheets/ document, within 28 days of signing the Contract, as per PCC Sub-Clause 14.1.</p> <p>This will not affect the mode of payment described in Volume 1, Part IV, Schedule 2, Clause 5, unless otherwise agreed by the Employer during contract negotiations.</p> <p>The Contractor shall provide a Bid Price for each milestone.</p>



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32	1	Schedule 2: Project Milestones		In the Bid Document, Volume 1: Part IV: Bid Schedule: Schedule-2: MS-6 states that there are Intake Gate and stoplogs for periodic flushing of a gravel trap that is located downstream of the Intake Screens; however, in the Technical Schedule 14, item 1.5 and in the Bid Document Volume 3, Part V, 1.5 gravel gates mean both the downstream gate and the upstream gate are plate stainless steel gate, therefore please clear the above mentioned query. There is the same query for MS-6, the flushing gate and the stoplogs for the lower desander chamber.	Milestone MS-3 relates to the Gravel Gates (and associated stoplogs) provided for the periodic flushing of the gravel trap located downstream of the Intake Trash Racks. The Particular Technical Requirements of the Gravel Gates are given in Volume 3, Part V, Clause 1.5 and are shown as Item 1.5 in Technical Schedule 14. The material of wetted components of the Gravel Gates shall be stainless steel. Milestone MS-6 relates to the Sand Gates (and associated stoplogs) provided for regular sediment flushing from the desander chambers. The Particular Technical Requirements of the Sand Gates are given in Volume 3, Part V, Clause 1.9 and are shown as Item 1.9 in Technical Schedule 14. The material of wetted components of the Sand Gates shall be stainless steel.
33	1	Technical Schedule 14		In the Bid Document, Volume 1: Technical Schedule 14 item 1.2: hot dip galv. for gate protective coating as the Employer's concept design; please confirm this?	The reference to "hot dip galv." in Technical Schedule 14 shall be disregarded and deleted. The Contractor shall refer to the Standard Technical Requirements (Volume 3, Part III, Section 15). Sub-Clause 15.6.1 indicates that the Radial Gates (other surfaces expected to be continually immersed in water) shall be protected using an epoxy mastic coating system (System B).
34		General		Since the project site is far away from Kathmandu passing through several highways, it is not practice able for overseas bidders to investigate and make route survey over a long distance. Hence the employer should provide the transport limitations in terms of dimensions (L x B x H) and maximum weight.	Pursuant to ITB Clause 6.6, the Contractor is obliged to have fully familiarise himself with the Site conditions, which includes access and transportation to Site. The Contractor is expected to have visited the Site prior to submission of their Bid and in doing so they should have made their own assessment of any access or transportation restrictions, and made allowances for the same in the Bid.

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35				Information of the access road, who will repair the access road from outside to worksite, because some places of the road are very dangerous and the traffic will be difficult.	The Contractor's attention is drawn to the following: (i) Volume 3, Part III, Sub-Clause 18.1.4(a), which states: "Public access roads shall not be used as haul roads or used by heavy construction equipment, unless otherwise approved. Approval may require redesign of the road pavement by the Contractor with greater pavement thickness. Public bridges shall not be used as haul roads or used by heavy construction equipment unless approved by the appropriate Agency and any necessary strengthening is carried out to the Agency's approval." (ii) Volume 3, Part IV, Sub-Clause 14.5(c), which states: "If the Contractor thinks an existing road is necessary to be repaired, the Contractor shall repair the road at his own expense. In case the Contractor gives any damage to existing road, the Contractor shall repair and keep it as is basis."
36				Information of Adit 1/2/3 access road	The Employer's Concept for the access roads to the construction adit portals is shown on Bidding Drawings (Volume 4), the Standard Technical Requirements (Volume 3, Part III, Section 18) and Particular Technical Requirements (Volume 3, Part IV, Section 14). The final design of these access roads is part of the Contractor's scope.
37				Information of the permanent road from one bridge to power house access tunnel? (the Employer know the bridge clearly). Because of the road is permanent road, so we want to know the standard of building this road.	The technical requirements for all access roads covered by the scope of the Lot 1 Works are given in the Standard Technical Requirements (Volume 3, Part III, Section 18) and Particular Technical Requirements (Volume 3, Part IV, Section 14)

