



Democratic Socialist Republic of Sri Lanka
Ministry of Irrigation & Water Resources Management

CONTRACT AGREEMENT

between

Ministry of Irrigation & Water Resources Management

&

M/s. Sinohydro Corporation Limited

FOR

Design, Construction and Commissioning of
Moragahakanda Reservoir Headworks Project

Exhibit I – Contract Agreement

Contract No: MIWRM/AGR/CONS/2012/33

June 2012

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Handwritten signature

List of EPC Contract Documents

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| | H5-Archological Impact assessment Report 2009 H6-Environment Monitoring Plan & Updated Environment Clearance Letters H7 -Detailed Geological Study with respect to the land stability of Moragahakanda Agri. Develp. Project H8-Updated Environment Mitigation Plan by MASL | |
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| | (4) Contractor's submission dated 5 th June 2012 on Amendment of Contract Agreement. (5) Contractor's submission dated 5 th June 2012 on Pay Monthly Plan. | |

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Exhibit I A – Contract Agreement

Exhibit I A – Contract Agreement

Exhibit I A- Contract Agreement

Contract No:- MIWRM/AGR/CONS/2012/33

This Agreement made the 08th day of June 2012 between the Secretary of Ministry of Irrigation & Water Resources Management of No 500, T.B.Jaya Mawatha, Colombo 10, Sri Lanka, hereinafter called "the Employer" which terms shall mean and include the present Secretary, his successors in office, any person acting in the post of Secretary or performing the function of the Secretary of the Ministry entrusted with the subject of Irrigation and Water Resources Management, acting for and on behalf of the Government of the Democratic Socialist Republic of Sri Lanka of the one part, and Sinohydro Corporation Ltd. of No 22, West CheGongZhuang Road, HaiDain District, Beijing, 100044, P.R.China, hereinafter called "the Contractor" of the other part.

Whereas the Employer desires that the Works known as Moragahakanda Reservoir Headworks Project should be executed by the Contractor, and has accepted a Tender by the Contractor for the execution and completion of these Works and the remedying of any defects therein,

The Employer and the Contractor agree as follows:

1. In this Contract Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Contract:
 1. The Contract Agreement (Section I A of Exhibit I)
 2. Letter of Acceptance
 3. Documents comprising Financial Negotiations (Annex - VIII)
 4. Documents comprising Technical Negotiations (Annex -IX)
 5. The Particular Conditions (Section I C of Exhibit I)
 6. The General Conditions - FIDIC-First Edition 1999 (Section I B of Exhibit I)
 7. The Annexes to the Conditions of Contract (Annex I - VII)
 8. Scope of Work & Particular Requirements (Exhibit II)
 - 8.1 Scope of Work (Section II A)
 - 8.2 Hydrology (Section II B)
 - 8.2 Topography (Section II C)
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 - 8.5 Quality Assurance Plan (Section II F)
 - 8.6 Health & Safety Plan (Section II G)
 - 8.7 Environmental Impact Mitigation Assurance Plan (Section II H)
 - 8.8 Social Impact Mitigation Assurance Plan (Section II I)
 - 8.9 Geological Assessment Report - December 2011 (Section II J)


9. The Employer's Requirements (Exhibit III)
 - 9.1 General Requirements (Section III A)
 - 9.2 General Technical Specifications -Volume 1- Civil Works (Section III B)
 - 9.3 General Technical Specifications -Volume 2- Electrical & Mechanical Works (Section III C)
 - 9.4 General Technical Specifications -Volume 3 - Transmission Line (Section III D)
 - 9.5 Technical Specifications for the Interconnection of Generation Resources- January 2003
10. The Particular Technical Specifications (Exhibit IV)
 - 10.1 The Particular Technical Specifications dated 21st February 2012
 - 10.2 The Particular Technical Specifications dated 07th April 2012 (Ref para 2 in page 04 of 73 of Minutes of Technical Negotiations)
11. Contractor's Proposal
 - 11.1 Contractor's Final Revised Proposal including Drawings dated 14th February 2012
 - 11.2 Contractor's Proposal including Drawings -November 2011
 - 11.3 Contractor's Documents dated 7th April 2012 and 24th April 2012
 - 11.4 Contractor's submission dated 05th June 2012 on Amendment of Contract Agreement.
 - 11.5 Contractor's submission dated 05th June 2012 on Pay Monthly Plan .
3. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to design, execute and complete the Works and remedy any defects therein in conformity with the provisions of the Contract.
4. The Employer hereby covenants to pay the Contractor, in consideration of the design, execution and completion of the Works and the remedying of defects therein, the final Contract Price of **US\$ 252,302,221.00 (inclusive of Income Tax and Corporate Tax and excluding other Taxes)** at the times and in the manner prescribed by the Contract.
5. The Contract shall come into full force and effect on the date when the following conditions are satisfied:
 - After submitting the acceptable Performance Guarantee which shall be submitted within twenty eight (28) days from the date of Contract Agreement
 - Approval of the Project by the governments and relevant authorities of the People's Republic of China and the Democratic Socialist Republic of Sri Lanka.
 - After becoming Facility Agreement (Loan Agreement) between the Government of Sri Lanka (referred as Borrower) and China Development Bank Corporation in the People's Republic of China (referred as Lender) is effective.

Should all conditions precedent and the procedures for the financial facility set out in the Facility Agreement (Loan Agreement) have not been fulfilled within one (01) year from the

signing date of the Agreement, the Agreement should be considered as null and void, unless otherwise agreed upon in writing between the Employer and the Contractor.

The Commencement Date shall be the date upon which the Contractor receives a Notice to Proceed from the Employer requiring it to proceed with the Works and confirming that each of the above mentioned conditions has been satisfied or waived by the Employer.

In Witness whereof the parties hereto have caused this Agreement to be executed the day and year first before written in accordance with their respective laws.

SIGNED by: 

Eng. K. W. Ivan de Silva
Secretary
Ministry of Irrigation & Water
Resources Management
No. 500, T.B. Jaya Mawatha,
Colombo - 10.

for and on behalf of the Employer
in the presence of:

Witness: 

Name: **Gamini Rajakaruna**
Director General
Mahaweli Authority of Sri Lanka
Address: No. 500, T B Jayah Mawatha,
Colombo - 10.

Date: 08 June 2012

SIGNED by: 


Feng Yanan

for and on behalf of the Contractor
in the presence of:

Witness: 

Name: **XU QINGYUAN**

Address:

Date: 08 June 2012

Exhibit I B – General Conditions of Contract

EXHIBIT I B – GENERAL CONDITIONS OF CONTRACT

Note:

General Conditions of Contract for EPC/Turnkey Projects (First Edition 1999) issued by FIDIC is not inserted with this document and Contractor shall obtain it from a suitable source.

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Exhibit I C - Particular Conditions of Contract

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EXHIBIT I C - PARTICULAR CONDITIONS OF CONTRACT

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Exhibit I – Section I C - Particular Conditions of Contract

Clause 1 General Provisions

Sub-Clause 1.1 Definitions

Replace the Sub-Clauses 1.1.1.3 and 1.1.1.4 with the following new Sub-Clauses 1.1.1.3 and 1.1.1.4:

1.1.1.3 “Employer’s Requirements” means the aggregate of the documents entitled Scope of Works and Particular Requirements, General Requirements, General Technical Specifications, Particular Technical Specifications and Outline Design Drawings as included in the Contract and any additions and modifications to such document in accordance with the Contract. Such documents specify the purpose, scope, and/or design and/or other technical criteria, for the Works

1.1.1.4 “Tender” or “Contractor’s Proposal” or “Particular Technical Specifications” means the document entitled the particular technical specifications, as included in the Contract.

Replace the Sub-Clause 1.1.2.2 with the following new Sub-Clause 1.1.2.2:

1.1.2.2 “Employer” means the person named as the Employer in the Contract Agreement which shall be represented by Secretary of Ministry of Irrigation & Water Resources Management of No 500, T.B.Jaya Mawatha, Colombo 10, Sri Lanka, hereinafter called "the Employer", which terms shall mean and include the present Secretary, his successors in office, any person acting in the post of Secretary or performing the function of the Secretary of the Ministry entrusted with the subject of Irrigation and Water Resources Management, acting for and on behalf of the Government of the Democratic Socialist Republic of Sri Lanka.

Insert the following new Sub-clause 1.1.2.11:

1.1.2.11 “Engineer” means the independent engineer named by the Employer in the Contract or appointed from time to time by the Employer under Sub-Clause 3.1 to assist the Employer.

The following Sub-Clauses provide supplementary information related to the same Sub-Clauses in the General Conditions:

1.1.3.1 “Base Date” means the date of signing the Contract Agreement

- 1.1.3.3 Time for Completion means the date falling 208 weeks after the Commencement Date.
- 1.1.3.7 Defect Notification Period means the period commencing on the Taking Over of the Works and expiring 104 weeks later.
- 1.1.4.4 Foreign Currency means US Dollars.
- 1.1.4.5 Local Currency means Sri Lankan Rupees (LKR)
- 1.1.6.2 Country means the Democratic Socialist Republic of Sri Lanka.

Insert the following new Sub-clause 1.1.6.9 through Sub-Clause 1.1.6.13:

- 1.1.6.9 “Delay Liquidated Damages” means liquidated damages described in Sub-Clause 8.7 [Delay Damages].
- 1.1.6.10 “Guaranteed Continuous Power Output” shall be defined in the Particular Technical Specifications
- 1.1.6.11 “Guaranteed Weighted Efficiency” shall be defined in the Particular Technical Specifications
- 1.1.6.12 “Minimum Performance Levels” shall be defined in the Particular Technical Specifications
- 1.1.6.13 “Performance Liquidated Damages” means liquidated damages described in Sub-Clause 9.4 [Failure to Pass Tests on Completion].

Sub-Clause 1.2

Interpretation

At the end of Sub-Clause 1.2, add:

In these conditions, provisions including the expression “cost plus reasonable profit” require this profit to be **five percent (5%) of this cost.**

Sub-Clause 1.3

Communications

The Correspondence addresses of the two Parties:

Employer: Secretary - Ministry of Irrigation & Water Resources Management.

Address: No 500, T.B.Jaya Mawatha, Colombo 10, Sri Lanka

Tel: +94 11 2676844

Fax: +94 11 2676846

Email: secretary@irrigationmin.gov.lk

Contractor: SINOHYDRO CORPORATION LIMITED
Address: No 22, West CheGongZhuang Road, HaiDain District
Beijin, 100044, P.R.China
Tel: +86 10 58384950
Fax: +86 10 58960142
Email: cwhecii@263.net

Sub-Clause 1.4 Law and Language

- a) The Law which will govern the contract shall be the Laws of Democratic Socialist Republic of Sri Lanka.
- b) The ruling Language shall be English.
- c) The Language for communication shall be English.

Sub-Clause 1.5 Priority of Documents

Replace Sub-Clause 1.5 with the following Sub-Clause 1.5:

The documents forming the Contract are to be taken as mutually explanatory of each other. For the purposes of interpretation, the priority of the documents shall be in accordance with the following sequence:

1. The Contract Agreement (Section I A of Exhibit I)
2. Letter of Acceptance
3. Documents comprising Financial Negotiations (Annex – VIII)
4. Documents comprising Technical Negotiations (Annex – IX)
5. The Particular Conditions (Section I C of Exhibit I)
6. The General Conditions – FIDIC-First Edition 1999 (Section I B of Exhibit I)
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 - 8.9 Social Impact Mitigation Assurance Plan (Section II I)
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 - 9.3 General Technical Specifications -Volume 2- Electrical & Mechanical Works (Section III C)
 - 9.4 General Technical Specifications -Volume 3 - Transmission Line (Section III D)

- 9.5 Technical Specifications for the Interconnection of Generation Resources-
January 2003
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- 10.1 The Particular Technical Specifications dated 21st February 2012
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- 11.3 Contractor's Documents dated 07th April 2012 and 24th April 2012
- 11.4 Contractor's submission dated 05th June 2012 on Amendment of Contract
Agreement.
- 11.5 Contractor's submission dated 05th June 2012 on Pay Monthly Plan

If an ambiguity or discrepancy is found in and amongst the documents, the Engineer shall issue necessary clarifications or instructions or shall make determinations after a careful scrutiny of the connected documents mentioned above in order to improve the efficiency or value of the completed works.

Sub Clause 1.9 Confidentiality

Insert the following at the end of Sub-Clause 1.9;

"Any advertising stating the subject of this Contract by the Contractor in Sri Lanka or in other foreign countries shall be subject to approval of the Employer prior to the publication. Publication of approved articles, photographs and other similar materials shall carry acknowledgement to the Employer and shall state the name of the Engineer."

Sub Clause 1.10 Employer's use of Contractor's Document

Insert the following at the end of the Sub-Clause 1.10;

"One licensed copy of the software for System Operation to be made available to the Employer."

Sub-Clause 1.13 Compliance with Laws.

Replace Sub-Clause 1.13 with the following:

"The Contractor shall, in performing the Contract, comply with applicable Laws. Unless stated otherwise:

(a) The Employer shall have obtained (or shall obtain) the planning, zoning or similar permission for the Permanent Works, and any other permissions described in Annex IV to the Particular Conditions of Contract as having been (or being) obtained by the Employer; and the Employer shall indemnify and hold the Contractor harmless against and from the consequences of any failure to do so;

(b) The Contractor shall give notices and obtain all permits, licenses, and approvals in accordance with Annex IV to the Particular Conditions of Contract and as

required by Laws in relation to the design, execution and completion of the Works and the remedying of any defects; and the Contractor shall indemnify and hold the Employer harmless against and from the consequences of any failure to do so; and

“(c) Relevant local taxes, duties and levies shall be paid by the Employer as stated in Sub-Clause 14.1. However the Contractor shall submit, in good time, the details of Goods to the Employer, who shall give necessary assistance to the Contractor at the request of the Contractor for obtaining all import permits or licenses required for these Goods. The Contractor shall indemnify the Employer in relation to additional customs and import duties or fines or penalties payable by the Employer as a result of any deficiencies or omissions in documentation prepared by the Contractor in connection with the importation of the Permanent Works.

Sub-Clause 1.15 Details to be Confidential

The Contractor shall treat the details of the Contract as private and confidential, except to the extent necessary to carry out obligations under it or to comply with applicable Laws. The Contractor shall not publish, permit to be published, or disclose any particulars of the Works in any trade or technical paper or elsewhere without the previous agreement of the Employer.

Clause 2 The Employer

Sub-Clause 2.1 Right of Access to the Site

The Employer shall give the Contractor the right of access to and possession of all parts of the Site within 28 days of the Contract coming into full force and effect for the purposes of survey and sub-surface investigations.

Sub-Clause 2.2 Permits, Licenses or Approvals

Insert the following paragraph at the end of Sub-Clause 2.2:

“The Employer shall also extend reasonable assistance to the Contractor at the request of the Contractor for obtaining, permit-to-work, environmental permits, and any other approval required for the Works.

The Contractor shall furnish all necessary documents required for the payment of Customs duties and levies on import of plant and equipment for the project to the Employer, in good time, and shall attend to all formalities in processing documents to enable the Employer to obtain exemption from payments of such Customs duties and VAT as provided in Sub Clause 14.1.”

Clause 3 The Employer’s Administration

Sub Clause 3.1 The Employer’s Representative

Add the following paragraph at the end of Sub-Clause 3.1.

“The Employer shall appoint an independent Engineer to assist the Employer’s Administration. The name, address, duties and authority of the Engineer shall be noticed.

Insert the following Sub-Clause 3.1.1 and 3.1.2:

Sub-Clause 3.1.1 Engineer’s Duties and Authority

The Engineer shall obtain the specific approval of the Employer before taking action under the following Sub-Clauses of these Conditions:

- a) consenting to the subletting of any part of the Works under Sub-Clause 4.4 (b);
- b) approving an extension of the Time for Completion, and / or any additional payment under Sub-Clause 20.1
- c) issuing variation under Sub-Clause 13.1, except:
 - (i) in an emergency situation, as reasonably determined by the Engineer; or
 - (ii) if such variation would increase the Contract Price by less than zero point one percent (0.1 %) of the Contract Price.
- d) approving additional payment under Sub-Clause 13.3

“Notwithstanding the obligation, as set out above, to obtain approval, if, in the opinion of the Engineer, an emergency occurs affecting the safety of life or of the Works or of adjoining property, he may, without relieving the Contractor of any of his duties and responsibilities under the Contract, instruct the Contractor to execute all such work or to do all such things as may, in the opinion of the Engineer, be necessary to abate or reduce the risk. The Contractor shall forthwith comply, despite the absence of approval of the Employer, with any such instruction of the Engineer. The Engineer shall determine an addition to the Contract Price, in respect of such instruction, in accordance with Clause 13.3 and shall notify the Contractor accordingly, with a copy to the Employer.

Sub-Clause 3.1.2 Management Meetings

The Engineer or the Contractor’s Representative may require the other to attend a Management Meetings in order to review the arrangements for future work. The Engineer shall record the business of management meetings and supply copies of the record to those attending the meeting and to the Employer. In the record, responsibilities for any actions to be taken shall be in accordance with the Contract.

Sub-Clause 3.5 Determinations

Insert the following paragraph at the end of Sub-Clause 3.5:

“Notwithstanding that the Contractor may dispute any determination made by the Employer in accordance with this Contract and refer such dispute for resolution in accordance with Clause 20 [Claims, Disputes and Arbitration], the Contractor shall proceed in accordance with the Employer’s determination pending any resolution agreed between the Parties or any determination by an arbitral tribunal in accordance with Clause 20 [Claims, Disputes and Arbitration].”

Clause 4 The Contractor

Sub-Clause 4.1 Contractor’s General Obligation

Add the following paragraphs at the end of Sub-Clause 4.1:

“Any commission, advantage, gift, gratuity, award or bribe given, promised or offered by or on behalf of the Contractor or his Agent or servant or any other person on his or behalf, to any officer, servant, representative or agent of the Employer or of the Engineer’s Representative or to any person on their behalf or behalf of any of them in addition to obtaining or to the execution of this or of any other contract which he may have entered into with the Employer, the Contractor shall in addition to any criminal liability is also liable to the payment of any loss or damage resulting from cancellation consequent upon such event. The Employer shall be entitled upon a certificate in writing of the Engineer to deduct the amount so certified from any money otherwise due to the Contractor under this or any other contract or to recover the said amounts as a debt due or partly the one and partly other as the Employer shall deem advisable.

Any advertising stating the subject of this Contract by the Contractor in Sri Lanka or in other foreign countries shall be subject to approval of the Employer prior to the publication. Publication of approved articles, ~~photographs and other similar materials shall carry acknowledgement to the~~ Employer and shall state the name of the Engineer.

The Contractor, his employees, agents and sub-contractor(s) shall not give to unauthorized persons any information, verbal or otherwise, about the Project and shall not allow unauthorized persons to inspect the Works and Contract Document without prior consent of the Employer”

Sub-Clause 4.2 Performance Security

Replace paragraph 1 and 2 of Sub-Clause 4.2 with the following:

“The Contractor shall obtain (at his cost) a Performance Security for his proper performance of the Contract, in the amount of ten percent (10%) of the Contract Price. The Contractor shall deliver the Performance Security to the

Employer within 28 days after signing the Contract Agreement and subject to becoming Loan Agreement effective. The performance security shall be in the form of a bank guarantee, as stipulated by the Employer in Annex I to the Conditions. The performance security shall be denominated in US Dollars. The Contractor shall notify the Engineer when providing the performance security to the Employer.

"The performance security shall be issued by a licensed commercial bank operating in Sri Lanka"

"Without limitation to the provisions of the preceding paragraph, whenever the Engineer determines an addition to the Contract Price as a result of a change in cost and/or legislation or as a result of a variation in respect of Sub Clause 3.1.1 amounting to more than 25 percent of the portion of the Contract Price payable in a specific currency, the Contractor, at the Engineer's written request, shall promptly increase the value of the performance security in that currency by an equal percentage.

The amount of performance Security shall be ten percent (10%) of the varied amount of the Contract Price and it shall be in US Dollars.

Sub-Clause 4.3

Contractor's Representative

At the end of Sub-Clause 4.3, add the following:

"The Contractor's Representative(s) shall be stationed at the Site on full time basis during the execution of the Works and may not leave the Site without the written approval of the Engineer. At least one of the representatives should be on the Site until issuance of the Taking Over Certificate of all equipment supplied by the Contractor.

Assignment and replacement of the representative(s) shall be subjected to the approval of the Employer.

The Contractor shall submit curriculum vitae of a candidate(s) with his application for assignment or replacement of the Contractor's Representative for the approval of the Engineer. The Contractor's Representative shall be permanent employee of the Contractor and shall have experience as manager of implementing similar projects at least during last ten (10) years.

The Contractor's Representative, or all these persons, if not fluent in English Language, the Contractor shall make a competent interpreter available during all working hours."

Sub-Clause 4.4

Subcontractors

Add the following at the end of Sub-Clause 4.4:

“Subcontractors must be selected from the list of approved parties set forth in Annex VI to the Particular Conditions of Contract. The Contractor shall not Sub-Contract work to any Subcontractor not listed in Annex VI to the Conditions of Contract of which the value is more than one fourth of one percent (0.25%) of the Contract Price without obtaining prior written approval of the Employer. The Contractor shall give a minimum 28 days’ notice to the Employer of his intension to subcontract any portion/s of Works.

The Contractor shall not change any Subcontractors selected by him and approved by the Employer, without prior written approval of the Employer.”

“Sources of suppliers of equipment as listed in Annex VI to the Particular Conditions of Contract shall not be changed without the prior approval of the Engineer who shall obtain consent of the Employer for such changes.”

Sub-Clause 4.7 Setting Out

Add following at the end of Sub-Clause 4.7:

“The Employer shall provide the original points, lines, and levels of reference, but the Contractor shall be responsible to verify their accuracy before they are used.”

Sub-Clause 4.13 Rights of Way and Facilities.

Add the following paragraph at the end of Sub-Clause 4.13:

“The Contractor shall submit all documents required for obtaining the approval of the authorities concerned to the Employer with due and sufficient time allowance for the procedure of formalities. The Employer shall not be liable for any loss, cost or delay, and the Contractor shall not be entitled to any extension of the Time for Completion for any delay, arising from late submission of documents or submission of incorrect or incomplete documents.”

