

September 22, 2022,

TL2025/0922/1A

Ms. Bolormaa Amgaabazar
Country Director for Pakistan
Islamabad

Subject: Complaint Against Serious Allegations of Irregularities in the Procurement of 215 MW Madyan Hydropower Project E&M Works, Estimated Cost USD 153 million, Funded by the World Bank under Khyber Pakhtunkhwa Hydropower Renewable Energy Development (KHRE) Project, RFB No. PK-PEDO-339716-CW-RFB)

Dear Madam,

Transparency International Pakistan has received a complaint against serious allegations of irregularities in the procurement of 215 MW Madyan Hydropower Project E&M Works, estimated cost USD 153 million, funded by the World Bank under Khyber Pakhtunkhwa Hydropower Renewable Energy Development (KHRE) Project RFB No. PK-PEDO-339716-CW-RFB) (**Annex-A**).

The complainant has made the following allegations:

That:

1. The Khyber Pakhtunkhwa Energy Development Organization (PEDO) through PMO KHRE invited bids for 215 MW Madyan Hydropower Project E&M Works, estimated cost USD 153 million.
2. The evaluation process for the prequalification has taken place in contravention to the eligibility and qualification requirements as per the World Bank Procurement Regulations for IPF Borrowers
3. The IMPSA – ZKB JV has been prequalified and invited to submit the techno-commercial bid. However, the company has *mis-represented its corporate status as a “private company” whereas, on the contrary IMPSA is a state-owned entity* in violation of the requirements under the bidding documents (**Annex B & C**).
4. The Clause 3.1 (Financial Capabilities) of Qualification Criteria Section of Madyan Hydropower Project requires bidders to demonstrate adequate financial capability, as quoted below (**Annex-D**):
“The Applicant shall demonstrate that it has access to, or has available, liquid assets, unencumbered real assets, lines of credit, and other financial means (independent of any contractual advance payment) sufficient to meet the construction cash flow requirements estimated as USD \$ Thirteen (13) million for the subject contract(s) net of the Applicants other commitments.
The Applicant shall also demonstrate, to the satisfaction of the Employer, that it has adequate sources of finance to meet the cash flow requirements on works currently in progress and for future contract commitments.”
5. M/S IMPSA failed to comply with mandatory financial requirements on the following grounds (**Annex-E**):
 - a. The company has reported negative cash flows for four consecutive years (2019–2022). Only in 2023 was a positive cash flow recorded.
 - b. The company’s total revenues across all business segments (Hydro, O&G, Cranes, etc.) have remained extremely low. In 2023, revenue amounted to **USD 16.6 million**, which is disproportionately small for a company undertaking billion-dollar hydropower commitments.



- c. Despite low revenues, IMPSA declared profits before tax of USD 57.2 million in 2023, exceeding total revenues.
6. To meet the mandatory financial requirement under clause 3.1, IMPSA submitted letter from ADCAP Securities, a financial brokerage and not a recognized banking or financial institution. The letter is quoted below (Annex-F)
- "We are pleased to inform you that we herewith give our commitment to arrange and underwrite, in connection with the financing of the reference project, subject to the standard conditions that our entity considers for such cases and in accordance with internal regulations, a financial facility of USD 15 million.*
- The above does not imply acceptance of the granting of the loan line, neither the entity nor its signatories guaranteeing said granting in any way until IMPSA S.A. has the contract awarded and signed with PEDO for the reference project and complete evaluation according to the prevailing standards at that time and its credit and markets conditions."*
7. The Khyber Pakhtunkhwa Energy Development Organization (PEDO) has ignored serious concerns regarding IMPSA's technical capability where it has supplied substandard material and construction in the previous project and the client had to take adverse action. In 2018, Sarawak Energy Berhad (SEB), the employer for "Bakun Hydropower Project" implemented by IMPSA was compelled to issue a Request for Quotation (RFQ) for service and technical analysis to address failures in turbine units (Annex-G)
8. The Clause ITB 4.1 required that all Joint Venture (JV) partners be jointly and severally liable for the execution of the Contract. The IMPSA-ZKB JV indicates that IMPSA holds a 90% shareholding and whereas ZKB holds only a 10% shareholding, in violation of the requirement of equal liability for contract, as quoted below (Annex-H)

"In the case of a joint venture, all members shall be jointly and severally liable for the execution of the entire Contract in accordance with the Contract terms."