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38	3	Clause 1.3: Overseas Training	69	<p>While necessary training shall be arranged by the contractor in manufacturer's plant, please confirm that all out of pocket expenses including cost of their travel, lodging, boarding, conveyance shall be borne by the Employer.</p> <p>Please clarify.</p>	<p>Please refer to Volume 3, Part III, Section 14, Clause 14.1(f), which states:</p> <p>“The Employer’s Personnel will be trained by the Contractor for transfer of technology at the Contractor's home country or abroad. The total training duration will be 10 man months. Training expenses, lodging and fooding, insurance, traveling and daily allowances US\$150 per day per person shall be borne by the Contractor. During training the Employer’s Personnel shall be introduced to the latest technology related to the similar kind of works under construction. All necessary expenses for such services shall be deemed to be included in the Contractor’s Tender/Bid.”</p>
39	2	PCC Sub-Clause 2.1	5	<p>The rights of way, easements, and land for the Contractor's site installation areas, access roads and spoil areas shown on the Tender Drawings will be provided by the Employer, also within 56 days from the Commencement Date.</p> <p>(a) This clause is reducing the Time for Completion.</p> <p>(b) According to MS-21, the Contractor will have 90 days after the Commencement Date to realize geological boreholes; this clause is reducing such time to 30 days: it is not feasible. (Also refer to PCC - 4.1 letter (c) page 6)</p>	<p>The right of access to the Site will not be unduly withheld by the Employer after issuance of the notice of the Commencement Date pursuant to GCC 8.1.</p> <p>PCC Sub-Clause 2.1 places the obligation on the Employer to handover possession of the Site, or sufficient parts thereof, within 42 days of the Commencement Date to enable the Contractor to commence the Works.</p> <p>As the Contractor must fulfil many tasks before it is physically able to commence the construction works at site, the Employer does not agree that this clause impacts the Time for Completion.</p> <p>As noted above, the right of access to the Site will not be unduly withheld by the Employer and there should not be any impediment attributable to the Employer that would prevent the Contractor satisfying the requirements of MS-21.</p>

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40	1	PCC Sub-Clause 4.2		Particular Conditions No. 4.2 provides that, if the Performance Security is issued by a foreign bank, counter guaranteed by a bank in Nepal, than the "A" ranking shall be owned by the foreign bank. Does it mean that any bank in Nepal can issue the Performance Security, regardless of its rating class?	PCC Sub-Clause 4.2 states: "The Performance Security shall be in the form of an on-demand and unconditional guarantee, issued by a Class "A" commercial bank located in Nepal, or if issued by a foreign bank, it shall be counter guaranteed by a Class "A" commercial bank in Nepal, and shall be subject to approval of the Employer." Any counter guarantee issued to support a Foreign Bank Guarantee must be issued by a Class "A" commercial bank in Nepal.
41	2	PCC Sub-Clause 11.1/11.3		The Defect Notification Period shall be 730 days from the date of issue of the Taking Over Certificate. After correction of defects in the Works or any part thereof by repair or replacement, the Defect Notification Period shall remain a minimum of 365 days from the time such repair or replacement was completed. If necessary, the Defect Notification Period shall be extended to fulfill this requirement. Please specify whether the 365 days refer to the only repaired or replaced parts	PCC Sub-Clause 11.3 states: "If any item of the Plant and/or Materials have been replaced, repaired or remedied in accordance with Sub-Clause 11.1 [<i>Completion of Outstanding Work and Remedying Defects</i>] during the Defects Notification Period, then that item shall be subject to an additional Defects Notification Period of 365 Days from the date of completion of such replacement, repair or remedy to the satisfaction of the Employer. However, the Defects Notification Period shall not be extended to more than a total period of 1095 days."
42		PCC Sub-Clause 13.8		Considering the long construction period of 1185 days, it is difficult to foresee the variation in the costs of labour, goods and materials. We would request you to consider the price variation as per FIDIC conditions of contract. This will help us quote competitive bid. Please clarify. Moreover, please clarify the provision for variation in taxes, duties any other statutory levies due to change in legislation.	Please refer to PCC Sub-Clause 13.8. Please refer to GCC Sub-Clause 13.7.