Sub-Clause 4.17 Contractor’s Equipment

Add the following paragraphs at the end of Sub-Clause 4.17:

“The Contractor’s Equipment shall include all tools and testing equipment necessary for constructing, erecting, testing and commissioning the Works. All cost of providing the Contractor’s Equipment including re-exporting charge on part thereof shall be deemed to have been included in the Contract Price.

The Contractor shall not remove (or permit the removal of) the Contractor’s

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Equipment from the Site without the Employer's consent until such Contractor's Equipment is no longer required for the execution of the Works. The Contractor shall not, without the written permission of the Employer, sell, let or transfer any goods, equipment or other property, which has been intended for the execution of the Works.

Contractor's Equipment which is owned by the Contractor (either directly or indirectly) shall be deemed to be the property of the Employer with effect from its arrival on the Site. This vesting of property shall not:

- a) affect the responsibility or liability of the Contractor
- b) prejudice the right of the Contractor to the sole use of the vested Contractor's Equipment for the purpose of the Works, or
- c) affect the Contractor's responsibility to operate and maintain Contractor's Equipment.

The property in each item shall be deemed to re-vest in the Contractor when he is entitled either to remove it from the Site or to receive the Taking-Over Certificate for the Works, which occurs first.

Sub-Clause 4.19 Electricity, Water & Gas

Add the following at the end of Sub-Clause 4.19:

"The Contractor shall make his own arrangements with the Electricity Supply Authority [Ceylon Electricity Board (the "CEB")] for power supply to the Site at his own cost. The Contractor shall be responsible for payment of all fees due to the CEB."

The Contractor shall possess alternative/standby facility to ensure uninterrupted supplies and services he may require at the Site, at his own cost. Employer shall provide all reasonable assistance to Contractor to obtain above services.

Sub-Clause 4.21 Progress Reports

Add the following at the end of Sub-Clause 4.21:

- (i) such other matters as may be set out in the Contract or reasonably required from time to time by the Engineer.

Insert the following new Sub-Clause 4.22, Sub-Clause 4.23 and Sub-Clause 4.24:

Sub-Clause 4.22 Security at Site

Unless otherwise stated in this Contract:

- (a) the Contractor shall be responsible for keeping unauthorised persons off the Site, and
- (b) authorized persons shall be limited to the Contractor's Personnel and the Employer's Personnel; and to any other personnel notified to the Contractor, by (or on behalf of) the Employer, as authorised personnel of the Employer's other contractors on the Site.

Sub-Clause 4.23 Contractor's Operation on Site

The Contractor shall confine his operations to the Site, and to any additional areas which may be obtained by the Contractor and agreed by the Employer as working areas. The Contractor shall take all necessary precautions to keep Contractor's Equipment and Contractor's Personnel within the Site and these additional areas, and to keep them off adjacent land.

During the execution of the Works, the Contractor shall keep the Site free from all unnecessary obstruction, and shall store or dispose of any Contractor's Equipment or surplus materials. The Contractor shall clear away and remove from the Site any wreckage, rubbish and Temporary Works which are no longer required.

Upon the issue of the Taking-Over Certificate for the Works, the Contractor shall clear away and remove all Contractor's Equipment, surplus material, wreckage, rubbish and Temporary Works and remediate any contamination caused to the Site or neighbouring areas by the Works. The Contractor shall leave the Site and the Works in a clean and safe condition. However, the Contractor may retain on Site, during the Defects Notification Period, such Goods as are required for the Contractor to fulfill obligations under the Contract.

Sub-Clause 4.24 Fossils

All fossils, coins, articles of value or antiquity, and structures and other remains or items of geological or archaeological interest found on the Site shall as between the Employer and the Contract, be the absolute property of the Employer and shall, upon discovery, be placed under the care and authority of the Employer. The Contractor shall take reasonable precautions to prevent Contractor's Personnel or other persons from removing or damaging any of these findings.

The Contractor shall, upon discovery of any such finding, promptly give notice to the Employer, who shall issue instructions for dealing with it.

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Clause 5 Design**Sub-Clause 5.2 Contractor's Documents**

Replace the first sentence of the first paragraph in Sub-Clause 5.2 with the following:

“The Contractor's Documents shall comprise the technical documents specified in the Employer's Requirements, documents specified in Chapter 4 of Section III A of Exhibit III of the Employer's Requirements, documents required to satisfy all regulatory approvals, and the documents described in Sub-Clause 5.6 [As-Built Documents] and Sub-Clause 5.7 [Operation and Maintenance Manuals].”

Sub-Clause 5.6 As-Built Documents

Replace the first sentence of the third paragraph in Sub-Clause 5.6 with the following:

“Prior to the issue of any Taking-Over Certificate, the Contractor shall supply to the Employer the specified numbers and types of copies of the relevant as-built drawings, in accordance with Chapter 4 of Section III A of Exhibit III of the Employer's Requirements.”

Sub-Clause 5.7 Operation and Maintenance Manuals

Replace the second paragraph in Sub-Clause 5.7 with the following:

“The Works shall not be considered to be completed for the purposes of taking-over under Sub-Clause 10.1 [*Taking Over of the Works and Units*] until the Employer has received final operation and maintenance manuals in such detail, and any other manuals as specified in Chapter 4 of Section III A of Exhibit III of the Employer's Requirements for these purposes.”

Clause 6 Staff and Labour**Sub-Clause 6.1 Engagement of Staff and Labour**

Add the following paragraphs at the end of Sub-Clause 6.1:

“The Contractor may employ expatriate technical personnel who are necessary for the execution of the Works. The Contractor must ensure that these personnel are provided with the required residence visas and work permits. The Contractor shall be responsible for the return to the place where they were recruited or to their domicile of imported Contractor's Personnel. In the event of a death in the Country of any of these personnel or members of their families, the Contractor shall similarly be responsible for making the appropriate arrangements for their return or burial.”

Sub-Clause 6.8 Contractor's Superintendence

Insert at the end of Sub-Clause 6.8:

"Most of the Contractor's superintending staff shall have a working knowledge of English or local language, or the Contractor shall have a sufficient number of competent interpreters available on Site during working hours. The Contractor's management and organization shall meet the requirements specified in Chapter 9 of Section III A of Exhibit III of the Employer's Requirements."

Add the following new Sub-Clause 6.12, Sub-Clause 6.13, Sub-Clause 6.14, Sub-Clause 6.15, and Sub-Clause 6.16:

Sub-Clause 6.12 Festivals and Religious Customs

"The Contractor shall respect the Country recognized festivals, days of rest and Religious and other Customs."

Sub-Clause 6.13 Foreign Staff and Labor

The Employer shall provide reasonable assistance to enable the contractor to obtain the residence visa and work permits and all related documents to ensure that sufficient management personnel, engineers and skilled workers available at site from China. The Contractor shall prepare and submit all necessary documents for applying Visa and Work Permits for such Contractor's Expatriate Personnel and shall bear all the payments involved in this respect.

The number of Contractor's Expatriate Personnel at Site shall not be more than three hundred and fifty (350) at any given time.

Sub-Clause 6.14 Alcoholic Liquor or Drugs

"The Contractor shall not, otherwise than in accordance with the Laws of the Country, import, sell, give, barter, or otherwise dispose of any alcoholic liquor or drugs, or permit or allow importation, sale, gift, barter, or disposal by Contractor's personnel."

Sub-Clause 6.15 Arms and Ammunition

"The Contractor shall not give, barter or otherwise dispose of to any person, any arms or ammunition of any kind, or allow Contractor's personnel to do so."

Sub-Clause 6.16 Explosives

"The Contractor shall comply with all rules and regulations with regards to import, handling, transportation, storage, usage, and disposal of explosives, in the Country."

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Clause 7 Plant, Materials and Workmanship

Sub-Clause 7.4 Testing

Add the following sentence at the end of the 1st paragraph of Sub-Clause 7.4:

“The Contractor shall carry out all tests stipulated in the Employer’s Requirement.”

Insert the following as the second paragraph of Sub-Clause 7.4:

“No part of the Works shall be covered up on the Site without the carrying out of any test or inspection of such part which is required under the Contract. If such covering up occurs the Employer may instruct the Contractor to uncover that part of the Work and carry out the required test or inspection.”

Sub-Clause 7.8 Royalties:

The Employer shall obtain clearance and pay Royalties to the concerned Government agencies for borrow areas & metal quarries. The Contractor shall be responsible for preparation of all documentary work needed for getting permits with the assistance of the Employer. If any aforesaid Royalties and fees are paid by Contractor directly to the respective Authorities, such payments shall be reimbursed by the Employer in reasonable time.

Clause 8 Commencement, Delays and Suspension

Sub-Clause 8.1 Commencement of Works

Replace the first paragraph in Sub-Clause 8.1 with the following:

“The Commencement Date shall be the date upon which the Contractor receives a Notice to Proceed from the Employer requiring it to proceed with the Works and confirming that each of the conditions in paragraph 5 of the Contract Agreement has been satisfied or waived by the Employer.”

Sub-Clause 8.3 Programme

Insert the following as the first paragraph in Sub-Clause 8.3:

“The Contractor’s initial programme shall be annexed to the Contractor’s Proposal. The Contractor shall submit revised and more detailed programmes in accordance with this Sub-Clause 8.3 and Chapter 13 of Section III A of Exhibit III to the Conditions of Contract.”

Sub-Clause 8.7 Delay Damages

The Contractor shall pay or allow the Employer to deduct the following liquidated and ascertained damages (“Delay Liquidated Damages”) for each day or part day for the period commencing on the day after the Time for Completion and expiring on the relevant Taking Over Date.

Delay Liquidated Damages, shall be equal to **zero point zero two percent (0.02%)** of the Contract Price for each day of delay payable in US Dollars. Delay Liquidated Damages shall not exceed five percent (5%) of the Contract Price.

The Parties agree that the Delay Liquidated Damages represent an agreed pre-estimate of losses likely to be suffered by the Employer in the event of delay to Taking Over of the Works beyond their relevant Dates for Completion and are not a penalty.

Clause 9 Test on completion

Sub-Clause 9.1 Contractor’s Obligations

Insert the following at the beginning of Sub-Clause 9.1:

“The Contractor shall carryout tests described in the Employer’s Requirements before being entitled to a Taking-over Certificate.

The Contractor shall submit to the Employer for approval the detailed procedures for those tests in accordance with the tests specified in the Employer’s Requirements not later than six (6) months prior to the tests. All test procedures submitted shall comply with applicable Laws and Contract. If the Employer reasonably requests modifications to the submitted procedures, the Contractor shall promptly incorporate such changes and resubmit its modified procedures within seven (7) days of a request so to do. The process shall be repeated until such detailed test procedures have been agreed. If the parties have not agreed upon the procedures 1 month prior to the anticipated start of a relevant test, the Employer shall make a determination in accordance with Sub-Clause 3.5 [Determinations].”

Sub-Clause 9.4 Failure to pass tests on completion

Add the following paragraph at the end of the Sub-Clause 9.4:

“In the event, the Works fails to meet the Guaranteed Weighted Efficiency and/or the Guaranteed Continuous Power Output but has attained the Minimum Performance Levels, the Contractor shall pay or allow the following liquidated and ascertained damages to the Employer (“Performance Liquidated Damages”).

- USD 44,000 for each zero point one (0.1) percent by which the Weighted Efficiency for each unit is less than the Guaranteed Weighted Efficiency and
- USD 74,000 for each kW of cumulated deficiencies at specified heads for which the Continuous Power Output for each unit is less than the Guaranteed Continuous Power Output”

Performance Liquidated Damages shall not be exceeded five percent (5%) of the Contract Price.

The Parties agree that the Performance Liquidated Damages represent an agreed pre-estimate of losses likely to be suffered by the Employer in the event the Guaranteed Weighted Efficiency and/or the Guaranteed Continuous Power Output are not attained but the Minimum Performance Levels are attained in carrying out the Performance Tests and are not a penalty.

In the event, the Works fail to meet the Minimum Performance Levels or any other performance requirements stipulated in the Employer’s Requirements and /or to satisfy the performance standards given in the Employer’s Requirements, the Employer may:

- (a) carry out any necessary remedial works and/or tests to attain the requisite standards by itself or by others and the Contractor shall pay or allow the Employer’s proper costs in doing so; or
- (b) reduce the Contract Price by such amount as shall be appropriate to cover the reduced value to the Employer as a result of this failure as agreed or determined in accordance with Sub Clause 3.5 [Determinations] of the Conditions of Contract.

Insert the following new Sub-Clause 9.5:

Sub-Clause 9.5 Creation of a Punch List

As soon as the Contractor reasonably believes the Works warrants such action, ~~but in any event before Taking Over of the Works,~~ the Contractor shall provide written notice to the Employer that the Contractor is prepared to conduct a joint inspection of the Works to produce a proposed Punch List (the “Punch List”). The Employer and the Contractor shall cooperate with each other in scheduling and conducting a joint inspection of the Works as soon as reasonably possible after the Employers receipt of such written notice but, in any event, within fourteen (14) days of its receipt. At the Employers option, the Punch List may be prepared and joint inspections performed on a component-by-component or system-by-system basis.

Within five (5) days of completion of any such joint inspection, the Contractor shall prepare and deliver to the Employer a written description of

all proposed items for the Punch List and the appropriate dates for completion of such items which the Contractor, in its best good faith judgment, believes have not been completed or require revision or correction to cause them to conform with the requirements of this Contract. Items of additional work disclosed by testing or operation of a unit or of the Works through the successful completion of the Performance Tests shall be added to the proposed Punch List.

If the Employer accepts such proposed list as a complete Punch List then known, then it shall sign a copy of such list marked "accepted" and return such copy to the Contractor. If the Employer does not so accept such proposed list, then the Employer shall within [ten (10)] days, state its objections to such proposed list and all if its proposed changes therein and additions thereto by written notice to the Contractor

Promptly after the giving of such notice, the Employer and the Contractor shall cause their respective representatives to meet and cooperate and negotiate in good faith to arrive at an agreed list of items for the Punch List and appropriate dates for completion of such items which shall be agreed by the Parties or determined in accordance with Clause 3.5 [Determinations].

Promptly following the Contractor's delivery of a proposed Punch List to the Employer, the Contractor shall commence and thereafter diligently pursue the completion of the Punch List items which shall in any case be completed within one hundred (100) days of submission, as well as any portion of the Works which the Contractor, in its best good faith judgment, believes has not been completed or require revision or correction, to cause it to conform with the requirements of this Contract. The Employer's acceptance of, or agreement on, a Punch List shall not alter or diminish either the Contractor's obligations to complete all of the Works, or the Employer's right to require the Contractor's completion of the Works, in accordance with the Contract.

Clause 10 Employer's Taking Over

Sub-Clause 10.1 Taking Over of the Works and Sections

Replace the first paragraph in Sub-Clause 10.1 with the following:

The Works shall be taken over by the Employer when (i) all the events below shall have occurred and (ii) a Taking-Over Certificate for the Works has been issued, or is deemed to have been issued in accordance with this Sub-Clause:

- (a) the Contractor has completed the Works (except for the items on the Punch List) in accordance with all Contract requirements and the Works comply with applicable Laws;

- (b) the Works have passed all relevant Tests on Completion or, subject to Clause 9.4, has passed the Tests on Completion other than the Performance Tests but has attained the Minimum Performance Levels and the Contractor has paid or allowed Performance Liquidated Damages to the Employer in accordance with Sub-Clause 9.4.;
- (c) the Punch List has been mutually agreed upon by the Parties or resolved pursuant to Sub-Clause 9.5;
- (d) the Contractor has supplied the spare parts and special tools required to be delivered by Taking Over of the Works in accordance with the Employer's Requirements and replaced any spare parts used or consumed during the carrying out of Tests on Completion;
- (e) the Contractor has completed its training obligations to be effected prior to Taking Over of the Works for the Employer's personnel and other nominees of the Employer;
- (f) the Contractor has supplied complete drafts of the Manuals required for Taking Over of the Works; and
- (g) the Contractor has paid or allowed any Delay Liquidated Damages for which the due date for payment has passed pursuant to Sub-Clause 8.7.

Clause 11 Defects Liability

Sub-Clause 11.1 Completion of Outstanding Works and Remedying Defects

Add the following paragraph at the end of Sub-Clause 11.1:

In respect of all works, the Defects Liability Period shall be the period commencing on the last date of handing over after completion of all works, ending on the date which is hundred and four (104) weeks unless otherwise extended under the Sub-Clause 11.3.

In respect of any spare part, the Defects Liability Period shall be the period commencing on the date of completion of installation of the spare part and ending on the date which is hundred and four (104) weeks unless otherwise extended under the Sub-Clause 11.3.

For the purposes of this Clause 11, a defect means any error, defect or damage ~~(where the damage is caused by the Contractor or by any error or defect for which it is responsible)~~ in or to the Works or any spare part (including in any design, materials or workmanship), and any failure of the Works or any spare part to comply with the Contract together with any damage arising there from, provided that, a defect does not include defects or damage,

- (a) arising due to operation or maintenance of the power plant by the Employer not in accordance with operation and maintenance manuals provided by the Contractor (save where due to breach by the Contractor of its obligations under Sub-Clause 5.7 and provided such manuals were provided for review and approval in accordance with the Contract);

- (b) arising due to operation of the Power Plant outside of the specifications and tolerances provided for in the Contract (as may have been adjusted by Variations); or
- (c) where, at the time of discovery of the defect or damage, the repair or replacement is already contemplated for such parts in the recommendations contained in the operation and maintenance manuals.

Clause 12 Test after Completion

Sub-Clause 12.1 Procedure for Tests after Completion

Delete first two lines of Sub-Clause 12.1 and insert the following at the beginning.

“Test after Completion shall be carried out by the Contractor, with the assistance of the Employer with respect to personnel and consumables as specified in the Employer’s Requirements”.

Clause 13 Variation and Adjustments

Sub-Clause 13.1 Right to Vary

Add the following paragraph under Sub clause 13.1

“No physical variations shall be entertained except the provisions made under Sub-Clause 3.1.1(c)”

Sub-Clause 13.8 Adjustment for Changes in Cost:-

There shall be no adjustments to the Contract Price due to the escalation of costs of Labour, Material, Goods, and Services or any other inputs to the Works as the Contract Price has already provided for escalation of cost of above items.

Clause 14 Contract Price and Payment

Sub-Clause 14.1 The Contract Price

Replace the existing sub-paragraph (a) and (b) of Sub-Clause 14.1 by the following new sub-paragraph (a), (b) and (c):

(a) Payment for the Works shall be made on the basis of the schedule of payment of the fixed lump-sum Contract Price.

(b) The Contractor is exempted from payment of Value Added Tax ("VAT), Nations Building Tax (NBT) Ports Authority Levy (PAL), and duties on all goods, materials, and services imported for execution of the Works, subject to

(i) the Employer being named as the consignee of such imports, and (ii) Employer's prior approval being obtained for the importation of same. The Contractor shall prepare and submit the required documentation to the Employer to obtain the certificate for exemption of payment of VAT and duties and attend to all other formalities required to obtain above mentioned exemption. If such exemption has not been granted for any reasons, the Contractor shall pay all taxes and levies imposed on all such consignments imported for the Works as stated in this paragraph and such payments made by the Contractor shall be reimbursed by the Employer on submittal of invoices together with relevant documentation. However, as stated in Sub-Clause 1.13, the Contractor shall indemnify the Employer in relation to additional customs and import duties or fines or penalties payable by the Employer as a result of any deficiencies or omissions in documentation prepared by the Contractor in connection with the importation of the Permanent Works.

All imported goods which are not incorporated in or expended in connection with the Works, shall be re-exported on completion of the Contract. If not re-exported the goods will be assessed for duties as applicable to the goods involved in accordance with the Laws of the Country and the Contractor shall be liable to pay such duties, VAT, NBT, and levies.

Any element of duty or tax inherent in the price of goods, materials or services procured in the Country, shall be deemed to have been included in the Contract Price.

VAT on goods, materials and services procured in the Country shall be paid by the Contractor. Such output VAT paid by the Contractor will be reimbursed to the Contractor directly by the Inland Revenue Department (IRD) of GOSL. The Contractor may submit these output VAT claims monthly to IRD through the Employer. Only the VAT component shown separately in the VAT invoices will be reimbursed.

The Contractor shall also make any payments of other statutory levies and taxes imposed by other local authorities. Such levies and taxes shall be reimbursed by the Employer on application.

~~All personnel employed by the Contractor or his Subcontractors shall comply with the Laws of the Country with regards to the payment of taxes. Any element of such personnel taxes which may have been paid by the Contractor shall be deemed to have been included in the Contract Price.~~

(c). In accordance with the current regulations of GOSL, the Contractor shall purchase all his requirements of fuel within the Country and any such payment shall be deemed to have been included in the Contract Price.

Sub-Clause 14.2 Advance Payment

Advance Payment shall be Thirty percent (30%) of the Contract Price..

Replace the second paragraph of Sub-Clause 14.2 with the following:

“The Advance Payment Guarantees shall be in the form of specimen annexed to this document and in a form of bank guarantee issued by a licensed commercial bank operating in Sri Lanka. Unless and until the Employer receives this Guarantee (Advance Payment Guarantee), this Sub-Clause shall not apply.

Add the following paragraph to the end of Paragraph four of Sub-Clause 14.2:

~~The Advance Payment shall be repaid by way of forty three percent (43%) deductions from each interim payment in accordance with this Sub-Clause. Deductions shall be commenced in the next interim payment following that in which the total of interim payments certificates issued has reached twenty percent (20%) of the Contract Price. The total amount of Advance Payment shall be repaid prior to total value of Statements submitted for interim payments reaches ninety percent (90%) of the Contract Price.~~

Sub-Clause 14.3 Application for Interim Payments

Percentage of retention to be deducted from each interim payment (except for the Advance Payment), shall be ten percent (10%) of the Interim Payment.

The limit of Retention Money shall be five percent (5%) of the Contract Price.