Transparency International Pakistan's Comments

Transparency International Pakistan has reviewed the allegations of the complaint, prima facie the allegations seem to be correct. Following are TI Pakistan comments:

1. The World Bank's Procurement Guidelines and the relevant bidding document clauses quoted by the complainant are unequivocal in regard that only state-owned enterprises which are legally and financially autonomous can be considered eligible, as quoted below:

"Bidders that are state-owned enterprises or institutions in the Employer's Country may be eligible to compete and be awarded a Contract(s) only if they can establish, in a manner acceptable to the Bank, that they

 - (i) are legally and financially autonomous*
 - (ii) operate under commercial law, and*
 - (iii) are not under supervision of the Employer."*
2. The World Bank and the Khyber Pakhtunkhwa Hydropower Renewable Energy Development (KHRE) Project must investigate serious allegations of financial bankruptcy of the prequalified bidder, too little annual turnover, available cash as well as the technical performance in form of an adverse action from the previous client for a similar work.

Transparency International Pakistan Recommendations

Transparency International Pakistan requests the Country Director World Bank to examine the allegations of the complaint to determine their veracity. If the allegations are found correct, World Bank must take appropriate action in compliance with World Bank Anti-Corruption Policies and re-initiate procurement



process for the prequalification of bidders in compliance with World Bank guidelines and requirements in the RFP.

Transparency International Pakistan is striving for across the board application of Rule of Law, which is the only way to stop corruption, and achieve against Zero tolerance against corruption

With Regards,

(Advocate Daniyal Muzaffar)
Trustee/Legal Advisor
Transparency International Pakistan

Copies forwarded for the information with request to take action under their mandate to:

1. PSPM, PM House, Islamabad
2. Chief Minister KP, CM House, Peshawar
3. Project Director, (KHRE) Project
4. Chairman, PMIC, Islamabad
5. Registrar, Peshawar High Court
6. Head, World Bank Integrity Unit

Note:

This is to clarify that Transparency International Pakistan is not a complainant, it acts as a whistleblower and operate under Article 19-A, of the Constitution of Pakistan which gives the right to public to know how government is being run by public officers. Article 19-A makes the right to access of information pertaining to a public authority a fundamental right, and a three member bench in case of Mukhtar Ahmad Ali vs the Registrar, Supreme Court of Pakistan, Islamabad, headed by Chief Justice Qazi Faez Isa in the landmark judgment on 16 October 2023, in CP No. 3532/2023, has declared that

"What previously may have been on a need-to-know basis Article 19A of the Constitution has transformed it to a right-to-know, and the Access to information is no longer a discretion granted through occasional benevolence, but is now a fundamental right available with every Pakistani which right may be invoked under Article 19A of the Constitution"

Subject: Irregularities in the Bidding and Evaluation Process of Electro-Mechanical Works of 215 MW Madyan Hydropower Project by PEDO in Khyber Pakhtunkhwa

Dear Sir,

We would like to submit for your consideration grave concerns regarding the procurement, bidding and evaluation process of the following multi-million-dollar project undertaken by the Pakhtunkhwa Energy Development Organization (PEDO), financed through the World Bank:

- **215 MW Madyan Hydropower Project** (estimated cost: USD 153 million for E&M Works)

It has reported with the credible information that material irregularities have occurred during the evaluation process and subsequent recommendation of this project. Members of the bid evaluation committee have disregarded fundamental eligibility and qualification requirements, thereby failing to apply the mandatory standards prescribed under:

- **The World Bank Procurement Regulations for IPF Borrowers** (July 2016, revised 2020), which are binding in view of the loan financing, especially the obligations under Sections III and V relating to integrity, non-discrimination and compliance with evaluation procedures as stipulated in the bidding documents.

And

- **The Khyber Pakhtunkhwa Public Procurement Regulatory Authority (KPPRA) Rules**, as adopted by the Province of Khyber Pakhtunkhwa, particularly the provisions requiring transparency, fairness, equal treatment of bidders and adherence to prescribed evaluation criteria;

A careful review of both IMPSA's **Legal Status, Technical Performance and Financial Position** demonstrates clear inconsistencies, weaknesses and risks which appear to have been overlooked or disregarded during the qualification process.