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43	2	PCC Sub-Clause 14.2		Particular Conditions No. 14.2, please confirm that the bank issuing the Advance Payment Bond is neither requested to be a bank in Nepal nor requested to own a particular minimum rating class.	Please refer to the Employer's response to Question 40.
44	2	PCC Sub-Clause 14.9		Can the retention money be released against submission of a bank guarantee?	The Contractor's Bid Price shall be prepared on the basis of PCC Sub-Clause 14.9.
45		Clause No. 1.2		<p>Diversion Weir Radial Gates</p> <p>(a) Bottom sill level and pier top level need to be indicated.</p> <p>(b) Please confirm that concrete Trunion Girder mono rail thic with the pier shall be considered as per modern design practice for submerged Radial Gates instead of steel anchorage system (i.e. anchor girder, yoke girder) connected by insulated (i.e. - flats or rods)</p>	<p>Please refer to Drawing No.RGHEP-HW-11-08</p> <p>The Contractor's design of the Diversion Weir Radial Gates shall comply with the Employer's Particular Requirements (Volume 3, Part V, Section 1, Clause 1.2), as well as the Employer's Standard Requirements (Volume 3, Part III, Section 21).</p>
46		Clause No. 1.3.2		<p>Diversion weir Stoplog</p> <p>It is suggested that instead of manually operated DN 150 bypass valve for achieving balanced head, spring actuated filling- in-valves are provided on the top unit of Stop log girder. Filling- in-valve shall be operated by Gantry Crane.</p>	The provision of a manually operated DN150 bypass valve in the bottom stoplog to permit filling between the stoplogs and the radial gate, so that the stoplogs can be removed under balanced conditions is the Employer's Concept. The Contractor is permitted to propose alternative arrangements, if it is believed that the alternative offers operational and cost benefits.
47		Clause No.1. 7.2		<p>Intake Stoplog</p> <p>It is suggested that instead of manually operated DN 150 bypass valve for achieving balanced head, spring actuated filling- in-valves are provided on the top unit of Stop log girder. Filling- in-valve shall be operated by Gantry Crane.</p>	Please refer to the Employer's Response to Question 46.

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48		Clause No. 1.12		Draft Tube Gates The bottom sill level, design head, deck level need to be furnished.	Please refer to Drawing No. RGHEP-PH-11-01 and RGHEP-PH-11-12
49		Clause No. 1.13		Tailrace Outlet Gate The bottom sill level, design head, deck level need to be furnished.	Please refer to 'Plan' given on Drawing No. RGHEP-PH-11-14
50		Clause No. 2.3		Trash Rack Raking Machine The speed of raking operation, LT speed need to be specified. Is the truck to dispose of the trashes, debris under the scope of supply of HM Equipments? Please clarify.	The Employer does not have any specific requirements in respect to the LT speed of the Trash Rack Raking Machine and this aspect of the design is left to the Contractor to propose reasonable values. The provision of a truck for removal and disposal of the raked debris is not required as part of the Lot 1 Scope of Works.
51		Clause No. 4.2.2		Penstock & Distributor It is mentioned that the design and manufacture shall be in accordance with British Standards (BS). Please note that as an Indian HM Equipment contractor, the Penstock and specials shall be designed and manufactured conforming to Indian Standards (BIS). However, the material of manufacture shall be of Pressure Vessel quality steel conforming to acceptable International Standards.	In accordance with GCC Sub-Clause 5.4: "The design, the Contractor's Documents, the execution and the completed Works shall comply with those technical standards referred to in the Employer's Requirements, or where no technical standards are referred to in the Employer's Requirements, with accepted international standards approved by the Employer." The Contractor shall prepare his Bid Price to comply with the above GCC Sub-Clause.
52				For structural design of Gates, Embedded Parts, Hoists, Cranes, TRCM etc, we will follow design provisions and guidelines as laid down in various IS Codes, which are well articulated and internationally accepted. Please confirm.	Please refer to the Employer's Response to Question 51. Reference should also be made to Volume 3, Part III: Standard Technical Requirements.