Sub-Clause 14.4 Schedule of Payments-

Substitute Sub-Clause 14.4 with following:

Prior to commencing construction of the permanent Works, the Contractor shall submit a bill of principal quantities of the Permanent Works (the “BPQPW”), together with any supporting information and calculations ~~reasonably required by the Engineer. The BPQPW shall include the~~ anticipated final quantities of the principal items of Permanent Works, which shall have been priced using all-in-rates such that the total amount equals the estimated final Contract Price. The BPQPW shall not contain priced items for design or for Temporary Works. The value of each element of this work, and of any other work elements not described in the BPQPW, shall each be included in the rates for Permanent Works which are to be constructed after the element is carried out.

The BPQPW shall be subject to the approval of the Engineer, which may at any time be withdrawn, and shall be without prejudice to the final amount due under the Contract. The BPQPW be revised and reissued if it appears during execution of the Works that there is any discrepancy between the priced BPQPW and the proportionate value of the Contract Price which has been allocated to the completed Permanent Works on or before taking over any

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component of the Works.

At any time prior to the Taking Over of the Works, the invoiced contract value showing in the Schedule shall not exceed the amount calculated from the current BPQPW, based on the quantities of Permanent Works which have been constructed in accordance with the Contract. Each Statement shall:

- a) be in same form as that of the current BPQPW,
- b) include a sign statement that the current BPQPW (including anticipated final quantities) and the as-constructed quantities are all correct, and
- c) the accompanied by a certificate signed by the Contractor's Representative, certifying that the part of the Works constructed to date complies with the Contract.

Payments to the Contractor shall be made monthly basis on the actual progress achieved in executing the Works in accordance with the Schedule of Payments. Contractor shall submit schedule of payment with respect to BPQPW.

Sub-Clause 14.8 Delayed Payments

Rate of interest upon unpaid sums shall be annual LIBOR (6 months) plus margin of one percent (1%).

Sub-Clause 14.9 Payment of Retention Money

Add at the end of this Sub Clause 14.9:

"The Contractor shall be allowed to provide a Guarantee in a form of specimen annexed to this document and in a form of Bank Guarantee by a licensed commercial bank operating in Sri Lanka, valid up to expiry date of Defects Notification Period, in amounts and currencies equal to the payment, of the second half of the Retention Money to receive the second half of Retention Money upon the issuance of Taking Over Certificate."

Sub-Clause 14.15 Currencies of Payment

The Contract Price shall be paid in the currency of US Dollars.

Insert the following new Sub-Clause 14.16, Sub-Clause 14.17, Sub-Clause 14.18 and Sub-Clause 14.19:

Sub-Clause 14.16 Income Tax/ Corporate Tax

Foreign and Local Contractors and construction agencies of the government will have to comply with regulations of the Department of Inland Revenue for payment of Income Tax /Corporate Tax on profits arising from the Contract. Foreign and Local Contractors and construction agencies of the government

shall be wholly responsible for the payment of all taxes which are payable under Revenue Laws of Sri Lanka.

Responsibility for all other taxes shall be in accordance with Sub-Clause 14.1(b).

Sub-Clause 14.17 Withholding Tax

Unless a direction is given by the Department of Inland Revenue not to deduct withholding tax, the Employer shall deduct withholding tax at the prevailing rates from all payments to the Contractor and the Employer shall remit the same to the Department of Inland Revenue on or before 1 day of the following month.

Sub-Clause 14.18 Construction Industry Guarantee Fund (CIGF)-

The CIGF Levy payable shall be remitted by any Subcontractor who registered in Institute for Construction Training and Development (ICTAD) at the time that Contractor receives each payment in accordance with the subcontract to the ICTAD as described in the Finance Act No. 5 of 2005.

Sub-Clause 14.19 Remittance Abroad-

If a foreign Contractor wishes to remit currency out of Sri Lanka which it receives under this Contract representing profits, foreign overheads, home allowances and salaries of foreign personnel, he will have to comply with regulations of the Department of Inland Revenue and of the Department of Exchange Control, Central Bank of Sri Lanka.

Any charges which may become payable in accordance with this Sub-Clause will be in Sri Lanka Rupees, and shall be borne by the Contractor.

Clause 17 Risk and Responsibility

Sub-Clause 17.6 Limitation of Liability

~~The restriction on losses for any indirect or consequential damages does not apply to liability for such losses or costs insofar as they form part of the pre-estimated losses for the purposes of calculation of Liquidated Damages provisions under the Contract.~~

The total liability of the Contractor to the Employer shall not exceed one hundred and ten percent (110%) of the Contract Price.

The liability of the Contractor to the Employer for:

- (a) Delay Liquidated Damages shall not exceed 5[Five] percent (%) of the Contract Price;
- (b) Performance Liquidated Damages shall not exceed 5[Five] percent (%) of the Contract Price;

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- (c) Delay Liquidated Damages and Performance Liquidated Damages in aggregate shall not exceed 10 [Ten] percent (%) of the Contract Price.

Clause 18 Insurance

Sub-Clause 18.1 General Requirements for Insurances

Add the following paragraph after the first paragraph of the Sub-Clause 18.1 and delete paragraph 3:

“The insuring Party (the “Insuring Party”) referred to in Clause 18 of General Conditions shall in all cases be the “Contractor.” The Contractor shall be responsible to affect the relevant insurance policies referred to in the Sub-Clauses 18.2 and 18.3 in the joint names of the Employer and the Contractor and maintain the same in full force and effect as specified in the relevant Sub-Clauses. All insurers’ rights of subrogation against such co-insured for losses or claims arising out of performance of the Contract shall be waived under such policies. The Contractor shall also be responsible to effect and maintain Insurance Policy under Sub-Clause 18.4.”

The Contractor shall also ensure that all his Subcontractors have effected such insurances and when required by the Engineer shall produce all such policies and receipts of payment of current premiums.”

The Contractor undertakes to notify the Employer promptly of any difficulty in extending, renewing or reinstating any of the insurance policies under this Clause 18.

If the Contractor fails to take out and/or maintain in effect the insurances referred to in Sub-Clause 18.2 or Sub-Clause 18.3 or fails to ensure that its Subcontractors take out and/or maintain in effect the insurances referred to in Sub-Clause 18.2 or Sub-Clause 18.3, the Employer may take out and maintain in effect any such insurances and may from time to time deduct from any amount due to the Contractor under the Contract any premium which the Employer shall have paid to the insurer or otherwise recover such amount as a debt due from the Contractor. The Contractor being the Insuring Party shall, within 56 days from the Commencement Date submits:

- a) Evidence that the insurances described in this Clause have been effected; and
- b) Copies of the policies for the insurance described in Sub-Clause 18.2 and Sub-Clause 18.3.

Sub-Clause 18.2 Insurance for Works and Contractor's Equipment.

Add the following paragraph at the end of the sub-clause:

“The Contractor shall effect and keep in force the Automobile Public Liability Insurance, from the commencement of the Works at Site until the issuance of the Taking-over Certificate for the whole of the Works. This insurance shall be written in comprehensive form and shall protect the Contractor against all claims for injuries to members of the public and damage to property of others arising from the use of motor vehicles, and shall cover operation on or off the Site of all motor vehicles licensed for highway use, whether they are owned, non-owned or hired.”

The minimum insurance amounts and maximum deductibles for insurances described in this Sub-Clause 18.2 shall be as follows:

| | Minimum Insurance Amount | Maximum Deductibles |
|--|------------------------------------|---------------------|
| (a) For the Works, Plant and Materials (Sub Clause 18.2) | 100% of the Contract price | USD 50,000 |
| (b) For loss or damage to Equipment (Sub Clause 18.2) | Replacement value of the Equipment | USD 50, 000 |

Sub-Clause 18.3 Insurance against Injury to Persons and Damage to Property

Add following paragraphs at the end of the sub-clause:

“The Contractor shall, in the joint names of the Contractor and the Employer, insure so far as reasonably practicable the Works and keep each part thereof insured for the Contract Price against all loss or damage from whatever cause arising, other than the Force Majeure, from the date of shipment until it is taken over by the Employer.

The Contractor shall so far as reasonably practicable insure against the Contractor's liability in respect of any loss or damage occurring whilst the Contractor is on Site for the purpose of making good a defect or carrying out any Tests after Completion (if any) during the Defects Liability Period or for the purpose of completing any outstanding work and against any loss or damage arising during the Defects Liability Period from a cause occurring prior to taking over.

Such insurances shall be effected with an insurer and in terms to be approved by the Employer (such approval not to be unreasonably withheld) and the Contractor shall from time to time, when so required by the Engineer, produce to the Engineer and the Employer the policy and receipts for the premium or premiums or satisfactory evidence of insurance cover. All monies received under any such

policy shall be applied in or towards the replacement and repair of the Works lost, damaged or destroyed but this provision shall not affect the Contractor's liabilities under the Contract.

The Contractor shall purchase marine/inland transit and air cargo insurance on an "all risks" basis against loss or damage to Plant and Materials supplied under this Contract from the commencement of loading at the manufacturers' premises until delivery to the Site. The marine insurance shall cover up to the Site at least the amount not less than CIF value plus ten (10) percent thereof and air freight & import tax/duties for the replacement of the damaged Plant and Materials."

"The Contractor shall, prior to the commencement of any work on Site by the Contractor pursuant to the Contract, insure against his liability for damage or injury occurring before all Works have been taken over, to the Employer, to any person (including any employee of the Employer as well as the Engineer) or to any property (other than property forming part of the Works) due to or arising out of the execution of the Works. Such insurance shall be effected with an insurer and in terms to be approved by the Employer (such approval not to be unreasonably withheld), and the Contractor shall from time to time when so required by the Engineer produce the policy and the receipts for the premiums or satisfactory evidence of insurance cover. The terms of the policy shall include a provision whereby, in the event of any claim being made against the Employer in respect of which the Contractor would be entitled to indemnity under the policy, the insurer will indemnify the Employer against such claims and any cost, charge and expense in respect thereof. The insurance policy effected by the Contractor in the joint names of the Employer and the Contractor shall include a cross liability clause such that the insurance shall apply to the Contractor and the Employer as separately insured."

The insurance shall be for the limit per occurrence of not less than-

- For personnel including Employer's personal USD 20,000 per person
- For physical properties USD 500,000

Sub Clause 18.4 Insurance for Contractor's Personnel

Add the following paragraph at the end of the sub-clause.:

"When required by the Engineer the Contractor shall produce the policy and the receipts for the premiums or satisfactory evidence of insurance cover. Provided always that in respect of any person employed by any Subcontractor, the Contractor's obligation under this Sub-Clause shall be satisfied if the Subcontractor shall have insured against the liability in respect of such persons in such manner that the Employer and the Engineer is indemnified under the policy, but the Contractor shall require such Subcontractor to produce to the Engineer when required the policy, the receipt for the premiums or satisfactory evidence of insurance cover.

The Contractor shall effect and maintain the Workmen Compensation Insurance for all employees on the work in accordance with the law of Sri Lanka”

Sub-Clause 18.5 Insurance for Design

Insert the following new Sub-Clause 18.5 to the Clause 18;

The Contractor shall affect professional indemnity insurance, which shall cover the risk of errors or omissions and professional negligence in the design of the Works. This insurance shall be for a limit of not less than 10% of Contract Price. The Contractor shall use his best endeavors to maintain the professional indemnity insurance in full force and effect until Completion of the Works. The Contractor undertakes to notify the Employer promptly of any difficulty in extending, renewing or reinstating this insurance.

Clause 20 Claims, Disputes and Arbitration

Replace Sub-Clause 20.2 through Sub-Clause 20.8 with the following Sub-Clause 20.2 through Sub-Clause 20.4.

Sub-Clause 20.2 Amicable Settlement

The Parties agree to seek to resolve any Dispute arising between them by mutual consultation.

If a Party is unable to settle a Dispute through mutual consultation it shall first refer the Dispute in writing to a committee comprising two [Directors/Senior Managers] of the Parties who shall not be involved in the day to day running and/or management of the Contract (“Management Committee”) with a copy of the notice of referral to the other Party. The Management Committee shall convene at a mutually agreed venue within [seven (7)] days of the notice of referral to consider the information available and provide the opinion within twenty-one (21) days of the notice of referral, provided that the Parties may agree to longer periods for convening the Management Committee and for it to form an opinion.

If within such twenty-one (21) day or longer period as aforesaid, an unanimous decision is reached by the Management Committee resolving the Dispute such decision shall be final and binding on the Parties.

Sub-Clause 20.3 Arbitration

Any Dispute that cannot be settled amicably by the Parties under Sub-Clause 20.2 (including where the Management Committee does not reach an unanimous decision or is not properly convened in accordance with Sub-Clause

20.2), shall be referred to final determination by arbitration in accordance with this clause.

The arbitration shall be conducted according to the Rules of Arbitration of the United Nations Commission on International Trade Law (the "UNCITRAL Rules") and the arbitration shall be held in Colombo - Sri Lanka and the language of arbitration shall be English. In case of conflict between the UNCITRAL Rules and the provisions of this clause, the provisions hereof shall prevail.

The arbitral tribunal shall consist of three arbitrators appointed pursuant to the procedures of the UNCITRAL Rules. Arbitrators shall be persons with experience in the implementation and interpretation of contracts relating to the design, engineering, construction, operation and maintenance of projects of a similar nature to the project the subject of this Contract and works of a similar nature to the Works. No arbitrator shall be a present or former employee or agent of, or consultant or counsel to, any Party or any affiliate thereof.

Any decision rendered by the arbitral tribunal, including the arbitral award shall be treated in secrecy by the arbitral tribunal and as confidential information by the Parties, pursuant to Sub-Clause 1.9.

Each Party shall bear its costs and expenses incurred with the arbitration, including solicitors' fees. The Parties shall also share equally the arbitrators' fees and expenses provided, however, that the arbitrators may provide for alternative allocation of such expenses to a Party if the arbitrators determine in writing that such Party's position was not taken in good faith.

Sub-Clause 20.4 Continuing Obligations

Notwithstanding any reference to dispute resolution hereunder the Parties shall continue to perform their respective obligations under the Contract unless the Parties otherwise agree..

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Annexes to the Conditions of Contract

Annex I - Form of Performance Security – Demand Guarantee

Contract No:.....

Brief description of Contract: **Moragahakanda Reservoir Headworks Project**

Name and Address of Beneficiary, **Secretary - Ministry of Irrigation & Water Resources Management, No 500, T.B.Jaya Mawatha, Colombo 10, Sri Lanka** (Whom the Contract defines as the Employer) We have been informed that _____ (hereinafter called the "Principal") is your contractor under such Contract, which requires him to obtain a performance security.

At the request of the principal, We (Name of bank) _____ hereby irrevocably undertake to pay you, the Beneficiary/Employer, any sum or sums not exceeding in total the amount of _____ (the "guaranteed amount", say: _____) upon receipt by us of your demand in writing and your written statement stating:

- (a) That the Principal is in breach of his obligation(s) under the Contract, and
- (b) The respect in which the Principal is in breach.

[Following the receipt by us of an authenticated copy of the taking-over certificate for the whole of the works under clause 10 of the conditions of the Contract, such guaranteed amount shall be reduced by % and we shall promptly notify you that we have received such certificate and have reduced the guaranteed amount accordingly.]

Any first demand for payment must contain your signature(s). The signed first demand and statement must be received by us at this office on or before (the date 70 days after the expected expiry of the Defects Notification Period for the Works) _____ (the "expiry date"), when this guarantee shall expire and shall be returned to us.

We have been informed that the Beneficiary may require the Principal to extend this guarantee if the performance certificate under the Contract has not been issued by the date 28 days prior to such expiry date. We undertake to pay you such guaranteed amount upon receipt by us, within such period of 28 days, of your first demand in writing and your written statement that the performance certificate has not been issued, for reasons attributable to the Principal, and that this guarantee has not been extended.

This guarantee shall be governed by the laws of _____ and shall be subject to the Uniform Rules for Demand Guarantees, published as number 458 by the International Chamber of Commerce, except as stated above.

Date _____

Signature(s)

When writing the tender documents, the writer should ascertain whether to include the optional text, shown in parentheses []

Annex II - Form of Advance Payment Guarantee

Contract No:.....

Brief description of Contract: Moragahakanda Reservoir Headworks Project

Name and Address of Beneficiary Secretary - Ministry of Irrigation & Water Resources Management, No 500, T.B.Jaya Mawatha, Colombo 10, Sri Lanka (Whom the Contract defines as the Employer)

We have been informed that _____ (hereinafter called the "Principal") is your contractor under such Contract and wishes to receive an advance payment, for which the Contract requires him to obtain a guarantee.

At the request of the principal, We (Name of bank) _____ hereby irrevocably undertake to pay you, the Beneficiary/Employer, any sum or sums not exceeding in total the amount of _____ (the "guaranteed amount", say: _____) upon receipt by us of your demand in writing and your written statement stating:

- (a) That the Principal has failed to reply the advance payment in accordance of the Contract, and
- (b) The amount which the Principal has failed to repay.

This guarantee shall become effective upon receipt [of the first installment] of the advance payment by the Principal. Such guarantee amount shall be reduced by the amounts of the advance payment repaid to you, as evidence by your notices issued under sub-clause of the conditions of the Contract. Following receipt (from the Principal) of a copy of each purported notice, we shall promptly notify you of the revised guaranteed amount accordingly.

Any first demand for payment must contain your signature(s). The signed first demand and statement must be received by us at this office on _____ days after the expected expiry of the Time for Completion) _____ (the "Beyond 28 of the expiry date"), when this guarantee shall expire and shall be returned to us.

We have been informed that the Beneficiary may require the Principal to extend this guarantee if the advance payment has not been repaid by the date _____ days prior to such expiry date. We undertake to pay you such guaranteed amount upon receipt by us, within such period of days, of your first demand in writing and your written statement that the advance payment has not been repaid and that this guarantee has not been extended.

This guarantee shall be governed by the laws of _____ and shall be subject to the Uniform Rules for Demand Guarantees, published as number 458 by the International Chamber of Commerce, except as stated above.

Date _____
Signature(s) _____

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Handwritten initials/signature

Annex III - FORM OF RETENTION MONEY GUARANTEE

Contract No:-.....

Brief description of Contract - **Moragahakanda Reservoir Headworks Project**

Name and Address of Beneficiary Secretary - **Ministry of Irrigation & Water Resources - Management, No 500, T.B.Jaya Mawatha, Colombo 10, Sri Lanka** (Whom the Contract defines as the Employer).

We have been informed that (hereinafter called the "Principal") is your contractor under such Contract and wishes to receive early payment of [Part of] the retention money, for which the Contract requires him to obtain a guarantee.

At the request of the principal, We (Name of bank) _____ hereby irrevocably undertake to pay you, the Beneficiary/Employer, any sum or sums not exceeding in total the amount of _____ (the "guaranteed amount", say: _____) upon receipt by us of your demand in writing and your written statement stating:

(a) that the Principal has failed to carry out his obligation(s) to rectify certain defect(s) for which he is responsible under the Contract, and

(b) the nature of such defect(s).

At any time, our liability under this guarantee shall not exceed the total amount of retention money released to the Principal by you, as evidenced by your notices issued under sub-clause 14.6 of the conditions of the Contract with a copy being passed to us.

Any first demand for payment must contain your signature(s). The signed first demand and statement must be received by us at this office on or before _____ (the "expiry date"), when this guarantee shall expire and shall be returned to us.

We have been informed that the Beneficiary may require the Principal to extend this guarantee if the performance certificate under the Contract has not been issued by the date 28 days prior to such expiry date. ~~We undertake to pay you such guaranteed amount upon receipt by us, within such period of 28 days, of your first demand in writing and your written statement that the performance certificate has not been issued, for reasons attributable to the Principal, and that this guarantee has not been extended.~~

This guarantee shall be governed by the laws of and shall be subject to the Uniform Rules for Demand Guarantees, published as number 458 by the International Chamber of Commerce, except as stated above.

Date _____

Signature(s) _____

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Annex IV - PERMITS

The Employer and the Contractor shall jointly establish procedures which shall be in accordance with the project requirements and in compliance with Sri Lankan law. The Contractor shall submit to the Employer the details to the EPC implementation programme and the Contractor's plans regarding the size of its work force, importation of equipment, supplies, communication, hiring of Sri Lankan nationals, movement of labour or personnel, health and safety procedures [etc.].

The Employer and the Contractor shall be responsible (to the extent they are in a position to do so) for providing timely and reasonable assistance to the other Party in identifying, applying, obtaining and maintaining permits required under this Contract.

In case there are any delays in identifying permits to be applied and the procedures to be followed to allow the government of the Country to grant and issue such permits in such time as required in the programme, the Employer and the Contractor shall be responsible to take all measures within their respective authorities in order to accelerate the permit issuance so as not to delay the project.

The permits required for the performance of the Works are not yet identified and the Employer and the Contractor shall be responsible for identifying the requirements and obtaining permits based on the following concept:

Responsibilities and Obligations of the Employer

The Employer shall be responsible for all requirements for the commencement of construction including permission to access the Site, use the access roads, and supply construction power and access water supplies. The Employer shall further be responsible for the following permits (or equivalent) to the extent required by the government of the Country:

- Investment Approval;
- Land Use Agreement / Right of way for the Works,;
- Raw Water;
- Power Generation License;
- Fuel, Water and Electric Lines;
- Tax Exemption on Importation of Plant and Materials and
- all other Governmental approvals, consents, licenses, easements, rights of way, wayleaves, authorizations and permissions which are not specified in this Annex and are required for the operation and maintenance of the Power Plant.

Responsibilities and Obligations of the Contractor

The Contractor shall be responsible for the following permits (or equivalent) to the extent required by the government of the Country:

- Construction License,

Exhibit I C – Particular Conditions of Contract

- Environmental and Waste Disposal Permits,
- Factory Establishment Permit
- Procurement Approval
- and all other Governmental approvals, consents, licenses, easements, rights of way, wayleaves, authorizations and permissions which are not specified in this Annex and are required for the design, engineering, procurement, construction, manufacture, erection, commissioning, testing and completion of the Works.