Misdeclaration of Entity Status by IMPSA in the JV with ZKB:

The **IMPSA – ZKB JV**, which has been prequalified and invited to submit the techno-commercial bid for the subject project, have made a material misrepresentation regarding its corporate status.

As per the **Letter of Bid** contained in the Bidding Documents (Bidding Forms Section), each bidder is required to explicitly declare its status, whether, it is a **state-owned enterprise** or a **private entity** (Form enclosed as Annex-A). Contrary to factual circumstances at the time of bidding, IMPSA declared itself as a **Private Entity**, whereas available information / records indicate that IMPSA was, in fact, **state-owned** at that time.

The World Bank's Procurement Guidelines and the relevant bidding document clauses are unequivocal in this regard. For ready reference, the applicable provision states:

"Bidders that are state-owned enterprises or institutions in the Employer's Country may be eligible to compete and be awarded a Contract(s) only if they can establish, in a manner acceptable to the Bank, that they

(i) are legally and financially autonomous

(ii) operate under commercial law, and

(iii) are not under supervision of the Employer."

The information submitted by IMPSA is misleading and should be addressed in accordance with the **World Bank Procurement Guidelines**. It is important to note that IMPSA was under the direct control of both the Central Government of Argentina and the Provincial Government of Mendoza, and therefore cannot be considered legally and financially autonomous.

Financial Vulnerability of Lead Partner IMPSA:

An analysis of IMPSA's financial records further indicates material weaknesses, inconsistencies, and speculative earnings that undermine the credibility of its financial standing.

i. Cash Flow from Operations

IMPSA reported negative cash flows from operating activities for four consecutive years (2019–2022). Only in 2023 was a positive cash flow recorded, which cannot be regarded as a reliable or sustainable trend.

ii. Revenue Base

IMPSA's total revenues across all business segments (Hydro, O&G, Cranes, etc.) have remained extremely low. In 2023, revenue amounted to **USD 16.6 million**, which is disproportionately small for a company undertaking billion-dollar hydropower commitments.

iii. Profitability Anomalies

Despite low revenues, IMPSA declared profits before tax of USD 57.2 million in 2023, exceeding total revenues. These profits were not derived from operations but from financial gains, mainly foreign exchange revaluations.

iv. Foreign Exchange Exposure

IMPSA's profit profile is driven by currency volatility, arising from the revaluation of assets and liabilities denominated in foreign currencies against the Argentine Peso. This creates artificially inflated and unsustainable profitability, unrelated to core business performance.

v. Non availability of Financial Resources:

As per the Clause 3.1 (Financial Capabilities) of Qualification Criteria Section of Madyan Hydropower Project bidding documents, it was **mandatory for bidders** to demonstrate adequate

financial capability to ensure smooth execution of the project. The relevant clause is reproduced below for reference:

"The Applicant shall demonstrate that it has access to, or has available, liquid assets, unencumbered real assets, lines of credit, and other financial means (independent of any contractual advance payment) sufficient to meet the construction cash flow requirements estimated as USD \$ Thirteen (13) million for the subject contract(s) net of the Applicants other commitments. The Applicant shall also demonstrate, to the satisfaction of the Employer, that it has adequate sources of finance to meet the cash flow requirements on works currently in progress and for future contract commitments."

In compliance with this requirement, IMPSA submitted a letter issued by ADCAP Securities (enclosed herewith as *Annex-E*), which is in fact a financial brokerage and not a recognized banking or financial institution. The contents of the said letter are reproduced below for ready reference:

"We are pleased to inform you that we herewith give our commitment to arrange and underwrite, in connection with the financing of the reference project, subject to the standard conditions that our entity considers for such cases and in accordance with internal regulations, a financial facility of USD 15 million."

The above does not imply acceptance of the granting of the loan line, neither the entity nor its signatories guaranteeing said granting in any way until IMPSA S.A. has the contract awarded and signed with PEDO for the reference project and complete evaluation according to the prevailing standards at that time and its credit and markets conditions."

It is evident that the above letter does not establish **IMPSA's Independent Financial Capacity** as required under the bidding documents. Instead, it merely reflects a conditional commitment from a financial institution, subject to award of contract. Accordingly, IMPSA's submission fails to satisfy the explicit financial capability requirement of the bidding documents, which required evidence of liquid assets or unencumbered lines of credit available *independent of contract award*. Acceptance of such conditional documentation risks undermining the integrity of the evaluation process and may constitute non-compliance with the World Bank's procurement regulations.