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53				Since speeds of hydraulic hoist and cranes are not mentioned in the Technical Specification Vol-3 Part -V, we will follow relevant provisions as per BIS Codes.	Please refer to the Employer's Response to Question 51. Reference should also be made to Volume 3, Part III: Standard Technical Requirements.
54				Since "Makes" of bought out items are not specified in Technical Specification Vol-3 Part -V, we will mostly utilize reputed Indian brands and in some applications import from a 3rd country with the approval of the EIC.	Please refer to the Employer's Response to Question 51. Reference should also be made to Volume 3, Part III: Standard Technical Requirements.
55				Since the specifications of raw materials including structural/pressure vessel quality steels for various equipment are not specified, we will adopt the same as per provisions laid down in BIS/equivalent International Standards. Please confirm.	Please refer to the Employer's Response to Question 51. Reference should also be made to Volume 3, Part III: Standard Technical Requirements.
56				Information of explosive materials? Can we put the explosive storage in front of every adit tunnel?	Please refer to the requirements of Volume 3, Part II, Clause 3.30: Use, Handling and Storage of Explosives and Volume 3, Part II, Clause 12.3.6: Supply, Storage and Use of Explosives The Contractor shall propose the locations of explosive storage in his Method Statements (Technical Schedule 8); however, the locations shall be subject to the approval of the Employer and the relevant Authorities.
57				Information of the ventilation system and fire protection system? Included in EPC contract or not?	Please refer to Addendum No. 3

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COMPANY LIMITED**

No.	Vol.	Clause Ref	Page Ref	Bidder Query	Employer Response
58	3/4	Drawing No. RGHEP-HW-11-08 and Standard Technical Requirements, Section 21		<p>Spillway Radial Gate</p> <p>(a) In the Section at CC for the said gate the details shown are indicative. Please specify the width of Clear opening x Clear height of opening, Radius of the gate, Location of Trunnion and number of Openings.</p> <p>(b) Width of Abutment pier, Width of intermediate pier and Elevation of the top of Pier .Plan view indicating the width of gate</p> <p>(c) Also confirm the Location of power pack to be placed</p> <p>(d) Also confirm the Location of Hoist Trunnion</p> <p>(e) The type of arms Inclined / Parallel</p> <p>(f) Number of Horizontal girders</p> <p>(g) The elevation indicating the top of pier is very much required to find out the stroke length of cylinder. To get a minimum stroke length, the position of trunnion point shall be indicated from the center line of trunnion for spillway Radial Gate. For Under sluice radial gate the position of trunnion point shall be still more, since the height of gate is still more. Please examine and confirm</p>	<p>The Spillway Radial Gates are referred to in the Bid Documents as the Diversion Weir Radial Gates. There are not separate 'Spillway' and 'Undersluice' radial gates.</p> <p>The design of the Diversion Weir Radial Gates is to be carried out by the Contractor. Details of the Employer's Concept and technical requirements are provided in:</p> <p>(i) Particular Technical Requirements – Hydro-mechanical Works (Volume 3, Part V, Clause 1.2);</p> <p>(ii) Standard Technical Requirements (Volume 3, Part III)</p> <p>(iii) Technical Schedule 14 (Volume 1); and</p> <p>(iv) the Bidding Drawings (Volume 4)</p>