Annex V - APPROVED SUBCONTRACTORS AND SUPPLIERS

Refer Annex V-A annexed herewith for approved Subcontractors and Suppliers

Annex VI - CONTRACT PRICE

Refer Annex VI-A annexed hrewith for Contract Price

Annex VII - PROJECT SCHEDULE

1. Preliminaries

- Contractor's Office and Housing Facilities
- Engineer's Office and Housing Facilities
- Employer's other Facilities

2. River Diversion Facilities

3. Main Dam (Rockfill with claycore)

4. Saddle Dam No 1

- RCC Gravity Dam
 - Spillway
 - Spillway Headworks
 - Spillway Chute
 - Stilling Basin
 - Bottom Outlets
 - Power Intakes and Power Houses
 - Tailrace and Switchyard
 - Hydropower Plants and Transmission Lines
5. Foundation Treatment in Dam axes [Main Dam, RCC Dam(Saddle Dam No 1), Earth Dam (Saddle Dam No2) already constructed]

Refer Annex VII-A annexed herewith for Project Schedule submitted on 14-02-2012 with Final Revised Proposal

Annex VIII - DOCUMENTS COMPRISING FINANCIAL NEGOTIATIONS

Documents comprise following

1. Minutes of the Standing Cabinet Appointed Review Committee (SCARC) Meeting on 22.03.2012
2. Investment Estimate (Agreed by both parties)
3. Project Committee Report on 20.03.2012 and 21.03.2012
4. Secretary MIWRM's letter number 2/2/73 dated 20 .032012 and 21 .03. 2012 to Chairman – SCARC requesting a SCARC meeting.
5. Project Committee Chairman's letter no SCARC/MORA/VOL II dated 02.04.2012 addressed to Sinohydro Corporation Ltd, requesting to submit Payment Schedule as agreed at the SCARC Meeting on 22-03-2012

Documents comprise following

1. Minutes of Technical Negotiations between Project Committee (PC) and Sinohydro Corporation Ltd dated 14th March 2012
2. PC Chairman's letter number 2/2/73 dated 09.03.2012 to Sinohydro Corporation Ltd on Instrumentation Arrangement Drawings
3. Sinohydro's letter dated 16.03.2012 to Chairman/ PC on submission of Unit Performance Guarantee and Seismic safety assessment document list
4. PC Chairman's letter number SCARC/MORA/Vol II dated 29.03.2012 to Sinohydro Corporation Ltd on the outstanding issues of the Agreed Version at the Technical Negotiation Meetings
5. PC Chairman's letter number SCARC/MORA/Vol II dated 02.04.2012 to Sinohydro Corporation Ltd on the outstanding issues of the Agreed Version at the Technical and Financial Negotiation Meetings
6. PC Chairman's letter number SCARC/MORA/Vol II dated 03.04. 2012 to Sinohydro Corporation Ltd on "Additional Issues for Clarifications/Further Information".
7. PC Chairman's letter number SCARC/MORA/Vol II dated 3rd April 2012 to Sinohydro Corporation Ltd on "Confirmation and Clarification of Negotiations" in response to latter's letter dated 27th March 2012
8. Secretary – MIWRM's letter number 2/2/73 dated 28.03.2012 to Sinohydro Corporation Ltd on document preparation of contract signing
9. Secretary – MIWRM's letter number IWRM/TS/2/73 dated 17.04.2012 to Sinohydro Corporation Ltd on submission of Technical Specifications in response to Sinohydro's letter dated 07.04.2012.
10. Sinohydro's letters dated 07.04.2012 and 24.04.2012 to Chairman /PC on submission of Technical Specifications.
11. Employer's response letter no.2/2/73 dated 06 June 2012 to Sino's letters dated 07.04.2012 and 24.04.2012 on Technical Specifications
12. Sinohydro's letter dated 05 June 2012 on Amendment of Contract Agreement addressed to Secretary
13. Employer's response letter no. 2/2/73 dated 06 June 2012 to Sinohydro on Amendment of Contract Agreement.
14. Sinohydro's letter dated 05 June 2012 on submission of Pay Monthly Plan, addressed to Secretary
15. Employer's response letter no. 2/2/73 dated 06 June 2012 to Sinohydro on Pay Monthly Plan

Annex V of Contract Agreement

List of Potential Suppliers

No. Project Name Potential suppliers

I. Potential Suppliers for Electro-Mechanical Equipment

| | | |
|---|--------------------|--|
| 1 | Turbine, Generator | Harbin Machinery (Kunming) Company Limited |
| | | Chongqing Water Turbine Works Co., Ltd. |
| | | Fujin Nandian Co., Ltd. |
| | | Toshiba Hydro Power (Hangzhou) Co., Ltd. |

II. Potential Suppliers for Hydro-Mechanical Equipment

| | | |
|---|---------------------|---|
| 1 | Gate | Sinohydro Corporation Limited |
| 2 | Pressure Steel Pipe | Sinohydro Corporation Limited |
| 3 | Hoist | Huadian Zhengzhou Mechanical Design Institute Co., Ltd. |
| | | Xinxiang Crane Equipment Factory Co., Ltd. |
| | | Changzhou Hydraulic Complete Equipment Co., Ltd. |
| | | Jian Su Wujin Hydraulic Hoist Co., Ltd. |
| | | Sanmenxia Xinhua Hydraulic Machinery Co., Ltd. |

Headworks of Moragahakanda Reservoir Project

No. Project Name Potential suppliers

III. Potential Suppliers for Electrical Equipment

| | | |
|---|---|---|
| 1 | Main transformer | Shandong Taikai Transformer Co., Ltd. |
| | | Yunnan Tongbian Electric Apparatus Co., Ltd. |
| | | Chongqing Aea Group Transformer Co., Ltd. |
| | | Shandong Dachi Electric Co., Ltd. |
| | | Wuhan Transformer |
| | | Baoding Tianwei Group |
| | | TBEA |
| | | Xi'an Electric Power Group |
| 2 | High voltage and low voltage switch cabinet and primary equipment | CET Pinggao Group Co., Ltd. |
| | | Yun Kai Electric Co., Ltd. |
| | | Chuan Kai Electric Co., Ltd. |
| | | Tai Kai Vacuum Switch Co., Ltd. |
| | | Shanghai Siyuan Co., Ltd. |
| | | Shandong Dachi Electric Co., Ltd. |
| 3 | Monitoring protection & DC& Excitation system | XJ Group Corporation |
| | | Nanjing Nanrui Group |
| | | Guodian Nanjing Automation Co., Ltd. |
| | | Nanjing Dianyan Electric Power Automation Co., Ltd. |
| | | Beijing Sifang Electric Equipment Co., Ltd. |
| | | Shanghai Nanzi Co., Ltd |
| 4 | Illumination System | ChuanKai Group |
| | | Beijing Qiandeng Lighting Equipment Co., Ltd. |
| | | Philips Lighting |
| | | Oppl Lighting Co., Ltd. |

Annex VI - CONTRACT PRICE

Refer Annex VI-A annexed hrewith for Contract Price



中国水电建设集团国际工程有限公司
SINOHYDRO CORPORATION LIMITED

Date: Mar-25th, 2012

To: Mr. Eng.D.C.Elakanda
Project Director (DSWRPP)
Chairman/TEC
Ministry of Irrigation and Water Resources Management
T.B. Jayah Mawatha, Colombo 10.

DSWRPP
04 APR 2012

Headworks of Moragahakanda Reservoir Project

Subject: Submission of Revised Estimate

Dear Sirs,

According to the meeting with Standing Cabinet Appointed Committee (SCARC) held on 22.03.2012, herewith we submit the revised estimate with total amount of 252,302,221 USD as the final contract price for your kindly review. Thanks.

Yours faithfully,

Mr. Elakanda (DSWRPP)
for Mr. Elakanda

Fu Linghua

General Manager in Sri Lanka

SinoHydro Corporation Limited

fil 25/2/12
4/4/12

Cc: 1. Secretary, MIWRM

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| 3.8 |

INVESTMENT ESTIMATE OF THE HEAD WORKS OF MORAGAHAKANDA RESERVOIR

| ITEM | DESCRIPTION OF WORK ITEMS | UNIT | ESTIMATED QUANTITY | UNIT PRICE | AMOUNT (USD) |
|------|---|------|--------------------|------------|--------------|
| 1 | General Works | | | | 35,358,147 |
| 1.1 | Mobilization and Demobilization | sum | 1 | 7,361,917 | 7,361,917 |
| 1.2 | Permanent Camp, Offices and Facilities to Employer and Engineer, Training and Any Employer's Expenses | sum | 1 | 10,775,240 | 10,775,240 |
| 1.3 | Provision and Maintenance of Vehicles to the Employer | sum | 1 | 2,462,586 | 2,462,586 |
| 1.4 | Temporary Roads and Bridges | sum | 1 | 3,286,290 | 3,286,290 |
| 1.5 | Contractor's Temporary Camps and Offices | sum | 1 | 2,959,270 | 2,959,270 |
| 1.6 | Contractor's Temporary Facilities on Site | sum | 1 | 4,005,076 | 4,005,076 |
| 1.7 | Aggregate Processing Plant | sum | 1 | 1,307,273 | 1,307,273 |
| 1.8 | Concrete Mixing Plant | sum | 1 | 537,996 | 537,996 |
| 1.9 | Safety, Health, Environment Protection (SHE) | sum | 1 | 2,662,499 | 2,662,499 |
| 2 | River Diversion Works | | | | 1,821,069 |
| 3 | Civil Works | | | | 168,682,831 |
| 3.1 | RCC Dam | sum | 1 | 95,084,254 | 95,084,254 |
| 3.2 | Rockfill Dam | sum | 1 | 58,327,510 | 58,327,510 |
| 3.3 | Power Station | sum | 1 | 10,057,068 | 10,057,068 |
| 3.4 | Clearing of the Construction Area | sum | 1 | 200,000 | 200,000 |
| 3.5 | Maintenance of Road | sum | 1 | 635,731 | 635,731 |
| 3.6 | Landscaping Works of Construction Area | sum | 1 | 294,638 | 294,638 |
| 3.7 | Drainage Work | sum | 1 | 1,782,532 | 1,782,532 |
| 3.8 | Reservoir Maintenance & Operating Office and Generating Plant Office | sum | 1 | 195,000 | 195,000 |

**INVESTMENT ESTIMATE OF THE HEAD WORKS OF
MORAGAHAKANDA RESERVOIR**

| ITEM | DESCRIPTION OF WORK ITEMS | UNIT | ESTIMATED QUANTITY | UNIT PRICE | AMOUNT (USD) |
|----------|--|------|--------------------|------------|-------------------|
| 3.9 | Gas Insulated Switchgear(GIS) Station | sum | 1 | 1,134,568 | 1,134,568 |
| 3.10 | Other Works | sum | 1 | 971,530 | 971,530 |
| 4 | Hydro-Mechanical Works | | | | 8,727,100 |
| 4.1 | Gate Equipment supply & Installation | sum | 1 | 5,173,686 | 5,173,686 |
| 4.2 | Hoisting device Supply & Installation | sum | 1 | 1,402,074 | 1,402,074 |
| 4.3 | Penstock Supply & Installation | sum | 1 | 2,151,340 | 2,151,340 |
| 5 | Electro-Mechanical Works | | | | 20,011,741 |
| 5.1 | Hydroturbine Supply & Installation | sum | 1 | 2,764,101 | 2,764,101 |
| 5.2 | Generator Supply & Installation | sum | 1 | 5,293,201 | 5,293,201 |
| 5.3 | Hoisting Apparatus Supply & Installation | sum | 1 | 508,174 | 508,174 |
| 5.4 | Hydraulic Auxiliary Equipment Supply & Installation | sum | 1 | 2,602,983 | 2,602,983 |
| 5.5 | Fire Fighting & Ventilation | sum | 1 | 199,186 | 199,186 |
| 5.6 | Electrical Equipment Supply & Installation | sum | 1 | 4,713,582 | 4,713,582 |
| 5.7 | Step-up Transforming Equipment Supply & Installation | sum | 1 | 1,731,093 | 1,731,093 |

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INVESTMENT ESTIMATE OF THE HEAD WORKS OF MORAGAHAKANDA RESERVOIR

| ITEM | DESCRIPTION OF WORK ITEMS | UNIT | ESTIMATED QUANTITY | UNIT PRICE | AMOUNT (USD) |
|------------------------------|--|------|--------------------|------------|--------------|
| 5.8 | Public Equipment Supply & Installation | sum | 1 | 800,563 | 800,563 |
| 5.9 | GIS Supply & Installation | sum | 1 | 1,398,858 | 1,398,858 |
| 6 | Transmission Line 33KV | | | | 3,896,679 |
| 7 | Illumination System | | | | 54,654 |
| 8 | Testing and Commissioning of the Works | | | | 1,000,000 |
| 9 | Survey and Design | | | | 12,750,000 |
| Total (1+2+3+4+5+6+7+8+9) | | | | | 252,302,221 |

Annex VII - PROJECT SCHEDULE

1. Preliminaries

- Contractor's Office and Housing Facilities
- Engineer's Office and Housing Facilities
- Employer's other Facilities

2. River Diversion Facilities

3. Main Dam (Rockfill with claycore)

4. Saddle Dam No 1

- RCC Gravity Dam
- Spillway
 - Spillway Headworks
 - Spillway Chute
 - Stilling Basin
- Bottom Outlets
- Power Intakes and Power Houses
- Tailrace and Switchyard
- Hydropower Plants and Transmission Lines
-

5. Foundation Treatment in Dam axes [Main Dam, RCC Dam(Saddle Dam No 1), Earth Dam (Saddle Dam No2) already constructed]

Refer Annex VII-A annexed herewith for Project Schedule submitted on 14-02-2012 with Final Revised Proposal

Annex VIII - DOCUMENTS COMPRISING FINANCIAL NEGOTIATIONS

Documents comprise following

1. Minutes of the Standing Cabinet Appointed Review Committee (SCARC) Meeting on 22.03.2012
2. Investment Estimate (Agreed by both parties)
3. Project Committee Report on 20.03.2012 and 21.03.2012
4. Secretary MIWRM's letter number 2/2/73 dated 20.03.2012 and 21.03.2012 to Chairman - SCARC requesting a SCARC meeting.
5. Project Committee Chairman's letter no SCARC/MORA/VOL II dated 02.04.2012 addressed to Sinohydro Corporation Ltd, requesting to submit Payment Schedule as agreed at the SCARC Meeting on 22-03-2012

① Attachment 1/2

**Minutes of the Standing Cabinet Appointed Review Committee (SCARC)
meeting held on 22.03.2012 - Proposal for EPC Contract on Design, Construction
and Commissioning of Moragahakanda Reservoir**

Title of the Procurement : Proposal for the EPC Contract on Design, Construction and
Commissioning of Moragahakanda Reservoir

| Members of the SCARC | Members of the Project Committee |
|---|--|
| Mr. S. Amarasekera - Chairman Secretary to the Prime Minister | Eng. D.C.S. Elakanda - Chairman Project Director (DSWRP), MIWRM |
| Mr. M.M.C. Ferdinando - Member Secretary, Ministry of Power & Energy | Eng. M.M. Gunatilake - Member Consultant, MASL. |
| Mr. Ivan de Silva - Member Secretary, Ministry of Irrigation & Water Resources Management | Eng. R.B. Thennakoon - Member PD (MO&KAI Dev) MASL |
| Mr. A. Abeygunasekera - Member Secretary to Ministry of Water Supply & Drainage | Eng. S.A.A. Dharmasiri - Member Asst. Director, (MASL) |
| Mr. K.V.P. Ranjith Silva - Member Secretary, Ministry of Civil Aviation | Mr. S.S. Mudalige - Member Director/NPD |
| Mr. Thilak Collure - Member Secretary, Ministry of Industry & Commerce | Eng. P.A.A.P.K. Pannala - Member Deputy Director, MIWRM |
| Mr. P.A. Abeysekera - Member Deputy Secretary to the Treasury | Eng. (Ms.) T.M.K. Jayasekara - Member Chief Engineer/Transmission & Planning/CEB |
| In attendance | Mr. Ananda Sellaheewa - Member Procurement Specialist/DSWRPP, MIWRM |
| Mr. P.W.C. Dayaratne, Mr. L.L. Wimalasiri | Consultant, Mahaweli Consultancy Bureau Project Director - Mahaweli Special Project Implementation |
| Mr. H.M. Kalubanda | Engineer in-charge (Randenigala) |
| Mr. Guo Xiaodan Mr. Zhan Jianchang Mr. Li Sizhong Mr. Fu Linghua Mr. Feng Yanan Ms. Zhan Tao | Sinohydro Corporation Ltd, China - do - - do - - do - - do - - do - |

2. Introduction

Ministry of Irrigation and Water Resources Management has received expression of interest from two Chinese Companies namely Sinohydro Corporation Ltd and China Machinery Engineering Corporation (CMEC) for the Design, Construction and Commissioning of Moragahakanda Reservoir, with funding from China Development Bank.

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A special Committee appointed by the Secretary, Ministry of Irrigation and Water Resource Management has assessed the financial and technical capabilities of both companies and recommended the Sinohydro Corporation Ltd as the most suitable company to implement the above project. Secretary to the line ministry submitted the proposal of Sinohydro Corporation Ltd, along with the above committee recommendation to the Standing Cabinet Appointed Review Committee (SCARC) for further assessment and to instruct the line ministry on the way forward.

In terms of the authority given by Cabinet Decisions for Cabinet Papers No.10/1327/404/048 and No.10/2548/404/048-1, the SCARC assessed the proposal submitted by the Sinohydro Corporation Ltd, No.22, West Chegongzhuang Road, Haidian District, Beijing 100044, P.R. China for a EPC Contract on Design, Construction and Commissioning of Moragahakanda Reservoir, funded by China Development Bank and granted its approval to sign an MOU with the Sinohydro Corporation Ltd to obtain detailed financial and technical proposals.

3. Project Committee Recommendation

The Project Committee appointed to evaluate the proposal has evaluated the proposed (general) conditions, particular (special) conditions, technical aspects etc. After having several rounds of discussions, the Project Committee has recommended the amended proposal of Sinohydro Corporation Ltd, submitted on 20th March 2012, for a total estimated price of US\$ 259,451,246/- as complied with employer's requirements and technically acceptable. (Project Committee Report is attached)

Consequence to further discussions with the Secretary to the line Ministry and the Project Committee the Contractor has brought down the cost estimate to US\$ 257,451,246/- which is 4.5% higher than the Engineer's estimate (US\$ 246,451,564).

4. Observations

The SCARC, as empowered by Cabinet Decision dated 20.10.2010, met as the Cabinet Appointed Negotiating Committee on 22.03.2011 and observed following conditions needs to be incorporated to the contract agreement. These are complementary to the agreements reached between the Project Committee and the Contractor.

- (i) The Project Manager/s of the Contractor shall be fluent in English both in writing and speaking. In the event of his/their inability, a qualified Engineer/s well conversant with English shall be assigned to liaise with the employer.
- (ii) Contractor will be exempted from all taxes for project inputs except the income tax and corporate tax.
- (iii) Detail design is a full responsibility of the Contractor, but the employer concurrence is required before implementation.
- (iv) Defect liability period for all items such as civil works, hydro-mechanical works, electromechanical works, transmission line and all equipment of the project will be extended to 2 years (i.e 104 weeks) commencing on the date of completion of the project.
- (v) GOSL contribution of 15% shall be paid in Sri Lanka Rupees (LKR)

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- (vi) Mobilization advance is 30% of total project cost, of which 50% will be paid in Sri Lanka Rupees (15% US\$ and 15% LKR)
- (vii) English translation of Chinese Codes and Standards shall be submitted by the Contractor to the employer one month before the submission of Basic Designs.
- (viii) Name tags in plants, machinery & equipment, measuring indicators and displays shall be in English
- (ix) Contractor is allowed for early access to site for preparatory work without any contractual obligations from the part of the employer (GOSL)
- (x) Service charge for Consultancy fee for project implementation assistance shall be 20%
- (xi) The Contractor shall submit payment schedule tied up with key Milestones for each major/sub items of work and agree with the Employer within few days

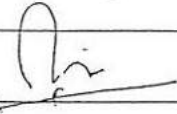


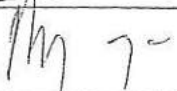
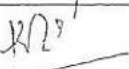

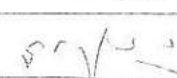
The Contractor will submit the amended proposal incorporating above conditions and technical specifications agreed at the meeting to the employer shortly.

Subject to above conditions, the SCARC requested the contractor to bring down the price to the Engineer's estimate which is US \$ 246,451,564/-. After a lengthy discussion, the Contractor agreed to offer a 2% discount as a gesture of goodwill and the final contract price as US\$ 252,302,221/- which is 2.3% higher than the Engineer's estimate.

PC is of the view that as this is a lump sum contract with all risks of price and physical contingencies to the contractor, the above price is reasonable.