Serious Concerns regarding IMPSA's Technical Capability:

IMPSA's historical performance reveals significant deficiencies in the execution and reliability of its hydropower equipment, raising concerns about its technical capacity and long-term dependability as a contractor. For example, IMPSA has referred one project "Bakun Hydropower Project" for the prequalification of Madyan Hydropower Project. Under this project, IMPSA was responsible for supplying four (04) turbine units, each with a capacity of 300 MW. However, shortly after commissioning, serious technical defects began to emerge in the turbines. Most notably, the turbine runners developed cracks,

compromising the performance and operational safety of the units. This necessitated costly interventions, and the Employer was compelled to replace the defective turbine runners within a short period of operation. Further, in-depth, details are as follows:

- **Bakun Hydropower Project (Malaysia)**

The Employer, **Sarawak Energy Berhad (SEB)**, detected cracks on the first two runners supplied by **IMPSA**. In 2018, SEB was compelled to issue a Request for Quotation (RFQ) for service and technical analysis to address these failures (copy attached). This clearly demonstrates defects in **IMPSA's** core turbine technology and raises questions about the company's quality assurance and product reliability.

Such failures, particularly at large-scale projects, cast serious doubt on **IMPSA's** technical capacity to deliver reliable, durable and safe equipment for future undertakings. The recurrence of these deficiencies indicates not isolated incidents, but systemic shortcomings in design, manufacturing, and quality assurance. Moreover, the omissions and oversights, whether deliberate or negligent are not merely procedural deficiencies but may constitute violations of statutory and contractual obligations. They risk undermining the legality and enforceability of the procurement process, potentially rendering the awards voidable and exposing the implementing agency to financial liability, audit objections and reputational damage.

Vulnerability of Joint Venture Structure:

As per **Clause ITB 4.1** of the Bidding Documents, all Joint Venture (JV) partners are required to be **jointly and severally liable** for the execution of the Contract. The relevant clause is reproduced below for ready reference:

"In the case of a joint venture, all members shall be jointly and severally liable for the execution of the entire Contract in accordance with the Contract terms."

However, the proposed JV Agreement indicates that **IMPSA** holds a **90% shareholding** and would be responsible for the complete technical scope on the basis of its prior experience, whereas **ZKB** holds only a **10% shareholding** and would be limited to inland transportation and office management.

Such allocation of scope among the JV partners, despite the requirement of equal liability for contract execution, is not only inconsistent with the provisions of the bidding documents but also constitutes a material deviation from the mandatory requirements. This deviation undermines the principle of joint and several liability and, therefore, renders the JV arrangement non-compliant and liable for rejection under the applicable bidding rules.

In these circumstances and in the paramount interest of safeguarding public funds and donor resources, we strongly require that:

1. An independent body inquiry or forensic audit be constituted to review the bidding and evaluation process of the subject projects;
2. The inquiry ascertains strict compliance with World Bank Procurement Regulations and Khyber Pakhtunkhwa Public Procurement Authority (KPPRA) regulations;
3. Any instances of bias, conflict of interest or departure from the evaluation criteria be identified and addressed through appropriate remedial, disciplinary or legal measures;
4. Corrective steps be mandated to ensure future procurements by PEDO fully comply with national procurement laws and international donor requirements to uphold the World Bank Integrity Guidelines.

We would also like to submit that such intervention is indispensable to uphold the principles of transparency, accountability, and fair competition, to protect the credibility of the procurement system in Khyber Pakhtunkhwa, and to maintain the confidence of international lenders and development partners.

We are enclosing herewith the detailed shortcomings and discrepancies in the qualification of the most advantageous bidders, as Annexures.

We trust your esteemed office will treat this representation with the seriousness and urgency it merits.

Respectfully,

Enclosed Documents:

- | | |
|--|-----------|
| • Form of Letter of Bid | (Annex-A) |
| • Bidding Document Clause for Eligible Bidders | (Annex-B) |
| • World Bank Guide Lines | (Annex-C) |
| • IMPSA's Legal Status (at the time of bid submission) | (Annex-D) |
| • Bank Letter against Credit Line | (Annex-E) |
| • SEB Document | (Annex-F) |
| • JV Agreement, Shareholding & scope of work | (Annex-G) |

prequalification process, bid submission, proposal submission and contract performance (in the case of award), and to have them audited by auditors appointed by the Bank.