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59	3/4	Drawing No. RGHEP-HW-11-08 and Standard Technical Requirements, Section 22		<p>Spillway Stoplog Gate:</p> <p>(a) width of Clear opening x Clear height of opening</p> <p>(b) Number of Stop log Units and its operation media. type of gate: Slide / Wheel</p> <p>(c) type of Lifting mechanisms</p>	<p>The Spillway Stoplog Gate is referred to in the Bid Documents as the Diversion Weir Stoplogs.</p> <p>The design of the Diversion Weir Stoplogs is to be carried out by the Contractor. The Employer's Concept and technical requirements for the Diversion Weir Stoplogs are presented in:</p> <p>(i) Particular Technical Requirements – Hydro-mechanical Works (Volume 3, Part V, Clause 1.3);</p> <p>(ii) Standard Technical Requirements (Volume 3, Part III)</p> <p>(iii) Technical Schedule 14 (Volume 1); and</p> <p>(iv) the Bidding Drawings (Volume 4)</p>
60		Standard Technical Requirements, Section 22		<p>Bulk Head Gate:</p> <p>(a) width of Clear opening X Clear height of opening</p> <p>(b) Number of Units and its operation media. type of gate: Slide I Wheel.</p> <p>(c) type of Lifting mechanisms</p>	<p>The Bulk Head Gate is referred to in the Bid Documents as the Headrace Bulkhead Door.</p> <p>The design of the Headrace Bulkhead Door is to be carried out by the Contractor. The Employer's Concept and technical requirements for the Headrace Bulkhead Door are presented in:</p> <p>(i) Particular Technical Requirements – Hydro-mechanical Works (Volume 3, Part V, Clause 1.10);</p> <p>(ii) Standard Technical Requirements (Volume 3, Part III)</p> <p>(iii) Technical Schedule 14 (Volume 1); and</p> <p>(iv) the Bidding Drawings (Volume 4)</p>



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No.	Vol.	Clause Ref	Page Ref	Bidder Query	Employer Response
61	3	Part III, Standard Technical Requirements, Section 23		Trash Racks. (a) width of Clear opening X Clear height of opening. (b) Number Of Panels required one opening and its operation media (c) type of Lifting mechanisms	The design of the Trash Racks is to be carried out by the Contractor. The Employer's Concept and technical requirements for the Trash Racks are presented in: (i) Particular Technical Requirements – Hydro-mechanical Works (Volume 3, Part V, Clause 1.4); (ii) Standard Technical Requirements (Volume 3, Part III) (iii) Technical Schedule 14 (Volume 1); and (iv) the Bidding Drawings (Volume 4)
62	3	Part IV, Particular Technical Requirements, Clause 5.2		Desander flushing arrangements. In Sub-Clause 5.2(b), the Employer's Concept indicates the use of the Bieri vertical flushing system. Please confirm whether it is required to provide a Bieri system?	The Contractor's design may propose alternative flushing systems provided that the proposed design fulfils the Employer's Particular Technical Requirements given in the Bid Documents (Volume 3, Part IV).
63	5	Information for Bidders		Request the Employer to provide the EIA Report of Rasuwagadhi Hydroelectric Project.	Please refer to the Employer's Response to Question 1.
64				Information of Dam site, spillway and intake foundation treatment and curtain grouting (as the depth of the curtain grouting)?	Please refer to the Employer's Response to Question 1.
65				Information of exceed the standard flood and flood definition?	Please refer to the Employer's Response to Question 1.
66				Information of the clay burrow area for the coffer dam? Where is the clay burrow area?	Please refer to the Employer's Response to Question 1. The design of the River Diversion Works is part of the Contractor's scope.
67				Is it possible to have the Concept Drawings (Volume 4) available in DWG format?	Please refer to the Employer's Response to Question 1.

Akeira

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No.	Vol.	Clause Ref	Page Ref	Bidder Query	Employer Response
68				Paragraph 3.5 of Volume 5 – Part II call for an Annex containing, in tabular form, the results of the steady flow calculations performed to estimate the water levels at each river cross section for each discharge profile. Since such Annex is not actually included in the Tender Documents, we kindly ask you to provide it.	Please refer to the Employer’s Response to Question 1.
69				Is there any geological-geotechnical report available, covering the whole of the project (particularly the underground caverns, i.e. the desanders)?	Please refer to the Employer’s Response to Question 1.
70				External Traffic There are gulch and landslide mass on two sections of the road from Kathmandu to project location. Meanwhile the road from Kathmandu to project location is sky way with deep slopes and sharp turnings; it cannot meet the requirement of the Contractor to transport materials, equipment and large items. We would like to know from you how to deal with it?	Please refer to the Employer’s Response to Question 34 and 35.