5. Recommendation

Based on Project Committee recommendations and the negotiations taken place, the SCARC recommends to award the EPC Contract on Design, Construction and Commissioning of Moragahakanda Reservoir funded by the China Development Bank to the Sinohydro Corporation Ltd at a total contract price of US\$ 252,302,221/- without taxes but inclusive of income tax and corporate tax.

| Name | Capacity | Agree with the above decision/s (Yes/No) | Signature |
|----------------------|----------|--|---|
| S. Amarasekera | Chairman | yes |  |
| M.M.C. Ferdinando | Member | yes |  |
| Ivan de Silva | Member | yes |  |
| A. Abeygunasekera | Member | yes |  |
| K.V.P. Ranjith Silva | Member | yes |  |
| Thilak Collure | Member | yes |  |
| P.A. Abeysekera | Member | yes |  |

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**INVESTMENT ESTIMATE OF THE HEAD WORKS OF
MORAGAHAKANDA RESERVOIR**

[Estimate submitted to
Project Committee]

| ITEM | DESCRIPTION OF WORK ITEMS | UNIT | ESTIMATED QUANTITY | UNIT PRICE | AMOUNT (USD) |
|------|---|------|--------------------|------------|--------------|
| 1 | General Works | | | | 29,384,443 |
| 1.1 | Mobilization and Demobilization | sum | 1 | 7,361,917 | 7,361,917 |
| 1.2 | Permanent Camp, Offices and Facilities to Employer and Engineer, Training | sum | 1 | 4,775,240 | 4,775,240 |
| 1.3 | Provision and maintenance of vehicles to the Employer | sum | 1 | 2,462,586 | 2,462,586 |
| 1.4 | Temporary roads and | sum | 1 | 3,286,290 | 3,286,290 |
| 1.5 | Contractor's temporary camps and offices | sum | 1 | 2,959,270 | 2,959,270 |
| 1.6 | Contractor's Temporary facilities in site | sum | 1 | 3,998,074 | 3,998,074 |
| 1.7 | Aggregate processing plant | sum | 1 | 1,331,691 | 1,331,691 |
| 1.8 | Concrete mixing plant | sum | 1 | 546,876 | 546,876 |
| 1.9 | Profession, Safety, Health, Environment.(SHE) | sum | 1 | 2,662,499 | 2,662,499 |
| 2 | River Diversion Works | | | | 1,821,069 |
| 3 | Civil Works | | | | 173,805,560 |
| 3.1 | RCC DAM | sum | 1 | 97,292,813 | 97,292,813 |
| 3.2 | Rockfill Dam | sum | 1 | 59,887,595 | 59,887,595 |
| 3.3 | POWER STATION | sum | 1 | 11,347,120 | 11,347,120 |
| 3.4 | Clearing of the construction area | sum | 1 | 200,000 | 200,000 |
| 3.5 | Maintenance of the road | sum | 1 | 635,731 | 635,731 |
| 3.6 | Landscaping works of construction area | sum | 1 | 294,638 | 294,638 |
| 3.7 | Drainage work | sum | 1 | 1,782,532 | 1,782,532 |
| 3.8 | Reservoir Maintenance , operating office and generating plant office | sum | 1 | 195,000 | 195,000 |
| 3.9 | Gas Insulated Switchgear(GIS) STATION | sum | 1 | 1,198,601 | 1,198,601 |
| 3.10 | Other works | sum | 1 | 971,530 | 971,530 |
| 4 | Hydro-Mechanical Works | | | | 8,727,100 |

**INVESTMENT ESTIMATE OF THE HEAD WORKS OF
MORAGAHAKANDA RESERVOIR**

| ITEM | DESCRIPTION OF WORK ITEMS | UNIT | ESTIMATED QUANTITY | UNIT PRICE | AMOUNT (USD) |
|------|--|------|--------------------|------------|-------------------|
| 4.1 | Gate Equipment supply & Installation | sum | 1 | 5,173,686 | 5,173,686 |
| 4.2 | Hoisting device Supply & Installation | sum | 1 | 1,402,074 | 1,402,074 |
| 4.3 | Penstock Supply & Installation | sum | 1 | 2,151,340 | 2,151,340 |
| 5 | Electro-Mechanical Works | | | | 20,011,741 |
| 5.1 | hydroturbine supply & Installation | sum | 1 | 2,764,101 | 2,764,101 |
| 5.2 | Generator supply & Installation | sum | 1 | 5,293,201 | 5,293,201 |
| 5.3 | Hoisting Apparatus supply & Installation | sum | 1 | 508,174 | 508,174 |
| 5.4 | Hydraulic Auxiliary Equipment supply & Installation | sum | 1 | 2,602,983 | 2,602,983 |
| 5.5 | Fire fighting & Ventilation | sum | 1 | 199,186 | 199,186 |
| 5.6 | Electrical Equipment supply & Installation | sum | 1 | 4,713,582 | 4,713,582 |
| 5.7 | Step-up transforming Equipment supply & Installation | sum | 1 | 1,731,093 | 1,731,093 |
| 5.8 | Public Equipment supply & Installation | sum | 1 | 800,563 | 800,563 |
| 5.9 | GIS Supply | sum | 1 | 1,398,858 | 1,398,858 |
| 6 | Transmission line 33KV | | | | 3,896,679 |
| 7 | Illumination system | | | | 54,654 |
| 8 | The testing and commissioning of the Works | | | | 1,000,000 |
| 9 | Survey and Design Expenses of the Main Works | | | | 12,750,000 |

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INVESTMENT ESTIMATE OF THE HEAD WORKS OF MORAGAHAKANDA RESERVOIR

| ITEM | DESCRIPTION OF WORK ITEMS | UNIT | ESTIMATED QUANTITY | UNIT PRICE | AMOUNT (USD) |
|---------------------------------|---------------------------|------|--------------------|------------|--------------|
| 10 | Provisional sum | prov | | | 8,000,000 |
| Total (1+2+3+4+5+6+7+8+9+10) | | | | | 259,451,246 |



2012.3.20

**INVESTMENT ESTIMATE OF THE HEAD WORKS OF
MORAGAHAKANDA RESERVOIR**

[Estimate Approved
by Project Committee]

| ITEM | DESCRIPTION OF WORK ITEMS | UNIT | ESTIMATED QUANTITY | UNIT PRICE | AMOUNT (USD) |
|------|---|------|--------------------|------------|--------------|
| 1 | General Works | | | | 35,384,443 |
| 1.1 | Mobilization and Demobilization | sum | 1 | 7,361,917 | 7,361,917 |
| 1.2 | Permanent Camp, Offices and Facilities to Employer and Engineer, Training and Any Employer's Expenses | sum | 1 | 10,775,240 | 10,775,240 |
| 1.3 | Provision and Maintenance of Vehicles to the Employer | sum | 1 | 2,462,586 | 2,462,586 |
| 1.4 | Temporary Roads and Bridges | sum | 1 | 3,286,290 | 3,286,290 |
| 1.5 | Contractor's Temporary Camps and Offices | sum | 1 | 2,959,270 | 2,959,270 |
| 1.6 | Contractor's Temporary Facilities on Site | sum | 1 | 3,998,074 | 3,998,074 |
| 1.7 | Aggregate Processing Plant | sum | 1 | 1,331,691 | 1,331,691 |
| 1.8 | Concrete Mixing Plant | sum | 1 | 546,876 | 546,876 |
| 1.9 | Safety, Health, Environment Protection (SHE) | sum | 1 | 2,662,499 | 2,662,499 |
| 2 | River Diversion Works | | | | 1,821,069 |
| 3 | Civil Works | | | | 173,805,560 |
| 3.1 | RCC Dam | sum | 1 | 97,292,813 | 97,292,813 |
| 3.2 | Rockfill Dam | sum | 1 | 59,887,595 | 59,887,595 |
| 3.3 | Power Station | sum | 1 | 11,347,120 | 11,347,120 |
| 3.4 | Clearing of the Construction Area | sum | 1 | 200,000 | 200,000 |
| 3.5 | Maintenance of Road | sum | 1 | 635,731 | 635,731 |
| 3.6 | Landscaping Works of Construction Area | sum | 1 | 294,638 | 294,638 |
| 3.7 | Drainage Work | sum | 1 | 1,782,532 | 1,782,532 |
| 3.8 | Reservoir Maintenance & Operating Office and Generating Plant Office | sum | 1 | 195,000 | 195,000 |

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INVESTMENT ESTIMATE OF THE HEAD WORKS OF MORAGAHAKANDA RESERVOIR

| ITEM | DESCRIPTION OF WORK ITEMS | UNIT | ESTIMATED QUANTITY | UNIT PRICE | AMOUNT (USD) |
|------|--|------|--------------------|------------|--------------|
| 3.9 | Gas Insulated Switchgear(GIS) Station | sum | 1 | 1,198,601 | 1,198,601 |
| 3.10 | Other Works | sum | 1 | 971,530 | 971,530 |
| 4 | Hydro-Mechanical Works | | | | 8,727,100 |
| 4.1 | Gate Equipment supply & Installation | sum | 1 | 5,173,686 | 5,173,686 |
| 4.2 | Hoisting device Supply & Installation | sum | 1 | 1,402,074 | 1,402,074 |
| 4.3 | Penstock Supply & Installation | sum | 1 | 2,151,340 | 2,151,340 |
| 5 | Electro-Mechanical Works | | | | 20,011,741 |
| 5.1 | Hydroturbine Supply & Installation | sum | 1 | 2,764,101 | 2,764,101 |
| 5.2 | Generator Supply & Installation | sum | 1 | 5,293,201 | 5,293,201 |
| 5.3 | Hoisting Apparatus Supply & Installation | sum | 1 | 508,174 | 508,174 |
| 5.4 | Hydraulic Auxiliary Equipment Supply & Installation | sum | 1 | 2,602,983 | 2,602,983 |
| 5.5 | Fire Fighting & Ventilation | sum | 1 | 199,186 | 199,186 |
| 5.6 | Electrical Equipment Supply & Installation | sum | 1 | 4,713,582 | 4,713,582 |
| 5.7 | Step-up Transforming Equipment Supply & Installation | sum | 1 | 1,731,093 | 1,731,093 |

INVESTMENT ESTIMATE OF THE HEAD WORKS OF MORAGAHAKANDA RESERVOIR

| ITEM | DESCRIPTION OF WORK ITEMS | UNIT | ESTIMATED QUANTITY | UNIT PRICE | AMOUNT (USD) |
|-------------------------------------|--|------|--------------------|------------|--------------------|
| 5.8 | Public Equipment Supply & Installation | sum | 1 | 800,563 | 800,563 |
| 5.9 | GIS Supply & Installation | sum | 1 | 1,398,858 | 1,398,858 |
| 6 | Transmission Line 33KV | | | | 3,896,679 |
| 7 | Illumination System | | | | 54,654 |
| 8 | Testing and Commissioning of the Works | | | | 1,000,000 |
| 9 | Survey and Design | | | | 12,750,000 |
| Total (1+2+3+4+5+6+7+8+9) | | | | | 257,451,246 |

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INVESTMENT ESTIMATE OF THE HEAD WORKS OF MORAGAHAKANDA RESERVOIR

[Estimate Approved
by SCARC]

| ITEM | DESCRIPTION OF WORK ITEMS | UNIT | ESTIMATED QUANTITY | UNIT PRICE | AMOUNT (USD) |
|----------|---|------|--------------------|------------|--------------------|
| 1 | General Works | | | | 35,358,147 |
| 1.1 | Mobilization and Demobilization | sum | 1 | 7,361,917 | 7,361,917 |
| 1.2 | Permanent Camp, Offices and Facilities to Employer and Engineer, Training and Any Employer's Expenses | sum | 1 | 10,775,240 | 10,775,240 |
| 1.3 | Provision and Maintenance of Vehicles to the Employer | sum | 1 | 2,462,586 | 2,462,586 |
| 1.4 | Temporary Roads and Bridges | sum | 1 | 3,286,290 | 3,286,290 |
| 1.5 | Contractor's Temporary Camps and Offices | sum | 1 | 2,959,270 | 2,959,270 |
| 1.6 | Contractor's Temporary Facilities on Site | sum | 1 | 4,005,076 | 4,005,076 |
| 1.7 | Aggregate Processing Plant | sum | 1 | 1,307,273 | 1,307,273 |
| 1.8 | Concrete Mixing Plant | sum | 1 | 537,996 | 537,996 |
| 1.9 | Safety, Health, Environment Protection (SHE) | sum | 1 | 2,662,499 | 2,662,499 |
| 2 | River Diversion Works | | | | 1,821,069 |
| 3 | Civil Works | | | | 168,682,831 |
| 3.1 | RCC Dam | sum | 1 | 95,084,254 | 95,084,254 |
| 3.2 | Rockfill Dam | sum | 1 | 58,327,510 | 58,327,510 |
| 3.3 | Power Station | sum | 1 | 10,057,068 | 10,057,068 |
| 3.4 | Clearing of the Construction Area | sum | 1 | 200,000 | 200,000 |
| 3.5 | Maintenance of Road | sum | 1 | 635,731 | 635,731 |
| 3.6 | Landscaping Works of Construction Area | sum | 1 | 294,638 | 294,638 |
| 3.7 | Drainage Work | sum | 1 | 1,782,532 | 1,782,532 |
| 3.8 | Reservoir Maintenance & Operating Office and Generating Plant Office | sum | 1 | 195,000 | 195,000 |

**INVESTMENT ESTIMATE OF THE HEAD WORKS OF
MORAGAHAKANDA RESERVOIR**

| ITEM | DESCRIPTION OF WORK ITEMS | UNIT | ESTIMATED QUANTITY | UNIT PRICE | AMOUNT (USD) |
|----------|---|------|--------------------|------------|-------------------|
| 3.9 | Gas Insulated Switchgear(GIS) Station | sum | 1 | 1,134,568 | 1,134,568 |
| 3.10 | Other Works | sum | 1 | 971,530 | 971,530 |
| 4 | Hydro-Mechanical Works | | | | 8,727,100 |
| 4.1 | Gate Equipment supply & Installation | sum | 1 | 5,173,686 | 5,173,686 |
| 4.2 | Hoisting device Supply & Installation | sum | 1 | 1,402,074 | 1,402,074 |
| 4.3 | Penstock Supply & Installation | sum | 1 | 2,151,340 | 2,151,340 |
| 5 | Electro-Mechanical Works | | | | 20,011,741 |
| 5.1 | Hydroturbine Supply & Installation | sum | 1 | 2,764,101 | 2,764,101 |
| 5.2 | Generator Supply & Installation | sum | 1 | 5,293,201 | 5,293,201 |
| 5.3 | Hoisting Apparatus Supply & Installation | sum | 1 | 508,174 | 508,174 |
| 5.4 | Hydraulic Auxiliary Equipment Supply & Installation | sum | 1 | 2,602,983 | 2,602,983 |
| 5.5 | Fire Fighting & Ventilation | sum | 1 | 199,186 | 199,186 |
| 5.6 | Electrical Equipment Supply & Installation | sum | 1 | 4,713,582 | 4,713,582 |
| | Step-up Transforming | | | | |
| 5.7 | Equipment Supply & Installation | sum | 1 | 1,731,093 | 1,731,093 |

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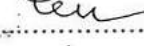
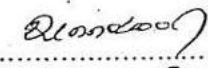

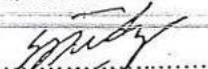
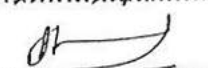

INVESTMENT ESTIMATE OF THE HEAD WORKS OF MORAGAHAKANDA RESERVOIR

| ITEM | DESCRIPTION OF WORK ITEMS | UNIT | ESTIMATED QUANTITY | UNIT PRICE | AMOUNT (USD) |
|------------------------------|--|------|--------------------|------------|--------------|
| 5.8 | Public Equipment Supply & Installation | sum | 1 | 800,563 | 800,563 |
| 5.9 | GIS Supply & Installation | sum | 1 | 1,398,858 | 1,398,858 |
| 6 | Transmission Line 33KV | | | | 3,896,679 |
| 7 | Illumination System | | | | 54,654 |
| 8 | Testing and Commissioning of the Works | | | | 1,000,000 |
| 9 | Survey and Design | | | | 12,750,000 |
| Total (1+2+3+4+5+6+7+8+9) | | | | | 252,302,221 |

Project Committee Report
 on
Design, Construction & Commissioning of
Moragahakanda Reservoir Headworks Project
 dated 21st March 2012

In view of Sinohydro Corporation Ltd.'s letter dated 21st March 2012 addressed to Chairman, Project Committee (PC) with a copy to the Secretary, MIWRM captioned "Submission of Revised BOQ and Summary" (Copy annexed -Annex C), the PC met on the same day (21st March 2012) and reviewed the revision effected on Item 1.2 of General Works and the Total Bid Amount .

Accordingly, the Total Bid Amount stated in Para 12 of the PC Report dated 20th March 2012 shall be amended as USD 257,451,246.

- | | | |
|--|-----------|---|
| Eng.D.C.S. Elakanda, PD(DSWRP), MIWRM | -Chairman |  |
| Eng. M.M. Gunathilake, Consultant, MASL | -Member |  |
| Eng. R.B. Thennakoon, PD(MO&KAI Dev) MASL | -Member |  |
| Eng. S.A.A. Dharmasiri, Asst. Dir (MASL) | -Member |  |
| Mr. S.S. Mudalige - Director, NPD | -Member |  |
| Eng. P.A.A.P.K. Pannala, Deputy Director,MIWRM | -Member |  |
| Eng Ananda Sellahewa- Procurement Specialist/DSWRPP,MIWRM | -Member |  |
| Eng. (Ms) T.M.K.Jayasekara-Chief Engineer/Transmission & Planning/CEB- | Member | |

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 நீர்ப்பாசனம் மற்றும் நீரவளங்கள் முகாமைத்துவ அமைச்சு
 MINISTRY OF IRRIGATION AND WATER RESOURCES MANAGEMENT

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 කොළඹ 10.

500, T.B. JayahMawatha,
 Colombo 10.

Our Ref : Mora/01

21-03-2012

Director General, DPF / Secretary, SCARC

Through

Secretary-Ministry of Irrigation & Water Resource Management,

Handwritten signature
 21/03/2012

EPC Contract of Construction of Moragahakanda Reservoir

Further to my letter dated 20th March 2012 annexed herewith is the revised Project Committee Report dated 21st March 2012 (*Annex B*), in view of Sinohydro Corporation Ltd.'s letter dated 21st March 2012 addressed to me with a copy to the Secretary/ MIWRM captioned "*Submission of Revised BOQ and Summary*" for your necessary please

Handwritten signature of Eng. D.C.S. Elakanda

o/c Eng.D.C.S. Elakanda,
 Chairman - Project Committee

Copy to
 Secretary,
 Ministry of Irrigation & Water Resource Management - For information please

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 கௌரவ அமைச்சர்
 Hon Minister

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 Fax: 2688340

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 செயலாளர்
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500, T B Jayah Mawatha, Colombo 10.

Our Ref : Mora /01

20-03-2012


Director General, DPF / Secretary, SCARC

base 20/03/2012

Through
Secretary-Ministry of Irrigation & Water Resource Management,

EPC Contract of Construction of Moragahakanda Reservoir

As per your letters number PFD/PMD/105-19-04 dated 22nd September 2011 and 30th December 2011 addressed to Secretary-Ministry of Irrigation & Water Resource Management appointing the members to the Project Committee (PC) to assist the Standing Cabinet Appointed Review Committee (SCARC) for the above procurement, the PC Report is annexed herewith (*Annex A*).


 Eng. D.C.S. Elakanda,
 Chairman - Project Committee

Copy to : Secretary,
Ministry of Irrigation & Water Resource Management - For information please

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Hon Minister

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Secretary

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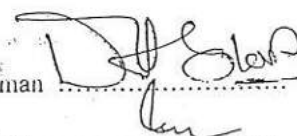
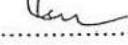
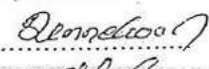

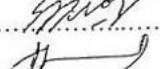
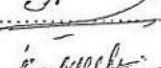

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Project Committee Report
on
Design, Construction & Commissioning of
Moragahakanda Reservoir Headworks Project
dated 20th March 2012

1. The Project Committee (PC) has been appointed by the DG/DPF vide his letters number PFD/PMD/105-19-04 dated 22nd September 2011 and 30th December 2011, to assist the SCARC for this procurement annexing the relevant Terms of Reference (TOR) to be followed by the PC on the procurement.
2. Since then, the PC informally met on several occasions and commenced compiling a draft Bid Document for a EPC Contract. A formal Project Committee meeting was held on 9th November 2011 and at this meeting, it was transpired that most members of the committee did not possess any previous experience in preparation of EPC Bid Documents. As such it was suggested to obtain the assistance of an experienced consultant to prepare the EPC Bid Document and review the Design & Construction Proposal submitted by Sinohydro Corporation Ltd. At the same time, the PC identified the immediately available experienced consultants presently working in Sri Lanka, namely, Poyry, Lahmyer and SMEC as the would be consultants.
3. The Secretary - MIWRM approved the engagement of an experienced consultant and a special Consultancy Procurement Committee of Ministry (CPCM) appointed for the purpose of selecting the most suitable consultant met on 13th November 2011 and approved the deployment of M/S Poyry Energy Ltd. Hardturmstrasse 161, PO Box CH 8037, Zurich, Switzerland for the assignment.
4. Besides, it was also felt by the PC and the Employer that it is prudent to get an independent opinion on the adequacy of the geological investigations so far carried out at the Moragahakanda Headworks prior to procurement of the EPC Contract.
5. Thus Poyry Energy Ltd. was assigned to assist the Employer in the preparation of draft EPC Bid Document & Review of Sinohydro Corporation Ltd's Design & Construction Proposal and the geological review of Moragahakanda Reservoir Headworks and Reservoir Bed Area.
6. The geological review was completed within a period of ten days and it was confirmed that the current state of geological investigations are quite sufficient to proceed on with the procurement of EPC Contract and Poyry Energy Ltd. submitted the Geological Assessment Report - 12th December 2011 at the conclusion of the Assignment.
7. During the evaluation process of the Design and Construction Proposal submitted by Sinohydro Corporation Ltd on 4th November 2011, the PC and Poyry Energy Ltd. noted several deficiencies / short comings in the proposal submitted by Sinohydro Corporation Ltd. which was submitted in the absence of a formal Bid Document comprising
 - General Conditions
 - Particular Conditions of Contract
 - General Technical Specifications and
 - Employer's Requirements
 - etc.
8. Meanwhile, the PC with the assistance of Poyry Energy Ltd. prepared the formal Bid Document and dispatched it to Sinohydro Corporation Ltd on 3rd February 2012 together with

the list of deficiencies / short comings identified in their previous Proposal to obtain a revised Design and Construction Proposal for the PC's review. The formal Bid Document comprised several Sections as depicted in Annex 3 and the connected documents are sent herewith.