4. Eligible Bidders

4.1

A Bidder may be a firm that is a private entity, a state-owned enterprise or institution subject to ITB 4.6, or any combination of such entities in the form of a joint venture (JV) under an existing agreement or with the intent to enter into such an agreement supported by a letter of intent. In the case of a joint venture, all members shall be jointly and severally liable for the execution of the entire Contract in accordance with the Contract terms. The JV shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the members of the JV during the Bidding process and, in the event the JV is awarded the Contract, during contract execution. Unless specified in the BDS, there is no limit on the number of members in a JV.

Please read the above highlighted line in combination with ITB 4.6

4.2

A Bidder shall not have a conflict of interest. Any Bidder found to have a conflict of interest shall be disqualified. A Bidder may be considered to have a conflict of interest for the purpose of this Bidding process, if the Bidder:

- (a) directly or indirectly controls, is controlled by or is under common control with another Bidder; or
- (b) receives or has received any direct or indirect subsidy from another Bidder; or
- (c) has the same legal representative as another Bidder; or
- (d) has a relationship with another Bidder, directly or through common third parties, that puts it in a position to influence the Bid of another Bidder, or influence the decisions of the Employer regarding this Bidding process; or
- (e) or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the Plant and Installation Services that are the subject of the Bid; or
- (f) or any of its affiliates has been hired (or is proposed to be hired) by the Employer or Borrower as Project Manager for the Contract implementation; or
- (g) would be providing goods, works, or non-consulting services resulting from or directly related to consulting services for the preparation or implementation of the

shall have determined. The list of debarred firms and individuals is available at the electronic address specified in the BDS.

- | | |
|-----|---|
| 4.6 | Bidders that are state-owned enterprises or institutions in the Employer's Country may be eligible to compete and be awarded a Contract(s) only if they can establish, in a manner acceptable to the Bank, that they (i) are legally and financially autonomous (ii) operate under commercial law, and (iii) are not under supervision of the Employer. |
|-----|---|
- 4.7 A Bidder shall not be under suspension from Bidding by the Employer as the result of the operation of a Bid-Securing Declaration or Proposal-Securing Declaration.
- 4.8 Firms and individuals may be ineligible if so indicated in Section V and (a) as a matter of law or official regulations, the Borrower's country prohibits commercial relations with that country, provided that the Bank is satisfied that such exclusion does not preclude effective competition for the supply of goods or the contracting of works or services required; or (b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, the Borrower's country prohibits any import of goods or contracting of works or services from that country, or any payments to any country, person, or entity in that country. Where the procurement is implemented across jurisdictional boundaries (and more than one country is a Borrower, and is involved in the procurement), then exclusion of a firm or individual on the basis of ITB 4.8 (a) above by any country may be applied to that procurement across other countries involved, if the Bank and the Borrowers involved in the procurement agree.
- 4.9 A Bidder shall provide such documentary evidence of eligibility satisfactory to the Employer, as the Employer shall reasonably request.
- 4.10 A firm that is under a sanction of debarment by the Borrower from being awarded a contract is eligible to participate in this procurement, unless the Bank, at the Borrower's request, is satisfied that the debarment; (a) relates to fraud or corruption, and (b) followed a judicial or administrative proceeding that afforded the firm adequate due process.
- 4.11 This bidding is open only to prequalified Bidders unless specified in the BDS.

IMPSA Ownership Timeline (2021–2024)

June 2021

IMPSA is nationalized; the Argentine national government acquires 63.7%, the Province of Mendoza acquires 21.2%, totaling 84.9% in public hands, following a capital injection of US \$20 million. (Wikipedia, IMPSA)

July 2021 – Mid-2024

IMPSA remains state-controlled, with majority public ownership (84.9%). No sale or privatization occurs during this period.