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71				<p>Camp Arrangement</p> <p>Temporary facilities, warehouse, workshop and camp are mainly arranged on the right bank of the river, which is specified in the tender document. However, as it is suggested from site situation, it is more reasonable to arrange them on the left bank of the river, and it will contradict with tender document. Moreover, the contractor shall conduct contraction of the main part two months after entering site according to the schedule in tender document. Therefore, who will be responsible for the potential risk of location variation of the camp and land requisition?</p>	<p>Please refer to the Employer's Responses to Question 14 and Question 15.</p> <p>If the Contractor wishes to propose an alternative arrangement for the construction site facilities, then the Contractor should clearly identify the proposed alternative/additional area(s) in their Bid.</p>
72				<p>Scope of Contract</p> <p>The traffic tunnel is incorporated in this contract. But the construction of it has already started. Shall you provide details of the items of this section which is under construction?</p>	<p>Please refer to the Employer's Responses to Question 26.</p>



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73				<p>Schedule</p> <p>Can the Contractor do properly adjust to the schedule if the Contractor is able to meet section schedule and completion time schedule, in reference with the attached RASUWAGADHI HYDROELECTRIC PROJECT TENTATIVE CONSTRUCTION TIME SCHEDULE?</p>	<p>The Contractor is not bound by the 'Tentative Construction Time Schedule' provided in Volume 4 (S.No.62).</p> <p>The Contractor shall plan the Lot 1 Works in sufficient detail to enable the derivation of their Bid Price. The order in which the Contractor proposes to execute the Permanent Works shall:</p> <ul style="list-style-type: none"> (i) follow a logical sequence and facilitate safe working; (ii) provide efficient and effective interfaces with the Lot 2 Contractor; and (iii) satisfy the times for completion of Milestones MS-20, MS-25, MS-32(a), MS-66 and MS-77, as well as the overall Time for Completion. <p>The Contractor's Bid Price shall make all allowances for execution of the Works consistent with the Method Statements (Technical Schedule 8) and Programme (Technical Schedule 11).</p>
74				<p>Material Resource</p> <p>Please designate the source and specify the quantity of clay which is approved to use for the cofferdam core wall.</p> <p>Can the sand and stone be selected and used from the river?</p>	<p>Details of the Construction Material Survey undertaken by the Employer as part of the Detailed Project Report are given in Section 4 of the Detailed Project Report, which will be made available to the Contractor.</p> <p>Material for use as fine and coarse aggregates must comply with the Standard Technical Requirements (Volume 3, Part III, Section 8)</p>
75				<p>Paragraph 2. 7 of Volume 5 Part II, refers to 7 sources for construction materials identified in the Project area. Can you please issue a drawing where such sites are shown or at least provide their exact locations and capacities?</p>	<p>Please refer to the Employer's Response to Question 74.</p>

A. Koirala

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76				Electricity How can the client provide electricity for construction? Please specify the capacity, connecting location and price.	Please refer to the Employer's Response to Question 18 and Question 19.
77				Who will be responsible for maintain good relation and co-ordinate with local committee and the matter of land requisition?	The Contractor shall co-operate with the Employer to ensure good relations are maintained with the local people. The Contractor's responsibilities in this regard are included in the Conditions of Contract. As mentioned in the Employer's Response to Question 14, the Employer is making land acquisition provisions for all of the areas indicated on Drawing No.RGHEP-GLP-11-03 and RGHEP-GLP-11-04.
78				Can the Contractor borrow the existing explosive process for the construction of traffic tunnel of powerhouse? Is the explosive permit still valid or who shall be responsible for applying the explosive permit?	Explosive permits are not transferable to the Contractor. The Contractor shall be fully responsible for complying with the guidelines given in ICI Nobel's Explosives Company Blasting Practice Handbook and with all statutory regulations of Nepal, including permits.
79				How to stipulate the customs duty and VAT about material and equipment importation? Who will be responsible for import licence and guarantee?	The Contractor shall be responsible for all formalities associated with the importation of materials and/or equipment to be incorporated into the Permanent Works.
80				There is one house under construction on the left side of the dam. If it hampers the construction of the dam, how to deal with it, and who will be responsible?	The Employer will be responsible for any necessary land acquisition should this property impact on the construction of the Project.
81				The communication situation on site is very weak. Will the Client solve this problem?	Please refer to Volume 3, Part II, Clause 8.22.3