- 9. Sinohydro Corporation Ltd. submitted the revised Design and Construction Proposal (Annex 4) with the Investment Estimate on 14th February 2012 and responses to PC's queries on 17th and 21st February 2012 respectively. Thereafter, the PC with the participation of Poyry Energy Ltd. sat on 9 occasions and thoroughly reviewed the Documents and obtained further responses from Sinohydro Corporation Ltd on few additional queries.
- 10. In accordance with the Terms of Reference annexed to the appointment of the PC, the PC with the participation of Secretary-MIWRM on behalf of the Employer and Poyry Energy Ltd as the Consultant met with Sinohydro Corporation Ltd. on 07th, 8th, 9th, 12th, 13th and 14th March 2012 and had Technical Negotiations on the Technical Proposal submitted by Sinohydro Corporation Ltd and the Minutes of Discussions were prepared and signed by Secretary-MIWRM and Sinohydro Corporation Ltd. of which a copy is attached as Annex 1.
- 11. The PC together with Secretary – MIWRM met with Sinohydro Corporation Ltd again on 16th, 17th and 19th March 2012 in order to ascertain the effects on the Technical Proposal as a result of the decisions arrived at the Technical Negotiation meetings and sorted out all issues pending related to the Technical Proposal. The assistance of Mahaweli Consultancy Bureau (MCB) Pvt Ltd. was obtained for the updating of the Engineer's Estimate prepared by JICA-Nippon Koei Consultants Ltd. –July 2010 and for the analysis of Investment Estimate submitted by Sinohydro Corporation Ltd.
- 12. Sinohydro Corporation Ltd has now submitted their revised Investment Estimate on 20th March 2012 for a value of USD 259,451,246 which is in Annex 2.
- 13. The updated Engineer's Estimate amounts to USD 246,451,564 comprising USD 33,061,984 for Employer's Requirements plus USD 213,389,580 for physical works.
- 14. On the basis of the foregoing review of the technical aspects of the Design & Construction Proposal of Sinohydro Corporation Ltd submitted on 14th February 2012, subjected to the Minutes of Technical Negotiations conducted on 7th, 8th, 9th, 12th, 13th, 14th, 16th, 17th and 19th March 2012, the PC recommends that the SCARC negotiates the Investment Proposal submitted by Sinohydro Corporation Ltd on 20th March 2012.

| | | |
|---|-----------|---|
| Eng.D.C.S. Elakanda, PD(DSWRP), MIWRM | -Chairman |  |
| Eng. M.M. Gunathilake, Consultant, MASI. | -Member |  |
| Eng. R.B. Thennakoon, PD(MO&KAI Dev) MASL | -Member |  |
| Eng. S.A.A. Dharmasiri, Asst. Dir (MASL) | -Member |  |
| Mr. S.S. Mudalige – Director, NPD | -Member |  |
| Eng. P.A.A.P.K. Pannala, Deputy Director ,MIWRM | -Member |  |
| Eng Ananda Sellahewa- Procurement Specialist/DSWRPP,MIWRM | -Member |  |
| Eng. (Ms) T.M.K.Jayasekara-Chief Engineer/Transmission & Planning/CEB- Member | | |



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கொழும்பு 10.

500, T B Jayah Mawatha,
Colombo 10.

Our reference 2/2/73

20-03-2012

Chairman
SCARC

M/B
PSC
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**EPC Contract on Design, Construction and Commissioning of Moragahakanda Reservoir
 Headworks Project**

Sequel to SCARC's approval conveyed to me by DG/DPF, vide his letter number PFD/PMD/105-19-04 dated 9th September 2011 to sign a Memorandum of Understanding (MOU) and to obtain a detailed proposal from Sinohydro Corporation Ltd., a MOU was signed with Sinohydro Corporation Ltd. on 14th September 2011 and obtained a Design and Construction Proposal with the Investment Estimate on 04th November 2011 for the captioned contract.

The Proposal was evaluated by a Project Committee (PC) appointed by the DG/DPF vide his letter number PFD/PMD/105-19-04 dated 22nd September 2011, with the assistance of M/s Poyry Energy Ltd., Hardturmstrasse 161, PO Box CH 8037, Zurich, Switzerland (who are currently working with the Dam Safety & Water Resources Planning Project) who's services were obtained on a short term assignment basis.

During the evaluation process, the PC and Poyry Energy Ltd. noted several deficiencies / short comings in the proposal submitted by Sinohydro Corporation Ltd. which was submitted in the absence of a formal Bid Document comprising

- General Conditions
- Particular Conditions of Contract
- General Technical Specifications and
- Employer's Requirements etc.

Meanwhile, the PC with the assistance of Poyry Energy Ltd. prepared the formal Bid Document and dispatched it to Sinohydro Corporation Ltd on 3rd February 2012 together with several deficiencies / short comings identified in their previous Proposal to obtain a revised Design and Construction Proposal for the PC's review.

Sinohydro Corporation Ltd. submitted the revised Design and Construction Proposal with the Investment Estimate on 14th February 2012 and responses to PC's queries on 17th and 21st February 2012

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Secretary
Minister

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respectively. Thereafter, the PC with the participation of Poyry Energy Ltd. sat on 9 occasions and thoroughly reviewed the Documents and obtained further responses from Sinohydro Corporation Ltd on few additional queries.

In accordance with the Terms of Reference annexed to the appointment of the PC, the PC with the participation of Secretary-MIWRM on behalf of the Employer and Poyry Energy Ltd as the Consultant met with Sinohydro Corporation Ltd. on 07th, 8th, 9th, 12th, 13th and 14th March 2012 and had Technical Negotiations on the Technical Proposal submitted by Sinohydro Corporation Ltd and the Minutes of Discussions were prepared and signed by Secretary-MIWRM and Sinohydro Corporation Ltd. of which a copy is attached as Annex 1.

The PC together with Secretary – MIWRM met with Sinohydro Corporation Ltd again on 16th, 17th and 19th March 2012 in order to ascertain the effects on the Technical Proposal as a result of the decisions arrived at the Technical Negotiation meetings and sorted out all issues pending related to the Technical Proposal.

Sinohydro Corporation Ltd has now submitted their revised Investment Estimate on 20th March 2012 for a value of USD 259,451,246 which is in Annex 2.

In the circumstances, it is appreciated if you could summon the SCARC for the Financial Negotiations with Sinohydro Corporation Ltd preferably in the afternoons on 22nd and 23rd March 2012 as a negotiation team is already in Sri Lanka who will stay until 25th March 2012.

Eng K.W. Ivan De Silva

Secretary

Ministry of Irrigation & Water Resources Management

CC: 1. Secretary- Ministry of Finance & Planning- For information please

2. Director General –ERD -For information please

3. Secretary-SCARC/DG-DPF -6 copies of the Annexes are sent herewith for the distribution amongst SCARC members

4. Director General – MASL - For information please



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500, T B Jayah Mawatha,
 Colombo 10.

Our Reference 22/73

21/03/2012

Chairman,
 SCARC

EPC Contract on Design Construction and Commissioning of Moragahakanda Reservoir Hearworks Project

Further to my even numbered letter dated 20th March 2012 addressed to you on the above caption with copies to others.

Sinohydro Corporation Ltd. vide their letter dated 21st March 2012 has now submitted a revised offer amounting to USD 257,451,246 (*Annex-C*) for the above Project, which has been reviewed by the Project Committee and forwarded to me on 21st March 2012 is forwarded for your information and further action by the SCARC.

o/p Eng. K.W. Ivan De Silva
 Secretary,
 Ministry of Irrigation & Water Resources Management

- CC: 1. Secretary, Ministry of Finance & Planning - For information please
 2. Director General, ERD - For information please
 3. Secretary, SCARC/DG-DPF - For information please

4. Director General, MASL - For information please

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 பேரவை அமைச்சர்
 Hon Minister

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500, T B Jayah Mawatha,
Colombo 10.

SCARC/MORA/VOL.II

02-04-2012

Mr. Fu Linghua,
General Manager,
Synohydro Corporation Ltd.,
Colombo.

Dear Mr. Fu Linghua,

EPC Contract of Moragahakanda Reservoir Headworks Projects

Further to our even numbered letter dated 29th March 2012 addressed to you on the above subject.

With regard to Item No 23 of page 28 of 73 of the Minutes of Technical Negotiations meeting, it was agreed by the both parties to finalize the issue of the availability of a second concrete mixer at the site for the uninterrupted concrete operations of the RCC dam within a week time (ie. 21st March 2012). As there is no response from you on this issue up to now, we presume that you have agreed to the stance put forward by the Employer at the Technical Negotiation Meeting and it is recorded that there shall be a second concrete mixer available at the site.

Further, we wish to draw your attention to the issue of the submission of Payment Schedule tied up with key milestones for each major / sub items of works discussed and agreed at the SCARC meeting held on 22nd March 2012, which is still outstanding from you and you are requested to submit same immediately.

Yours sincerely

Eng. D.C.S. Elakanda
Project Director- DSWRPP
Chairman -TEC
Moragahakanda Reservoir Headworks Project

cc. to : Secretary - MIWRM

- for inf. pl.

Handwritten notes: 11/24/73/2/73, 2/4/12

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Annex IX - DOCUMENTS COMPRISING TECHNICAL NEGOTIATIONS

Documents comprise following

1. Minutes of Technical Negotiations between Project Committee (PC) and Sinohydro Corporation Ltd dated 14th March 2012
2. PC Chairman's letter number 2/2/73 dated 09.03.2012 to Sinohydro Corporation Ltd on Instrumentation Arrangement Drawings
3. Sinohydro's letter dated 16.03.2012 to Chairman/ PC on submission of Unit Performance Guarantee and Seismic safety assessment document list
4. PC Chairman's letter number SCARC/MORA/Vol II dated 29.03.2012 to Sinohydro Corporation Ltd on the outstanding issues of the Agreed Version at the Technical Negotiation Meetings
5. PC Chairman's letter number SCARC/MORA/Vol II dated 02.04.2012 to Sinohydro Corporation Ltd on the outstanding issues of the Agreed Version at the Technical and Financial Negotiation Meetings
6. PC Chairman's letter number SCARC/MORA/Vol II dated 03.04.2012 to Sinohydro Corporation Ltd on "Additional Issues for Clarifications/Further Information".
7. PC Chairman's letter number SCARC/MORA/Vol II dated 3rd April 2012 to Sinohydro Corporation Ltd on "Confirmation and Clarification of Negotiations" in response to latter's letter dated 27th March 2012
8. Secretary - MIWRM's letter number 2/2/73 dated 28.03.2012 to Sinohydro Corporation Ltd on document preparation of contract signing
9. Secretary - MIWRM's letter number IWRM/TS/2/73 dated 17.04.2012 to Sinohydro Corporation Ltd on submission of Technical Specifications in response to Sinohydro's letter dated 07.04.2012.
10. Sinohydro's letters dated 07.04.2012 and 24.04.2012 to Chairman /PC on submission of Technical Specifications.
11. Employer's response letter no.2/2/73 dated 06 June 2012 to Sino's letters dated 07.04.2012 and 24.04.2012 on Technical Specifications
12. Sinohydro's letter dated 05 June 2012 on Amendment of Contract Agreement addressed to Secretary
13. Employer's response letter no. 2/2/73 dated 06 June 2012 to Sinohydro on Amendment of Contract Agreement.
14. Sinohydro's letter dated 05 June 2012 on submission of Pay Monthly Plan, addressed to Secretary
15. Employer's response letter no. 2/2/73 dated 06 June 2012 to Sinohydro on Pay Monthly Plan



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கொழும்பு 10.

500, T B JayahMawatha,
Colombo 10.

Our Ref : 2/2/73

9th March 2012

Mr. Fu Lingua
Chief Representative
Synohydro Corporation Ltd.,
Colombo

Dear Sir

Instrumentation Arrangement Drawings

This is to confirm that the following drawings on Instrumentation Arrangement of the Rockfill and RCC Dam with Memo comparing 5 pages were handed over to you 8th March 2012.

1. SLLK/MGD/JC-CCRD-01
2. SLLK/MGD/JC-CCRD-02
3. SLLK/MGD/JC-CCRD-03
4. SLLK/MGD/JC-CCRD-04
5. SLLK/MGD/JC-RCC-01

Yours faithfully

Eng. D.C.S.Elakanda
Chairman/TEC
Moragahakanda Reservoir Project

cc: Secretary - MI&WRM

Received by

PTZ
2012.03.08

300105

Memo

Date March 08, 2012

Ref. No 501421.20
Page 1 (5)
Contact Mark Fox
Direct dial +94 772104250
E-mail mark.fox@poyry.com

Moragahakanda Development Project Review of Monitoring Drawings for Clay Core Rockfill Dam (CCRD) and RCC Gravity Dam

1 REVIEW AND ASSESSMENT OF THE DRAWINGS PREPARED BY SINOHYDRO

The comments given in the following are exclusively based on the information given in the report and the facts shown on the drawings.

General Comments:

The instrumentation and monitoring of the CCRD and the RCC dam should be carefully planned and executed to meet defined objectives. In general the objectives are:

- Verify design and analysis assumptions;
- Evaluate behaviour during construction, first filling, and operation of the structure;
- Evaluate performance of specific design features;
- Observe performance of known geological and structural anomalies;
- Evaluate performance with respect to potential site specific failure modes.

The monitoring concept proposed for the clay core rockfill dam and the RCC dam should be revised taking into account these comments and the specific comments given below.

Drawing SLLK-MGD/JC-CCRD-01:

- a) Location of monitoring cross sections should be clearly shown in the drawing.
- b) The longitudinal section should give a clear overview of all instruments.
- c) The set of drawings showing the proposed instrumentation for the dam should be consistent.
- d) For monitoring the deformations of the core the central 3 magnetic extensometers are considered to be sufficient.

Drawing SLLK-MGD/JC-CCRD-02:

- a) Location of monitoring cross sections should be shown.

04 would be placed on the same level in Zone 2 and Zone 3. However, it is not considered to be necessary.

Drawing SLLK-MGD/JC-CCRD-04:

- a) The drawing should give a clear overview of all instruments arranged in the main monitoring cross section.
- b) Clear reference should be made to the layout drawing showing the location of the cross section.
- c) For reasons of clarity unnecessary information should not be shown on the drawing.
- d) The drawings should reflect the information provided in the table.
- e) For a dam of this height focus of the monitoring should be given on the core and the downstream foundation. Monitoring of deformation of the core can be performed by the vertical magnetic settlement gauges. Deformation of the downstream shoulder can be monitored by the surface markers. The arrangement of the settlement cells as shown in not considered to be necessary.

Drawing SLLK-MGD/JC-RCC-01:

- a) The proposed instrumentation of the Moragahakanda RCC Dam should be shown consistently in layout, longitudinal sections and cross sections. The whole set of drawing should be consistent instead of only showing the instrumentation in bits and pieces in different drawings without proper reference.
- b) For reasons of clarity unnecessary information should not be shown on the drawing.
- c) For joint monitoring we would recommend 3 dimensional joint meters which are installed in the galleries at a certain number of joints, instead of embedded joint meters.
- d) Survey markers on the crest of the dam should also be installed at the spillway blocks.
- e) Benchmarks and reference points for the geodetic survey should be shown on the layout drawing.
- f) ~~Water level meters to measure the head water level and the tailwater level should be included in the monitoring system of the RCC dam and shown on the layout drawing. The Nilometer was a means (typically a structure) of measuring the River Nile's clarity and for measuring the water level of the Nile river during the annual flood season.~~
- g) Indium ruler: The notation is not clear. But is understood to be a settlement gauge. This is to be clarified and the design explained to measure RCC dam settlement. Direct and inverted pendulum should be used instead. The location of the pendulum should be as close to the main dam section as possible.
- h) V-notch weirs should be located in the drainage gallery at the left abutment, in the central part and on the right abutment.

- b) Probable location of seepage measuring weir should be shown.
- c) To properly monitor movements, survey markers should be positioned over the clay core, on the upstream and downstream edges of the crest and at several levels on the upstream and downstream slopes.
- d) Position and type of water level gauge for monitoring water level in the reservoir should be shown.
- e) Position of piezometers (Pz) for measuring water level (phreatic line) in the downstream shoulder should be shown.
- f) Position of settlement cells (SC) should be indicated.
- g) Drawing should reflect the information provided in the table.
- h) Generally, the instrumentation for monitoring, except for the surface markers are concentrated in cross sections (e.g. section I-I and section II-II), thus conclusions from data of different types of instruments can be drawn. For the CCRD, two main monitoring sections are considered to be adequate. The whole monitoring concept should be described by a layout drawing, cross sections showing the main monitoring cross sections and a longitudinal section (e.g. section A-A). The whole set of drawing should be consistent instead of only showing the instrumentation in bits and pieces in different drawings without proper reference.
- i) Benchmarks and reference points for the geodetic survey should be shown on the layout drawing.

Drawing SLLK-MGD/JC-CCRD-03:

- a) The drawing should give a clear overview of all instruments arranged in the main monitoring cross section.
- b) Clear reference should be made to the layout drawing showing the location of the cross section.
- c) For reasons of clarity unnecessary information should not be shown on the drawing.
- d) The drawing should reflect the information given in the table.
- e) ~~It is concluded that the term "osmometers" refers to what is known as~~ Piezometers. Piezometer should be used to measure the piezometric conditions in the clay core and the foundation. Optional piezometers to be placed in the downstream filter at the same levels as in the core might be considered to monitor the drain effectiveness of the filter material.
- f) Piezometers should be arranged upstream and downstream of the grout curtain to monitor its effectiveness.
- g) The position of all surface markers on the upstream and downstream slope should be clearly shown. It is stressed that for proper monitor of movements of the clay core surface markers should be placed centrally over the earth core and on the upstream and downstream edges of the crest.
- h) The use of interfacial displacement meter (extensometer) at the interface of the two filters is questionable. The type of instrument to be used should be clearly specified. More reliable results of differential settlements of the two zones would be obtained if two settlement cells as shown on Drawing SLLK-MGD/JC-CCRD-

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- i) It is not necessary to place piezometers for monitoring the effectiveness of the grout curtain under each block. It is recommended to reduce the monitored sections to one spillway block, one block comprising the power intake and one block at each abutment.

Drawing SLLK-MGD/JC-RCC-02:

- a) The drawings should reflect the information provided in the table. Symbols used for different types of instruments should be fully provided.
- b) Instruments should be clearly specified using the proper technical terms. Indium wire should be replaced by direct and inverted pendulum, osmometer by piezometer, bedrock displacement meter by extensometer.
- c) The installation of "No-stress" Strain meters to measure the volume change in the concrete is not considered to be necessary.
- d) For earthquake monitoring at least 3 strong motion recorders are required (one at the dam crest, one at the foundation level and one outside the dam).
- e) To provide meaningful results thermocouples for measuring concrete temperature should be placed at least 1.5 m from the face.
- f) Piezometers to monitor the effectiveness of the grout curtain should be placed in boreholes. The schematic arrangement of the piezometers should be properly shown. Depending on the foundation conditions installation of additional piezometers should be considered.
- g) The arrangement of the direct and inverted pendulums as shown in the cross section does not correspond to the longitudinal section shown in Drawing SLLK-MGD/JC-RCC-01. To follow sound engineering practise the set of drawings describing the monitoring concept should be consistent.
- h) In general, it is expected that the RCC dam will be constructed on sound rock (gneiss). Therefore, except for weak zones which might be encountered during excavation of the foundation, it is not considered to be necessary to install extensometers in the foundation to monitor foundation movements.
- i) ~~The three dimensional strain gages are not considered to be necessary. In general interpretation of the measurement data are very time consuming. To convert the measured strains into stresses, material parameters of the concrete which are changing with time, such as creep, shrinkage, and modulus of elasticity have to be known. These material properties are usually determined by laboratory testing prior to construction and are only valid for a specific mix design. If mix design is modified due to field conditions, then laboratory testing need to be repeated to obtain meaningful results.~~
- j) In general it is not common to monitor uplift pressure in concrete lift joints by using piezometers (pore pressure cells). To prevent excessive uplift pressure in concrete lift joints the upstream facing of the dam should be properly designed and the dam body should be drained by drain holes behind the waterstops in the contraction joints and drain holes drilled upwards from the gallery.

Drawing SLLK-MGD/JC-RCC-02:

- a) The drawings should reflect the information provided in the table. Symbols used for different types of instruments should be fully provided.
- b) Instruments should be clearly specified using the proper technical terms. Osmometer should be replaced by piezometer.
- c) The three dimensional strain gages are not considered to be necessary. In general interpretation of the measurement data are very time consuming. To convert the measured strains into stresses, material parameters of the concrete which are changing with time, such as creep, shrinkage, and modulus of elasticity have to be known. These material properties are usually determined by laboratory testing prior to construction and are only valid for a specific mix design. If mix design is modified due to field conditions, then laboratory testing need to be repeated to obtain meaningful results.
- d) The installation of "No-stress" Strain meters to measure the volume change in the concrete is not considered to be necessary.
- e) In general it is not common to monitor uplift pressure in concrete lift joints by using piezometers (pore pressure cells). To prevent excessive uplift pressure in concrete lift joints the upstream facing of the dam should be properly designed and the dam body should be drained by drain holes behind the waterstops in the contraction joints and drain holes drilled upwards from the gallery.

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中国水电建设集团国际工程有限公司
SINOHYDRO CORPORATION LIMITED

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To: Mr. Eng.D.C.Elakanda
Project Director (DSWRPP)
Chairman/TEC
Ministry of Irrigation and Water Resources Management
T.B. Jayah Mawatha, Colombo 10.

Headworks of Moragahakanda Reservoir Project

Subject: Submission of Unit Performance Guarantee & Seismic Safety Assessment Documents List

Dear Sirs,

Herewith we submit the Unit Performance Guarantee & Seismic Safety Assessment Documents List as attached herein for your kindly check. Thanks.