July 2024 – October 2024

The government initiates an asset transfer process due to ongoing financial losses and heavy debt (~US \$500 million). (Wikipedia)

ARC Energy (via IAF) submits the only formal privatization offer (US \$27 million + assumption of US \$576 million debt). (Wikipedia, Rio Times, El País)

February 11, 2025

Final privatization completed: shares formally transferred to ARC Energy/IAF. IMPSA is no longer state-owned. (Wikipedia, IMPSA, Reuters)

financial capability to ensure smooth execution of the project. The relevant clause is reproduced below for reference:

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CONTRACT No: PK-PED0-339716-CW-RFB

Project Director
Madyan Hydropower Project
KHRE - PEDO
Peshawar, Pakistan

Subject: Declaration Regarding IMPSA S.A. and Commitment of Financial Support for Madyan HPP E&M Lot

Of our consideration:

We inform you that IMPSA S.A. and its new major parent company IAF are regular clients of our company and we have registered in our books an account opened *in our Argentina Office*, in the name of IMPSA S.A., identified as per Argentinian commercial laws with tax ID number 30-50146646-4, with address at Rodriguez Peña 2451, Godoy Cruz Mendoza, Argentina, which have been operating normally.

We are fully aware of the business line of IMPSA S.A. as Hydropower Plant Equipment supplier for projects worldwide and understand that financial facilities are a substantial requirement for it.

Our experience working with both clients to date with respect to compliance has been satisfactory.

We are pleased to inform you that we herewith give our commitment to arrange and underwrite, in connection with the financing of the reference project, subject to the standard conditions that our entity considers for such cases and in accordance with internal regulations, a financial facility of USD 15 million.

The above does not imply acceptance of the granting of the loan line, neither the entity nor its signatories guaranteeing said granting in any way until IMPSA S.A. has the contract awarded and signed with PEDO for the reference project and complete evaluation according to the prevailing standards at that time and its credit and markets conditions.

Without further to add, greeting to you sincerely.

For AdCap Securities Ltd

Name: Juan Martin Molinari

Designation: Director

APPENDIX 1 – SCOPE OF SERVICES

Sarawak Energy Berhad (SEB) invites a suitable and competent contractor to provide service for Turbine Runner Stress Analysis, Failure Investigation, Non Destructive Test (NDT) and Metallurgical Services, Bakun Power Station which will cover but not limited to, the following aspects;

1. Introduction:

The Bakun Power Station has 8x300 MW Hydro Machines operational since 2011 and has had problems with cracking of two turbine runners.

The runners have cast blades and crowns welded together using martensitic stainless steel CA 6NM material.

The Evidence to date is that Machines 1 and 2 have experienced runner cracking because of:

- Application of incorrect weld metal during the manufacturing process
- Ferritic contamination of stainless steel surfaces in the workshop
- Previously undetected casting flaws present in the runner structure

The questions are:

- Are they safe to run?
- Are the cracks propagating and at what potential rate?
- What is the Critical Flaw before catastrophically failure?
- What are the root causes of the cracks?
- For weld repairs previously carried out – what is the full assessment of the quality, strength and future fatigue resistance?
- What is the review of the Critical Design Information?
- What assessment is required to assess the Consequences, Probability of Failure and Risks?

Internal Site Inspection, Independent Stress Analysis to BS 7910 and Metallurgical advice are required to answer the questions above.

Request for Quotation

Location

The Bakun Power Station— owned and operated by Sarawak Energy, is in the Malaysian State of Sarawak on Borneo Island.

The Bakun Power Station has a well-equipped township with good accommodation and facilities.

The Station is remote being 3-hour drive from the nearest city and major airport at Bintulu.

2. Tentative date for U1 to U4 Outages

Outage Dates	Unit No	Tentative Window for Internal Inspection	Comments
20.1.18 to 19.2.18	U2	29.1.18 to 7.2.18	Runner Cracking possible may extend outage if we need to repair cracks
21.2.18 to 18.3.18	U1	2.3.18 to 11.3.18	Runner Cracking possible may extend outage if we need to repair cracks
20.4.18 to 15.5.18	U3	29.4.18 to 8.5.18	Runner Cracking possible may extend outage if we need to repair cracks
15.5.18 to 9.6.18	U4	24.5.18 to 2.6.18	Runner Cracking possible may extend outage if we need to repair cracks