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82				Will the Client upgrade or adjust the construction access and working field on the drawing of tender document, if possible, who will be responsible for the land requisition and cost on the purpose?	Please refer to the Employer's Responses to Question 14 and Question 15. If the Contractor wishes to propose an alternative arrangement for the construction access or designated working areas, then the Contractor should clearly identify the proposed alternative/ additional area(s) in their Bid.
83				Which kind of insurance that the client will buy? Is there any kind of compulsory insurance?	The Contractor shall allow for the provision of all insurances specified in GCC/PCC Clause 18 in his Bid Price.
84				There are many check point on the road from Kathmandu to site, is it hamper the transportation of materials, equipment? Is there any specific document or permit the Client has to process?	The Employer will provide assistance in the form of a clearance letter to facilitate easy passage of plant and materials to the Project site. The Contractor shall be responsible for arranging the necessary transportation documentation and collection of the aforementioned clearance letters from the Employer's office.
85				The issues about hydro-mechanical works to be clarified: (a) Accordance with the description in the tender document Volume 3 Lot 1: Civil and Hydromechanical Works, Part V – Sand Gate (page 7), there are totally 12 gates, including 6 maintenance gates and 6 work gates; and in Technical Schedule 14, Volume 1, Part III (page 37), Item 9 – Sand Gate, there are only 6 work gates, however, there are also only 6 work gates in Drawing No. RGHEP-HE-11-07, therefore we consider that 6 work gates shall be installed can meet the requirements. Please verify and confirm.	Please refer to Addendum No. 3.



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				(b) Please verify and confirm the rate of work gates that be mentioned in Technical Schedule 14, Volume 1, Part III is 4/0.4mm/min.	<p>The operating speeds of the cranes to be provided for installation and operation of the various gates are given below:</p> <table border="1"> <thead> <tr> <th colspan="2"></th> <th colspan="2">Operating Speed (mm/min)</th> </tr> <tr> <th colspan="2">Item</th> <th>Hoist Normal</th> <th>Creep Speed</th> </tr> </thead> <tbody> <tr> <td>2.2</td> <td>Diversion Weir Gantry Crane</td> <td>~4.0</td> <td>0.4</td> </tr> <tr> <td>2.4</td> <td>Intake Gantry Crane</td> <td>~4.0</td> <td>0.4</td> </tr> <tr> <td>2.5</td> <td>Desander Upper Chamber Cranes</td> <td>~4.0</td> <td>0.4</td> </tr> <tr> <td>2.6</td> <td>Crane for Penstock Valve Chamber</td> <td>~10</td> <td>1</td> </tr> <tr> <td>2.7</td> <td>Gantry Crane for Draft Tube Gates</td> <td>4.0</td> <td>-</td> </tr> </tbody> </table> <p>For Item 1.2: Diversion Weir Radial Gates, the opening and closing rates shall be 0.3m/min and ≤1.0m/min, respectively.</p>			Operating Speed (mm/min)		Item		Hoist Normal	Creep Speed	2.2	Diversion Weir Gantry Crane	~4.0	0.4	2.4	Intake Gantry Crane	~4.0	0.4	2.5	Desander Upper Chamber Cranes	~4.0	0.4	2.6	Crane for Penstock Valve Chamber	~10	1	2.7	Gantry Crane for Draft Tube Gates	4.0	-
		Operating Speed (mm/min)																															
Item		Hoist Normal	Creep Speed																														
2.2	Diversion Weir Gantry Crane	~4.0	0.4																														
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A. Keirala