Yours faithfully,

Fu Linghua

*pl. copy to this to Mr. For, CBS
Naze - to their comment
16/3/12*

Chief Representative in Sri Lanka

SinoHydro Corporation Limited

Cc: 1. Secretary, MIWRM

Colombo Office
No. 110, Horton Place, Colombo 07; 410/26A, Baudhanolaha Mawatha, Colombo 07
Tel/Fax: +94-011-26672512; 2688727
Email: sinohydrohk@yahoo.com.cn

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Unit Performance Guarantee

1. Unit 5MW

1.1 Turbine (2x5MW)

Type: HLA551C-LJ-135

Performance Guarantee Parameter Table 1-1

| Net Head (m) | Maximum Output (kW) | Allowable Suction Height Hs(m) | Maximum Output (kW) | Cavitation Coefficient σ | Cavitation auxiliary value k |
|-----------------------------|---------------------|--------------------------------|---------------------|---------------------------------|------------------------------|
| Maximum Net Head 45 | ≥5729 | 1.74 | 7141 | 0.12 | 1.5 |
| Weighted Average Head 37.89 | ≥5254 | 1.89 | 7141 | 0.14 | 1.5 |
| Rated Head 38 | ≥5277 | 1.90 | 7141 | 0.14 | 1.5 |
| Minimum Head 24.95 | ≥2707 | 1.61 | 7141 | 0.22 | 1.5 |

Turbine Efficiency Guarantee Value at the rated speed with different heads and output Table 1-2

| Head (m) | Efficiency (%) | Percentage of Rated Output | | | | |
|------------------------------|----------------|----------------------------|------|------|------|------|
| | | 100% | 90% | 75% | 60% | 45% |
| Maximum Head 45m | Model | 90.8 | 88.5 | 85.1 | 79.3 | 70.4 |
| | Prototype | 91.8 | 89.5 | 86.1 | 80.3 | 71.4 |
| Weighted Average Head 37.89m | Model | 91.2 | 93.3 | 90.8 | 87.9 | 81.0 |
| | Prototype | 92.2 | 94.3 | 91.8 | 88.9 | 82.0 |
| Rated Head 38m | Model | 91.0 | 93.4 | 90.7 | 87.8 | 80.8 |
| | Prototype | 92.0 | 94.4 | 91.7 | 88.8 | 81.8 |
| Minimum Head 24.95m | Model | — | — | — | — | 85.8 |
| | Prototype | — | — | — | — | 86.8 |

Turbine operational reliability index:

- 1) Mean Time between Overhaul 5 Years
- 2) Duration of Service before out of operation 40 Years
- 3) Availability Ratio >99 %
- 4) Trouble-free Continuous Operation Time 18000 h

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5) Annual Unit On/Off Allowable Operating Times ≥ 600 times/year

1.2 Generator (2x5MW)

Type: SF5000-16/2600

Main Parameter and Technical Performance

1. Insulation and Temperature Rise

1) Insulation Grade

Grade F is adopted for stator core, winding and rotor winding.

2) Cooler inlet water temperature 25°C

3) As to the maximum of temperature raise of generator at rated voltage, rated frequency and power factor with 105% rated power, see Table 1-3.

Table 1-3

| Project | Measuring Method | Temperature Rise(K) |
|-----------------|--------------------------------|---------------------|
| Stator Windings | Embedded Temperature Detector | 105 |
| Rotor Windings | Electrical -resistivity Method | 110 |
| Stator Core | Embedded Temperature Detector | 105 |
| Collector Rings | Thermometer method | 90 |

2. Electrical Character and Main Parameters

1) Output

① Generators should output rated power under the following conditions:

- a. While at the same rated speed and rated power factor, the deviation of voltage and rated value should not exceed $\pm 5\%$.
- b. While at the rated voltage, the deviation of frequency and rated value should not exceed $\pm 1\%$.
- c. While the values of voltage and frequency deviate (both not exceed $\pm 5\%$ and $\pm 1\%$) : If each deviation is positive value, then the total sum of both will not exceed 6%; if each deviation is negative value or one is positive and the other one is negative, then the total

sum of both absolute values will not exceed 5%. (If the deviation of voltage and frequency exceed the above specified value, generators should run continuously, the output exciting current will not exceed rated value and the stator current will not exceed 105% of the rated value).

②With rated voltage, rated frequency and rated power factor, generators should operate continuously and safely under 105% rated capacity.

③Using the method of power factor improvement to increase generator's active power to apparent power is allowed.

2) Short-circuit ratio not less than 1.0

3. Reliability Index

1) Availability Ratio: the first year not less than 99%; the second year not less than 99.5%.

2) The generator units should meet the requirement of average 1000 on/off operating times per year.

3) Trouble-free Continuous Operation Time 18000 h

4) Mean Time Between Overhaul >5 Years

5) Duration of Service before out of operation will not less than 40 years.

2. Unit 15MW

2.1 Turbine (1×15MW)

Type: HLA551C-LJ-250

Performance Guarantee Parameter Table 2-1

| Net Head (m) | Maximum Output (kW) | Allowable Suction Height Hs(m) | Maximum Output (kW) | Cavitation Coefficient σ | Cavitation auxiliary value k |
|-----------------------------|---------------------|--------------------------------|---------------------|---------------------------------|------------------------------|
| Maximum Net Head 42 | ≥18750 | 2.3 | 6995 | 0.12 | 1.5 |
| Weighted Average Head 34.22 | ≥15596 | 2.65 | 6995 | 0.14 | 1.5 |
| Rated Head 34 | ≥15544 | 2.7 | 6995 | 0.14 | 1.5 |
| Minimum Head 21.74 | ≥7683 | 1.69 | 6995 | 0.25 | 1.5 |

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Turbine Efficiency Guarantee Value at the rated speed with different heads and output Table 2-2

| Head (m) | Efficiency (%) | Percentage of Rated Output | | | | |
|---------------------------------|----------------|----------------------------|------|------|------|------|
| | | 100% | 90% | 75% | 60% | 45% |
| Maximum Head 42m | Model | 91.4 | 88.9 | 85.4 | 81.2 | 72.3 |
| | Prototype | 92.7 | 90.2 | 86.7 | 82.5 | 73.6 |
| Weighted Average Head 34.22m | Model | 90.4 | 93.0 | 90.6 | 87.2 | 80.2 |
| | Prototype | 91.7 | 94.3 | 91.9 | 88.5 | 81.5 |
| Rated Head 34m | Model | 90.5 | 93.1 | 90.8 | 87.4 | 80.4 |
| | Prototype | 91.8 | 94.4 | 92.1 | 88.7 | 81.7 |
| Minimum Head 21.74m | Model | — | — | — | — | 88.4 |
| | Prototype | — | — | — | — | 89.7 |

Turbine operational reliability index:

- 1) Mean Time between Overhaul 5 Years
- 2) Duration of Service before out of operation 40 Years
- 3) Availability Ratio >99 %
- 4) Trouble-free Continuous Operation Time 18000 h
- 5) Annual Unit On/Off Allowable Operating Times ≥600 times/year

2.2 Generator (1×15MW)

Type: SF15-30/5000

Main Parameter and Technical Performance

1. Insulation and Temperature Rise

1) Insulation Grade

Grade F is adopted for stator core, winding and rotor winding.

2) Cooler inlet water temperature 25°C

3) As to the maximum of temperature raise of generator at rated voltage, rated frequency and power factor with 105% rated power, see Table 2-3.

Table 2-3

| Project | Measuring Method | Temperature Rise (K) |
|-----------------|--------------------------------|----------------------|
| Stator Windings | Embedded Temperature Detector | 105 |
| Rotor Windings | Electrical -resistivity Method | 110 |
| Stator Core | Embedded Temperature Detector | 105 |
| Collector Rings | Thermometer method | 90 |

2. Electrical Character and Main Parameters

1) Output

① Generators should output rated power under the following conditions:

- a. While at the same rated speed and rated power factor, the deviation of voltage and rated value should not exceed $\pm 5\%$.
- b. While at the rated voltage, the deviation of frequency and rated value should not exceed $\pm 1\%$.
- c. While the values of voltage and frequency deviate (both not exceed $\pm 5\%$ and $\pm 1\%$): If each deviation is positive value, then the total sum of both will not exceed 6%; if each deviation is negative value or one is positive and the other one is negative, then the total sum of both absolute values will not exceed 5%. (If the deviation of voltage and frequency exceed the above specified value, generators should run continuously, the output exciting current will not exceed rated value and the stator current will not exceed 105% of the rated value).

② With rated voltage, rated frequency and rated power factor, generators should operate continuously and safely under 105% rated capacity.

③ Using the method of power factor improvement to increase generator's active power to apparent power is allowed.

- 2) Short-circuit ratio not less than 1.0

3. Reliability Index

1) Availability Ratio: the first year not less than 99%; the second year not less than 99.5%.

2) The generator units should meet the requirement of average 1000 on/off operating times per year.

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- 3) Trouble-free Continuous Operation Time 20000h
- 4) Mean Time Between Overhaul >5 Years
- 5) Duration of Service before out of operation will not less than 40 years.

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MINISTRY OF IRRIGATION AND WATER RESOURCES MANAGEMENT

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කොළඹ 10.

509, T B Jayah Mawatha,
Colombo 10.

SCARC/MORA/VOL.II

29th March 2012

Mr. Fu Linghua
General Manager
Synohydro Corporation Ltd.,
Colombo

Dear Mr Fu Linghua


EPC Contract of Moragahakanda Reservoir Headworks Project

This refers to the Minutes of Technical Negotiation between Ministry of Irrigation & Water Resources Management and Synohydro Corporation signed on 14th March 2012.

We have not received the documents related to followings as per the decisions arrived at the Technical Negotiation.

| Refer Page No. | Details of Documents | Agreed date for submission |
|----------------|---|----------------------------|
| Page 4 | Data Sheets under Exhibit IV – the Electro-Mechanical Equipment including Turbine, Generator, Transformers and other Main Electrical Equipment. | 16/03/2012 |
| Page 4 | Only a part of the information received on 16/03/2012 and the outstanding information on guarantee points are as shown in the annexure. | 14/03/2012 |
| Page 38 | Basic sketches of phasing out of the construction of river diversion facilities. | 22/03/2012 |
| Page 47 | Cost – benefit analysis of machine configuration of turbine | 09/03/2012 |

Please furnish these documents immediately as agreed dates are already lapsed.


Eng. D.C.S. Elakanda
Chairman/TEC
Moragahakanda Reservoir Headworks Project

cc: Secretary – MI&WRM - f.i.pl.

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MORAGAHAKANDA DEVELOPMENT PROJECT

Unit Performance Guarantees

data to be entered by Sinohydro

data already submitted by Sinohydro

| | | Unit 5 MW | | | Unit 15 MW | | |
|---|-------|-----------|-----------|-------------|------------|-----------|-------------|
| | | Turbine | Generator | Transformer | Turbine | Generator | Transformer |
| Mean time between overhaul | years | 5 | 5 | | 2 | 5 | |
| Duration of service before out of operation | years | 40 | 40 | | 40 | 40 | |
| Availability ratio 1st year | % | | 99 | | | 99 | |
| Availability ratio | % | | 99.5 | | | 99.5 | |
| Trouble-free continuous operation time | hours | 8,000 | 8,000 | | 8,000 | 26,000 | |
| Start stops per year | | 600 | 1,000 | | 600 | 1,000 | |

Generator Efficiency according to IEC

| Efficiency in % | PF 1.0 | PF 0.9 | PF 0.8 |
|-----------------|--------|--------|--------|
| Load 100% | | | |
| Load 75% | | | |
| Load 50% | | | |
| Load 25% | | | |

Transformer Efficiency

| | |
|--|--|
| no load loss in kW | |
| total losses at rated power and 75°C in kW | |
| Efficiency at 100% load | |
| Efficiency at 75% load | |
| Efficiency at 50% load | |
| Efficiency at 25% load | |

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TERM AND CONDITION OF THE RELIABILITY RUN

The Contractor shall perform the Reliability Run Performance Test in accordance with following terms and conditions:

- a. The Contractor shall perform a Reliability Run Performance Test for a continuous thirty (30) day period for the Plant. The Plant here is defined as the power generation system comprising of the 3 units which includes a turbine and generator and all auxiliary equipment. A trip is defined as the trip of one or more of the units or trip or failure of any other equipment causing the Plant not to be able to dispatch any or all of the power requested by the Employer subject to the requested amount of power being within the Guaranteed Output of each unit and combined Plant.
- b. The Plant shall pass the Reliability Run Performance Test if the Plant achieves at least 98.5% reliability calculated from (the total actual operating hours at the requested output) / (the requested operation hours).
- c. The Contractor shall provide supervision and technical personnel to perform the Reliability Run Performance Test for the Plant and each unit.
- d. The test shall begin after Operational Acceptance Certificate under full remote control has been issued.
- e. The Contractor must notify the Employer when the Contractor is ready to operate the equipment in its Contract safely and reliably to follow the requirements of the load dispatch up to the maximum continuous rating. The Reliability Run Performance Test will start within reasonable time after this notification in compliance with the stipulations of the General Condition of Contract, Clause 9.1.
- f. The Contractor shall provide experienced supervision and technical personnel to perform Reliability Run Performance Test of each unit.
- g. If a unit or units trips and the Contractor is found to be responsible for the trips, the Contractor's accumulated run time will return to zero. In the event the Contractor is not responsible for the trip, the Contractor will continue to accumulate run time up to six hours after trip. If the unit or units have not returned to the system (i.e dispatching power) within six hours after the trip, accumulation of run time will stop for the Contractor until the unit or units return to the system (i.e dispatching power).
- h. If the Employer requires a load change on the units and the Contractor's Plant cannot support the change, the Contractor's accumulated run time will return to zero.
- i. The Contractor may request load reduction during the Reliability Run Performance Test for the purpose of performing maintenance. The load reduction must be agreed to by the Employer in advance.
- j. The Contractor will not be responsible for interruptions due to Employer's operator errors during Reliability Run Performance Test.

Moragahakanda Reservoir Headworks Project
Reliability Run Performance Test

- k. The Contractor will be given a daily update of the status of the Reliability Run Performance Test by the Employer.
- l. The Contractor shall perform inspection of the systems and correction of major deficiencies as they occur at the Employer's approval. Deficiencies which will not prevent the Plant from safe and reliable operation are to be corrected at a time when operating conditions allow.
- m. The Employer's personnel in the control room will be operating the units during the Reliability Run Performance Test under the supervision and responsibility of the Contractor's operation personnel. The Contractor shall retain responsibility for the work within the scope of this Contract and shall provide technical assistance and labour to perform any adjustments or modification within the time frame mutually agreed upon.



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 MINISTRY OF IRRIGATION AND WATER RESOURCES MANAGEMENT

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500, T B Jayah Mawatha,
 Colombo 10.

SCARC/MORA/VOL.II

02-04-2012

Mr. Fu Linghua,
 General Manager,
 Synohydro Corporaion Ltd.,
 Colombo .

Dear Mr. Fu Linghua,

EPC Contract of Moragahakanda Reservoir Headworks Projects

Further to our even numbered letter dated 29th March 2012 addressed to you on the above subject.

With regard to Item No 23 of page 28 of 73 of the Minutes of Technical Negotiations meeting, it was agreed by the both parties to finalize the issue of the availability of a second concrete mixer at the site for the uninterrupted concrete operations of the RCC dam within a week time (ie. 21st March 2012). As there is no response from you on this issue up to now, we presume that you have agreed to the stance put forward by the Employer at the Technical Negotiation Meeting and it is recorded that there shall be a second concrete mixer available at the site.

Further, we wish to draw your attention to the issue of the submission of Payment Schedule tied up with key milestones for each major / sub items of works discussed and agreed at the SCARC meeting held on 22nd March 2012, which is still outstanding from you and you are requested to submit same immediately.

Yours sincerely

Eng. D.C.S.Elakanda
 Project Director- DSWRPP
 Chairman -TEC
 Moragahakanda Reservoir Headworks Project

cc. to : Secretary - MIWRM

- for inf. pl.

Handwritten notes:
 11/24/73/2/73
 2/4/12

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MINISTRY OF IRRIGATION AND WATER RESOURCES MANAGEMENT

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500, T B Jayah Mawatha,
Colombo 10.

SCARC/MORA/VOL.II

03rd April 2012

Mr. Fu Linghua
General Manager
Synohydro Corporation Ltd.,
Colombo

Dear Mr Fu Linghua

EPC Contract of Moragahakanda Reservoir Headworks Project
Additional Issues for Clarifications / further information

Listed below are few additional issues needing clarifications/further information from you.

1. Access to Upstream face of spillway gates

It was stated at the Technical Negotiation Meetings that you will make arrangements for the O & M vehicles to enter the platform of the gantry crane above the spillway section to have proper access to the upstream face of the radial gates by having the gantry crane moved sideways longitudinally. Please elaborate this arrangement with adequate details shown on drawings.

2. Instrumentation Drawings

It is noted that there has not been a feedback from you to date on the comments made by us during our Review and Assessment of the following Drawings comprising three pages handed over to you vide our letter number 2/2/73 dated 9th March 2012. (Refer Item 15 B of page 26 of 73 of the Minutes of Technical Negotiations)

3. Evidence for batching plant capabilities

As highlighted by our comment (Item 21) of page 28 of 73, Employer needs evidence on batching plant capabilities with references submitted as early as possible for the Employer to be satisfied about the plant capacity/capability prior to the basic design phase.

4. Repayment of Advance Payment

It is noted that the formula given for repayment of Advance Payment is incorrect.(Item 4 of page 59 of 73). The correct formula shall be submitted by the Contractor immediately in terms of the conditions laid down in the Sub-Clause 14.2.

Eng. D.C.S. Elakanda
Chairman/TEC
Moragahakanda Reservoir Headworks Project

cc: Secretary - MI&WRM - f.i.pl.

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500, T B Jayah Mawatha,
 Colombo 10.

SCARC/MORA/VOL.II

03rd April 2012

Mr. Fu Linghua
 General Manager
 Synohydro Corporation Ltd.,
 Colombo

Dear Mr Fu Linghua

**EPC Contract of Moragahakanda Reservoir Headworks Project
 Confirmation and Clarification of Negotiations**

This refers to your letter dated 27/03/2012 addressed to me with copy to Secretary/MI&WRM based on decision taken at the Technical Negotiations Meeting held from 16th, 17th and 19th March 2012.

| | Issue | Decision |
|----------|--|---|
| 1 | Work Scope Confirmation Regarding to the Negotiation Meeting | |
| 1.1 | Client requested to revise the work scope. 6 km. permanent road under item 3.5.2 is cancelled. | The Employer agreed to withdraw the 6 km length of permanent post construction Operation & Maintenance road (Item 3.5.2) (Item no 25 B of Minutes of Technical Negotiations dated 14 th March 2012. Pg 14 of 73) |
| 1.2 | Item 6 only include 17 km. 33 kv transmission line. Client confirmed the transformer in Naula is not included in the Contract. | The Employer confirmed that no facilities at Naula substation are included in the Contract except for the interconnections and testing. |
| 1.3 | The Client confirmed reservoir clearing is not included in the Contract and requested to delete item 3.4 with price of 2,000,000 US Dollars. The Client to revise the item to "clearing of construction area" with price 200,000 US Dollars. | The Employer confirmed that no reservoir bed clearing is required except in construction area at a cost of USD 200,000. |
| 1.4 | The Client confirmed the item 3.9 permanent camp with price 3,500,000 US Dollars is not included in the Contract. The Client requested to increase the quarter area with 1,500,000 US Dollars under item 1.2 Permanent camp. It is agreed by the Contractor. | The Employer confirmed that Item 1.2 of the Investment Estimate shall be increased by USD 1,500,000 in order to accommodate the Employer's residential facilities and to delete Item 3.9 entirely. |

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 கௌரவ அமைச்சர்
 Hon Minister

2528425
 Fax: 2528340

සේකර
 செயலாளர்
 Secretary

2554000
 Fax: 2554063

නාමයාලය
 அலுவலகம்
 Office

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நீர்ப்பாசனம் மற்றும் நீரவளங்கள் முகாமைத்துவ அமைச்சு
MINISTRY OF IRRIGATION AND WATER RESOURCES MANAGEMENT

500, පී.ටී. ජයාමාතා
කොළඹ 10.

500, පී.ටී. ජයා මාවත, කොළඹ 10.

500, T B Jayah Mawatha,
Colombo 10.

2/2/73

28th March 2012

Mr. Fu Linghua
General Manager
Synohydro Corporation Ltd.,
Colombo

Dear Mr Fu Linghua

EPC Contract of Moragahakanda Reservoir Headworks Project
Documents Preparation of Contract Signing

We refer to your email of 26th March 2012 relating to the preparation of the confirmed contract document.

Please submit Exhibit IV Particular Technical Specification if this is completed. This Exhibit IV should include the critical technical information discussed recently during the technical negotiation meetings and before.

We would like to bring to your attention that the structure of the Contract and all the documentation of the Contract was reviewed and agreed by the SCARC on 22nd March 2012. A copy of the full set of the documentation submitted to the SCARC was handed over to you prior to the SCARC meeting.

The General Technical Specifications were completed some time ago by the Client and submitted to you on 3rd February 2012. These will form Exhibit IIIB, IIIC, IIID of the contract document. We would like to bring to your attention that that Exhibit IIIE Technical requirements for the Interconnection of Generation resource was handed over to you in the technical negotiation meeting on Friday 9th March 2012. This was recorded in the minutes as Item 101 on page 54 of 74. In this case compliance with the applicable codes and standards within this document is mandatory for compatibility of power transmission into the grid. The documents namely, Exhibit IIIB, IIIC, IIID and IIIE were included in the documentation reviewed and approved by the SCARC on 22nd March 2012. The SCARC approved the concept, as agreed in the minutes of meeting, that Chinese codes will have priority within the Contract over the International Codes and Standards where applicable. The minutes of meeting will be included in Exhibit I.

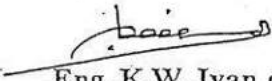
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Any other documentation that you are now preparing and considering to introduce into the Contract document can be added to Exhibit IV Particular Technical Specification or as the part of the Contractor's Proposal. This will be in compliance with the structure already approved by the SCARC.

Therefore we request that you submit the outstanding documentation immediately in order that we can collate the conformed Contract document and make this ready for both parties' signature.

Yours faithfully


Eng. K.W. Ivan de Silva
Secretary
Ministry of Irrigation & Water Resources Management

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 MINISTRY OF IRRIGATION AND WATER RESOURCES MANAGEMENT

අංක 500, ටී.බී.ජයා මාවත, இல:500, டி.பி. ஜயா மாவத்தை, No: 500, T.B.Jayah Mawatha, Website : www.irrigationmin.gov.lk
 කොළඹ - 10. கொழும்பு-10. Colombo- 10. E-mail : irrigationwm@gmail.com

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| මගේ අංකය } எனது கில } My No } IWRM/TS/2/73 | ඔබේ අංකය } உமது கில } Your No } | දිනය } திகதி } Date } 7.04.2012 |
|--|---------------------------------------|---------------------------------------|

Mr. Fu Linghua
 General Manager
 Synohydro Corporation Ltd
 Colombo

Dear Sir,

Moragahakanda Reservoir Head Works Project
Submission of Technical Specifications

We refer to your letter dated 7th April 2012 addressed to Chairman / Project Committee with a copy to me on the above subject and wish to inform that it is not possible to change in the stance taken by me at this moment and conveyed to you by my even numbered letter dated 28th March 2012, in respect of submission of Exhibit iii – GTS Vol. 1 Civil Works, GTS-Vol. 2 Electrical & Mechanical Works, GTS – Vol. 3 Transmission Lines.