3. Scope of Work Inspection, Stress Analysis and Failure Investigation

- Inspect U1 to U4
- Gather critical runner dimensions and obtain OEM Design information
- Carry out Independent:
 - Stress analysis to BS 7910
 - Turbine Runner Inspection
 - Perform NDT
 - Dimensional Check on Turbine Runner
 - Review site NDT and results

MADYAN HYDROPOWER PROJECT
CONTRACT NO: PK-PEDO-339716-CW-RFB
 Islamic Republic of Pakistan

IMPISA



IMPISA - ZKB JV

PROPOSED JOINT VENTURE AGREEMENT

PARTIES:

IMPISA S. A., a company organized and existing under the laws of Argentina having office at Carril Rodriguez Peña 2451, Godoy Cruz, M5503AHY, Mendoza, Argentina, hereby duly represented by Mr. Ricardo Dell'Agnola (hereinafter "IMPISA")

and

Zahir Khan & Brothers, a company organized and existing under the laws of Islamic Republic of Pakistan having office at Plot No. 44, Street No. 11, 1-9/2, Islamabad, duly represented by Mr. Soleman Khan (hereinafter "ZKB").

(and together with IMPISA, the "Parties"), declare:

PROJECT:

Considering that:

Pakhtunkhwa Energy Development Organization (PEDO), Government of Khyber Pakhtunkhwa (KP) Islamic Republic of Pakistan, is requesting for Bids (Plant) for the Design, Supply, and Installation (After Prequalification), Two-Envelope Bidding Process (Rated Criteria), E & M Works: Turbines, Generators, Control Room, Equipment, SCADA, Auxiliaries, Power Transformers, Switch Yard, Switch Gear (GIS), Transmission Line, Control Equipment at Weir and Allied E&M Works, for MADYAN HYDROPOWER PROJECT (Ln./Cr # IBRD-91640; IDA-67790), CONTRACT No: PK-PEDO-339716-CW-RFB.

The Client has awarded the Parties with the contract for the Project.

Therefore, as required by the Bid Documents, the Parties wish to enter into a Joint Venture Agreement for the execution of the Project, in accordance with the following terms and conditions:

SECTION I: Constitution of the JV. Object.

The Parties hereby constitute a Joint Venture (hereinafter referred to as the "JV") with the object of executing the Project in partnership with each other.

SECTION II: Members of the Joint Venture. Participation. Scope of work.

The JV shall have 2 (two) members with the following participation, being the estimated scope of work of each member the following:

1) IMPISA:	90 %
2) ZKB:	10 %



MADYAN HYDROPOWER PROJECT

CONTRACT NO: PK-PEDO-339716-CW-RFB

Islamic Republic of Pakistan

IMP**SA**



IMP**SA - ZKB JV**

The scope of activities to be carried out by each Party of the JV shall be as follows:

1) IMPSA

- Big and Small Synchronous Generators with Excitations,
- Ecological Mini Synchronous Generator with Excitation,
- Big and Small Turbines,
- Big and Small Governors,
- Big and Small Main Inlet Valves,
- Hydro-Mechanical Equipment-For Mini Unit,
- Mini Unit Governor,
- Control and Monitoring System for Powerhouse and Weir,
- Protection System,
- CCTV and Access Control System.
- Big and Small Generator Step-up (GSU) Transformers,
- 220 kV SF6 GIS with Control System,
- Generator's Phase Cubicles,
- Powerhouse Switchgears,
- Electrical Balance of Plant,
- Main Transmission Line and Interconnection,
- Water Flow and Level Meter,
- 13,8 kV/11 kV Transmission Line,
- Powerhouse Mechanical Auxiliaries,
- Powerhouse Overhead Crane Major Equipment / System,
- Control Building Lift/Passenger Elevator,
- Monorail Cranes for GIS, Transformer and Mini Hydropower,
- Erection.
- Contract Management

2) ZKB

- Arrangement of accommodation facilities for Project Management at Islamabad (or wherever the Project Management office is going to be located)
- Inland transportation from Port of Karachi to Madyan Power Plant
- Provision of the local support to IMPSA for the execution of works (accommodation facilities, working Visas and permits for IMPSA's personnel in Pakistan
- Construction and running of Camp office.

The assigned scope and parts of contract correspond to the members' respective experience and capacity to implement them.

SECTION III: JV Lead Member. Decisions

The JV Lead Member shall be IMPSA S.A.