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86				<p>As there are no more details in tender documents, some issues about electric bidding should be clarified as following:</p> <p>(a) Environmental conditions for equipments, such as altitude, temperature and humidity, etc.</p> <p>(b) Electrical control requirements:</p> <p>(i) PLC control or not?</p> <p>(ii) The brand of electrical components?</p> <p>(iii) The data display pattern is instrument panel or touch screen?</p> <p>(iv) What kind of method for remote control (if any)?</p> <p>(c) Power supply: the requirements of voltage level and voltage drop and the rated frequency?</p>	<p>Please refer to Environmental Impact Assessment (EIA) Report Volume I, Chapter 4 – Existing Environmental Conditions.</p> <p>Please refer to Volume 3, Part V, Clause 3.5</p> <p>The brand of electrical components is for the Contractor to propose. The only requirement is that the components fulfil all relevant Employer’s Requirements (Volume 3).</p> <p>The design of the Electrical Works included in Lot 1 Scope of Works is for the Contractor to design in accordance with the Employer’s Requirements.</p> <p>Please refer to Volume 3, Part V, Clause 3.5.</p> <p>The design of the Electrical Works included in Lot 1 Scope of Works is for the Contractor to design in accordance with the Employer’s Requirements.</p>
87				<p>When we try to display the concept drawings (currently available only in PDF format), in several cases and error message appears saying “cannot find or create the font ‘ArialMT’”. Some characters may not display or print correctly”. Since this problem depends on a setting to be selected during the conversion of the drawings, from the native DWG format to PDF, please check and resolve this issue and provide us with the working drawings.</p>	<p>Please refer to the Employer’s Response to Question 1.</p>

A. K. Karki

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88				Details pertaining to some permanent structures included in the Scope of Works are missing: reference is made, for instance, to plan and cross section of the Bus Bar tunnels, to cross section of the Draft Tube tunnels, to plan and longitudinal section of the Transformer Cavern etc. Since Bidders are expected to estimate, on a lump sum basis, all of those structures, availability of these additional info would be strongly appreciated.	<p>The intent of the Employer’s Concept Drawings is to provide the Contractors with an understanding of the Concept Design; not the full details of each individual component. The full set of available Employer’s Concept Drawings has been provided in Volume 4.</p> <p>The Contractor is responsible for developing his own Concept Design conforming to the Employer’s Requirements, in sufficient detail to enable the derivation of a competitive Bid Price.</p>
89				Is there any preliminary calculation/evaluation of the thickness to be assigned to the steel lining for pressure shaft/tunnel? Is the bidder expected to make its own computation and submit it with its bid?	The Contractor should make his own assessment as part of the Contractor’s Concept Design submission (Technical Schedule 9).
90				According to the Tender drawing #16, the proposed cross section for the Construction Adits is D-shaped HxW 4.8 x 4.8: with reference to Adit 3, such provision conflicts with the fact that, based on drawing #28, the Access Tunnel to Valve Chamber - which stems from Adit 3- is D-shaped HxW 6 x 6, then larger than the tunnel from which it bifurcates. Please clarify.	<p>The typical cross section for the Construction Adit shown on Drawing No. RGHEP-HW-11-11 is clearly titled “Minimum Cross Section”.</p> <p>The Access Tunnel to the Valve Chamber downstream of the Surge Shaft has been sized to facilitate the delivery and installation of the Penstock Isolating Valve. Accordingly, Construction Adit No.3 shall be required to be of at least the same size up to the junction with the Access Tunnel to the Valve Chamber. Between the junction and the Headrace Tunnel, the minimum cross section may be adopted for the remaining length of Construction Adit No.3.</p>



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91				There is an inconsistency, between drawing #28 and #32, pertaining to the size (width and length) assigned to the Valve Chamber. Please clarify	The inconsistency is noted and the dimensions shown on Drawing No. RGHEP-PH-11-02 should be considered as minimum dimensions. However, the Contractor is reminded that the Drawings presented in Volume 4 represent the Employer's Concept only and the Contractor is responsible for the Design and developing his Bid Price accordingly.
92				Paragraph 1.2 of Volume 3 Part IV outlines how to calculate water conveyance system's head losses: please confirm that the maximum allowed value for headlosses (9.4m) only refers to the stretch of the waterway between the trashracks (included) at the Intake structure and the pressure tapping located 0.5 m upstream of the Main Inlet Valve.	Please refer to Addendum No.3.
93				Is it possible to extend the "Tunnel works adjustment mechanism" also to the underground caverns and the other major tunnels (i.e. Construction Adits, Main Access Tunnels etc.)?	The logic of applying the "Tunnel Works Adjustment Mechanism" to the Headrace Tunnel and Tailrace Tunnel only is that these structures are linear and extend over a long distance, thus increasing the level of uncertainty of the rock classification along the length of the tunnels. The Employer does not consider it necessary to apply the Adjustment Mechanism to the other underground structures and the Contractor shall prepare his Bid Price accordingly.