In regard to second half of Retention Money, it will be paid as stipulated in the Sub. Clause 14.9 - Payment of Retention Money in the Particular Conditions of the Contract.

Yours sincerely,

o/c

Eng. K.W.Iwan de Silva
 Secretary
 M/ Irrigation & Water Resources Management

Cc. Chairman / Project Committee - For Information Please

| | | |
|--|--|---|
| මගේ අංකය } கௌரவ அமைச்சர் } Hon Minister: } 2688425 Fax: 2688340 | ලේකම් } செயலாளர் } Secretary } 2676844 Fax: 2676846 | කාර්යාලය } அலுவலகம் } Office } 2684710 300 427 } Fax: 2689548 |
|--|--|---|



中国水电建设集团国际工程有限公司
SINOHYDRO CORPORATION LIMITED

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01 65-77

Date: April 7th, 2012

To: Mr. Eng.D.C.Elakanda
Project Director (DSWRPP)
Chairman/TEC
Ministry of Irrigation and Water Resources Management
T.B. Jayah Mawatha, Colombo 10.



Headworks of Moragahakanda Reservoir Project

Subject: Submission of Technical Specifications

Dear Sirs,

This is reference to your letter dated on 03rd April 2011 with caption of "Confirmation and Clarification of Negotiations", herewith we submit the following Contract documents for your review:

Exhibit IV Particular Technical Specifications

- Exhibit III-GTS_Vol.1 Civil Works, GTS_Vol.2 Electrical and Mechanical Works, GTS_Vol.3 Transmission Lines

And another issue is that it is agreed to added "When the first half of Retention Money is paid, the second half of Retention Money can be replaced by a Guarantee "at the end of item 14.9 Payment of Retention Money". Please kindly confirm the same.

Ours faithfully,

Fu Linghua

General Manager in Sri Lanka

SinoHydro Corporation Limited

* Cc: 1. Secretary, MIWRM

Mr Wimala Per (07 MAY 12)
A spec
D C Elakanda
fil 2/2/12

Colombo Office
110, Horton Place, Colombo 7; 410/26A, Baudhaloka Mawatha, Colombo 07
Tel/Fax: +94-011-2667251/2, 2688727
Email: sinohydrolk@yahoo.com.cn

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@ copy to SPP
@ copy to TEC



中国水电建设集团国际工程有限公司
SINOHYDRO CORPORATION LIMITED

10

Date: April 24th, 2012

To: Mr. Eng.D.C.Elakanda
Project Director (DSWRPP)
Chairman/TEC
Ministry of Irrigation and Water Resources Management
T.B. Jayah Mawatha, Colombo 10



Headworks of Moragahakanda Reservoir Project

Subject: Technical Specifications Submission

Dear Sirs,

Kindly reference to the conversation with you on 23th April 2012, herewith we submit the Exhibit_IV -PTS_Vol.1, Vol.2 and Vol.3 as a part of Particular Technical Specifications.

Further please be noted that the submission of this time shall be included in Contract Documents Exhibit IV together with the previous submission of Exhibit_IV Particular Technical Specifications with letter dated on April 7th, 2012. Thanks.

The letter dated on April 7th, 2012 is attached for your easier understanding.

Yours faithfully,

Mr M. M. Genelab (Colombo)
Mr Wimalaka (Mawatha)
Jh
Rupe

Fu Linghua
General Manager in Sri Lanka
SinoHydro Corporation Limited

Cc: 1. Secretary, MIWRM

Colombo Office
110, Horton Place, Colombo 07; 410/26A, Baudhaloka Mawatha, Colombo 07
Tel/Fax: +94-011-2667251/2; 2688725
Email: sinohydrolk@yahoo.com.cn

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லாரிமார்க்கு க்கா சலகு சஸீசந் கலுமலாகர்லு அலுலலலலலல
 நீர்ப்பாசனம் மற்றும் நீர் வளங்கள் முகாமைத்துவ அமைச்சு
 MINISTRY OF IRRIGATION AND WATER RESOURCES MANAGEMENT

අංක 500, ටී.බී.ජයා මාවත, කොළඹ - 10. இல:500, டி.பி. ஜயா மாவத்தை, கொழும்பு-10. No: 500, T.B.Jayah Mawatha, Colombo- 10. Website : www.irrigationmin.gov.lk E-mail : irrigationwm@gmail.com

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| මගේ අංකය } எனது கில } My No } 02/02/73 | ඔබේ අංකය } உமது கில } Your No } | දිනය } திகதி } Date } 6 .06.2012 |
|--|---------------------------------------|--|

Mr. Fu Linghua
 General Manager in Sri Lanka
 Sinohydro Corporation Ltd

Dear Sir,

Moragahakanda Reservoir Headworks Project
Technical Specifications Submission

We refer to your letters dated 7th April 2012 and 24th April 2012 addressed to Chairman, Project Committee on the captioned subject and wish to inform that said Documents will be included under Contractor's Proposal in the Contract Document as communicated to you vide our even referenced dated 28th March 2012.

Yours faithfully,

Eng. P.U. Wickramaratna
 Addl. Secretary (TS)

Sgd. Eng. K.W. Ivan de Silva
 Secretary /Ministry of Irrigation
 & Water Resources Management

கட்சி அமைச்சர் }
உள்ள அமைச்சர் } 2688425
Hon Minister: }
Fax: 2688340

ලේකම් }
செயலாளர் } 2676844
Secretary }
Fax: 2676846

கාර්යாலயம் }
அலுவலகம் } 2684710
Office }
Fax: 2689548

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中国水电建设集团国际工程有限公司
SINOHYDRO CORPORATION LIMITED

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Mr. K.W. Ivan de Silva
Secretary
Ministry of Irrigation & Water Resources Management

June 5, 2012

*Add. See CTS)
Please take plus
up with the
relevant TEC
for comments
on a.i.a. Pleas
05/06/2012*

Subject: Amendment of Contract Agreement of Moragahakanda Reservoir Headworks Project

Dear Sir,

After reviewing the draft Contract Agreement of Moragahakanda Reservoir Headworks Project, we sincerely hope the followings can be amended as requested.

A. The Priority Order of the Contract Documents:

1、 Propose to amend CONTRACT AGREEMENT , Sub-Clause 1.5 Priority of Documents, put "10. The Particular Technical Specifications (Exhibit IV)"

10.1 The Particular Technical Specifications dated 21st February 2012

10.2 The Particular Technical Specifications dated 7th April 2012 (Ref para 2 in page 04 of 73 of Minutes of Technical Negotiations)" to be ahead of "6.The General Conditions - FIDIC-First Edition 1999 (Section I B of Exhibit I)";

2、 Based on the Minutes of Financial Negotiations between SCARC and SinoHydro Corporation Ltd, China held on 22nd March 2012 at the Office of the Prime Minister, (b) General: 4. Overall discount applicable for all items of the offer shall be 2%, so the Final Price Summary Sheet and BOQ provided by our company is attached by the Affix 1 INVESTMENT ESTIMATE OF THE HEAD WORKS OF MORAGAHAKANDA RESERVOIR , Affix 2 Bill Of Quantity;

3、 It is proposed to amend CONTRACT AGREEMENT, Sub-Clause 14.2 Advance Payment, "The Advance Payment shall be repaid by way of forty three percent (43%) deductions from each interim payment in accordance with this Sub-Clause." should be amended as "The Advance Payment shall be repaid by way of twenty five percent (25%) deductions from each interim payment in accordance with this Sub-Clause".

4、 CONTRACT AGREEMENT, Sub-Clause 8.1 Commencement of Works , should be correspondence with Annex 3 of Moragahakanda Reservoir Headworks Project Minutes of Technical Negotiations.

Colombo Office:

Address: 110, Horton Place, Colombo 7

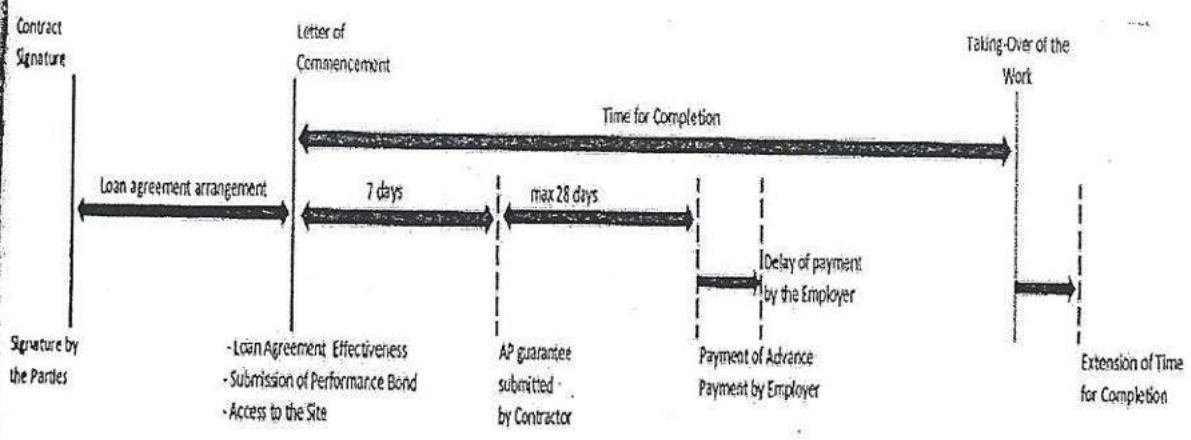
Tel/fax: +94-011-2638727, 2667251/2

Email: sinohydroell@yahoo.com.cn

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Moragahakanda Reservoir Headworks Project
Schematic for Agreement and Commencement of the Works



Note: The Employer shall make the Advance Payment to the Contractor within 28 days from the date the Employer receives the Advance Payment Guarantee from the Contractor

B. Civil Works

1. Annex VII is it acceptable to submit the latest programme for the execution of works of Moragahakanda Reservoir Headworks Project once the project commenced.
2. (vii) "English translation of Chinese Codes and Standards shall be submitted by the Contractor to the employer one month before the submission of Basic Designs." is advised to be amended as "Corresponding part of English translation of Chinese Codes and Standards shall be submitted by the Contractor to the employer one month before the submission of Basic Designs."

Handwritten signature or mark.

C. Electro-Mechanical Equipment

I. Potential Suppliers for Electro-Mechanical Equipment

| | | |
|---|--------------------|--|
| 1 | Turbine, Generator | Yibin Fuyuan Generator Equipment Company Limited |
| | | Chongqing Water Turbine Works Co., Ltd. |
| | | Fujin Nandian Co., Ltd. |
| | | Hangzhou Liyuan Generator Equipment Co., Ltd. |

II. Potential Suppliers for Hydro-Mechanical Equipment

| | | |
|---|---------------------|--|
| 1 | Gate | SINOHYDRO CORPORATION LIMITED |
| 2 | Pressure steel pipe | SINOHYDRO CORPORATION LIMITED |
| 3 | hoist | Xinxiang Crane Equipment factory Co., Ltd. |
| | | Changzhou Hydraulic Complete Equipment Co., Ltd. |
| | | Jiangsu Wujin Hydraulic Hoist Co., Ltd. |
| | | Sanmenxia Xinhua Hydraulic Machinery Co., Ltd. |

Your consideration and consent in this regard is highly appreciated.

Yours faithfully,



Fu Linghua
General Manager
Sinohydro Corporation Limited



Colombo Office:
Address 110, Horton Place, Colombo 7
Tel/fax: +94-011-2688727, 2667251/2
Email: sinohydrok@yahoo.com.cn

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Affix 1

INVESTMENT ESTIMATE OF THE HEAD WORKS OF MORAGAHAKANDA RESERVOIR

| ITEM | DESCRIPTION OF WORK ITEMS | UNIT | ESTIMATED QUANTITY | UNIT PRICE | AMOUNT (USD) |
|------|---|------|--------------------|------------|--------------------|
| 1 | General Works | | | | 34,646,156 |
| 1.1 | Mobilization and Demobilization | sum | 1 | 7,214,679 | 7,214,679 |
| 1.2 | Permanent Camp, Offices and Facilities to Employer and Engineer, Training and Any Employer's Expenses | sum | 1 | 10,559,735 | 10,559,735 |
| 1.3 | Provision and Maintenance of Vehicles to the Employer | sum | 1 | 2,413,335 | 2,413,335 |
| 1.4 | Temporary Roads and Bridges | sum | 1 | 3,286,290 | 3,286,290 ✓ |
| 1.5 | Contractor's Temporary Camps and Offices | sum | 1 | 2,900,084 | 2,900,084 |
| 1.6 | Contractor's Temporary Facilities on Site | sum | 1 | 3,918,112 | 3,918,112 |
| 1.7 | Aggregate Processing Plant | sum | 1 | 1,305,153 | 1,305,153 |
| 1.8 | Concrete Mixing Plant | sum | 1 | 536,018 | 536,018 |
| 1.9 | Safety, Health, Environment Protection (SHE) | sum | 1 | 2,512,750 | 2,512,750 |
| 2 | River Diversion Works | | | | 1,784,855 |
| 3 | Civil Works | | | | 170,349,649 |
| 3.1 | RCC Dam | sum | 1 | 95,347,884 | 95,347,884 |
| 3.2 | Rockfill Dam | sum | 1 | 58,707,380 | 58,707,380 |
| 3.3 | Power Station | sum | 1 | 11,120,282 | 11,120,282 |
| 3.4 | Clearing of the Construction Area | sum | 1 | 196,000 | 196,000 |
| 3.5 | Maintenance of Road | sum | 1 | 623,016 | 623,016 |
| 3.6 | Landscaping Works of Construction Area | sum | 1 | 288,745 | 288,745 |
| 3.7 | Drainage Work | sum | 1 | 1,746,882 | 1,746,882 |
| 3.8 | Reservoir Maintenance & Operating Office and Generating Plant Office | sum | 1 | 191,100 | 191,100 |

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INVESTMENT ESTIMATE OF THE HEAD WORKS OF MORAGAHAKANDA RESERVOIR

| ITEM | DESCRIPTION OF WORK ITEMS | UNIT | ESTIMATED QUANTITY | UNIT PRICE | AMOUNT (USD) |
|----------|--|------|--------------------|------------|-------------------|
| 3.9 | Gas Insulated Switchgear(GIS) Station | sum | 1 | 1,176,261 | 1,176,261 |
| 3.10 | Other Works | sum | 1 | 952,099 | 952,099 |
| 4 | Hydro-Mechanical Works | | | | 8,552,562 |
| 4.1 | Gate Equipment supply & Installation | sum | 1 | 5,070,214 | 5,070,214 |
| 4.2 | Hoisting device Supply & Installation | sum | 1 | 1,374,033 | 1,374,033 |
| 4.3 | Penstock Supply & Installation | sum | 1 | 2,108,315 | 2,108,315 |
| 5 | Electro-Mechanical Works | | | | 19,621,693 |
| 5.1 | Hydroturbine Supply & Installation | sum | 1 | 2,717,469 | 2,717,469 |
| 5.2 | Generator Supply & Installation | sum | 1 | 5,187,335 | 5,187,335 |
| 5.3 | Hoisting Apparatus Supply & Installation | sum | 1 | 498,009 | 498,009 |
| 5.4 | Hydraulic Auxiliary Equipment Supply & Installation | sum | 1 | 2,550,923 | 2,550,923 |
| 5.5 | Fire Fighting & Ventilation | sum | 1 | 195,202 | 195,202 |
| 5.6 | Electrical Equipment Supply & Installation | sum | 1 | 4,620,848 | 4,620,848 |
| 5.7 | Step-up Transforming Equipment Supply & Installation | sum | 1 | 1,696,473 | 1,696,473 |

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INVESTMENT ESTIMATE OF THE HEAD WORKS OF MORAGAHAKANDA RESERVOIR

| ITEM | DESCRIPTION OF WORK ITEMS | UNIT | ESTIMATED QUANTITY | UNIT PRICE | AMOUNT (USD) |
|-------------------------------------|--|------|--------------------|------------|--------------------|
| 5.8 | Public Equipment Supply & Installation | sum | 1 | 784,552 | 784,552 |
| 5.9 | GIS Supply & Installation | sum | 1 | 1,370,882 | 1,370,882 |
| 6 | Transmission Line 33KV | | | | 3,818,745 |
| 7 | Illumination System | | | | 53,561 |
| 8 | Testing and Commissioning of the Works | | | | 980,000 |
| 9 | Survey and Design | | | | 12,495,000 |
| Total (1+2+3+4+5+6+7+8+9) | | | | | 252,302,221 |

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MINISTRY OF IRRIGATION AND WATER RESOURCES MANAGEMENT

අංක 500, ටී.ඒ.ජයා මාවත, කොළඹ - 10. இல:500, டி.பி. ஜயா மாவத்தை, கொழும்பு-10. No: 500, T.B.Jayah Mawatha, Colombo- 10. Website : www.irrigationmin.gov.lk E-mail : irrigationwm@gmail.com

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My No } 02/02/73
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உமது கில }
Your No }
දිනය }
திகதி }
Date } 6 .06.2012

Mr. Fu Linghua
General Manager in Sri Lanka
Sinohydro Corporation Ltd

Dear Mr. Linghua

Amendment of Contract Agreement of
Moragahakanda Reservoir Headworks Project

We refer to your letter dated 5th June 2012 addressed to me on the captioned subject and wish to respond as follows.

A. The Priority Order of the Contract Documents

Reference Item 1, please be informed that your request cannot be heeded at this stage, simply because of the fact that the Priority of Documents and the Structure of the Contract Documents have been already approved by the SCARC on March 2012 and no alterations to the Priority of Documents and Structure of the Contract Document is possible now.

Reference Item 2, the changes incorporated in the Investment Estimate of the Headwork of Moragahakanda Reservoir cannot be acceded too, for the same reason given in above para under Item 1.

Reference, Item 3 this issue has been dealt in Page 59 of 73 under Minutes of Negotiations and this document takes precedence over Section 1C - Particular Conditions of Contract according to Priority of Document.

Reference, Item 4, we see no difference between Annex 3 in the Minutes of Negotiations and what has been put forward here.

B. Civil Work

1. We have no objection for your submission of the latest programme for the execution of work of Moragahakanda Reservoir Headworks as provided for under Sub Clause 8.3 Programme of Section 1C. Particular Conditions of Contract.
2. The Contractor shall submit the English translation of Chinese Codes and Standards to the Employer one month before the submission of Basic Designs to enable the Employer to fully comprehend it.

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வகலாள் அமைச்சர் } 2688425
Hon Minister: }
Fax: 2688340
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செயலாளர் } 2676844
Secretary }
Fax: 2676846
කාර්යාලය }
பி.ஆ.அ.க.ம் } 2684710
Office }
Fax: 2689548

C. Electro Mechanical Equipment

Please be informed that we have noted the potential suppliers for Electro Mechanical and Hydro Mechanical Equipment.

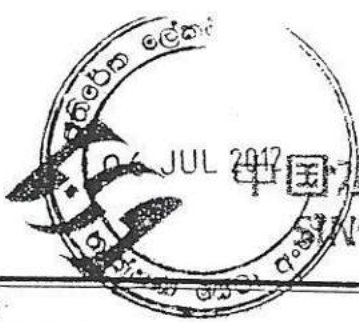
Yours faithfully,



Eng. P.U. Wickramaratna
Addl. Secretary (TS)

Sgd. Eng. K.W. Ivan de Silva
Secretary/ Ministry of Irrigation
& Water Resources Management

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中国水电建设集团国际工程有限公司
SINOHYDRO CORPORATION LIMITED

Handwritten number: 110-117

Mr. K.W. Ivan de Silva

June 5, 2012

Secretary

Ministry of Irrigation & Water Resources Management

Subject: Submission of Pay monthly Plan for Moragahakanda Reservoir Headworks Project

Dear Sir,

As requested, hereby we submit the Pay Monthly Plan (hereinafter attached) for your review.

Yours faithfully,

Handwritten notes:
Add. See CTS-ID / Add. See CTS-MASL / D (CTS-MASL)
F. n - a please
S / R w R M

Fu Linghua

General Manager

Sinohydro Corporation Limited

Handwritten notes:
Copy to:-
Eny M. M. Gunatilleke,
Consultant

Colombo Office:
Address: 110, Horton Place, Colombo 7
Tel/fax: +94-011-2688727, 2667251/2
Email: sinohydrok@yahoo.com.cn

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 நீர்ப்பாசனம் மற்றும் நீர் வளங்கள் முகாமைத்துவ அமைச்சு
 MINISTRY OF IRRIGATION AND WATER RESOURCES MANAGEMENT

අංක 500, ටී.ඒ.ජයා මාවත, කොළඹ - 10. இல:500, டி.பி. ஜயா மாவத்தை, கொழும்பு-10. No: 500, T.B.Jayah Mawatha, Colombo- 10. Website : www.irrigationmin.gov.lk E-mail : irrigationwm@gmail.com

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Mr. Fu Linghua
 General Manager in Sri Lanka
 Sinohydro Corporation Ltd

Dear Sir

**Submission of Pay Monthly Plan for Moragahakanda Reservoir
 Headworks Project**

We thank you for your letter dated 5th June 2012 annexing the Monthly Payment Schedule for the Captioned Project.

We wish to inform that there is hardly any time left for us to scrutinize the Monthly Payment Schedule and concur the document before the Agreement signing date scheduled on 8 June 2012 because of your delayed submission of same.

Hence, please be informed that your submission will be reviewed and concurred together with any refined document, you would wish to submit prior to the commencement of the permanent works in terms of Sub Clause 14.4 - Schedule of Payments in Section 1C - Particular Conditions of Contract in the Contract Document.

Yours faithfully,

Eng. P.U. Wickramaratna
 Addl. Secretary (TS)

Sgd. Eng. K.W. Ivan de Silva
 Secretary /Ministry of Irrigation
 & Water Resources Management

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| මහලු අමාත්‍යවරයා } வெள்ளையன் அமைச்சர் } Hon Minister: } 2688425 | ලේකම් } செயலாளர் } Secretary } 2676844 | කාර්යාලය } அலுவலகம் } Office } 2684710 |
| Fax: 2688340 | Fax: 2676846 | Fax: 2689548 |