

**Khyber Pakhtunkhwa Hydropower and  
Renewable Energy Development Program  
(P163461)**

**Project Procurement Strategy for  
Development (PPSD) - Revised for  
Madyan HPP and other Renewable  
Energy Investments**

**July 2023**

## ABBREVIATIONS /ACRONYMS

ADB	Asian Development Bank
E & M	Electrical & Mechanical
EOI	Expression of Interest
ESIA	Environmental & Social Impact Assessment
ESM	Environmental & Social Management
E & P	Energy & Power
GKH	Gabral Kalam Hydropower Project
GoKP	Government of Khyber Pakhtunkhwa
GoP	Government of Pakistan
GRM	Grievance Redressal Mechanism
GWh	Giga Watt Hour
IBRD	International Bank for Reconstruction & Development
ICB	International Competitive Bidding
IPOE	Independent panel of experts
KP	Khyber Pakhtunkhwa
MSC	Management Support Consultant
MW	Mega Watt
NGOs	Non Governmental Organizations
O&M	Operation & Maintenance
PEDO	Pakhtunkhwa Energy Development Organization
PDO	Project Development Objective
PIC	Project Implementation Consultant
PIU	Project Implementation Unit
PMO	Project Management Organization
PPP	Public Private Partnership
PPSD	Project Procurement Strategy for Development
QCBS	Quality and Cost Based Selection
RE	Renewable Energy
SRB	Swat River Basin
STEP	Systematic Tracking of Exchanges in Procurement
WAPDA	Water and Power Development Authority
WB	World Bank

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## 1 Project Overview

<b>Country:</b>	Islamic Republic of Pakistan
<b>Implementing Entities:</b>	Pakhtunkhwa Energy Development Organization (PEDO) Energy & Power Department, Government of Khyber Pakhtunkhwa (GoKP)
<b>Full Project Name:</b>	Khyber Pakhtunkhwa Hydropower and Renewable Energy Development (KP Hydro & RE/KHRE)
<b>Total Estimated Cost and Indicative Financing Plan:</b>	Total Project Cost = \$727 million (excluding PEDO overheads, PMO establishment and other administrative costs of about US\$ 14 million; and IDC and Financing costs excluding IBRD of about USD45 Million) World Bank Share = \$ 450 million (including IBRD financing cost) GoKP & PEDO Share = \$92 million (excluding financing cost) Commercial and Private Sources = \$ 185 million Note: Financing plan is indicative; efforts will be made to mobilize as much commercial financing as feasible/possible and the PEDO/GoKP share will depend upon the level of commercial capital that is mobilized.
<b>Project Number:</b>	P-163461
<b>Project Development Objectives</b>	Increase renewable energy generation and strengthen the capacity of associated institutions in Khyber Pakhtunkhwa.

### 1.1 Program Description and Objectives

Pakistan's power sector has seen for years, the significant shortage of electricity and insufficient transmission and distribution systems. Country's energy mix has seen a phenomenal shift from hydel (clean energy) to fossil fuel. This shift not only resulted in increased cost of energy but has continuous bad environmental impacts. The share of hydropower which used to be 60 to 70 percent before 1990 is currently less than 25 percent. The Renewable Energy Policy 2021 envisages shifting the generation mix to 63 percent renewable sources including solar, wind and hydro thus reversing the large dependence on imported fossil fuels.

The Khyber Pakhtunkhwa Hydropower and Renewable Energy Development Program is a transformational Program that besides tapping green energy would help in building capacity and institutions for harvesting the large renewable

energy potential of the Province and help the government achieve its RE objectives. KHRE is a different project than the traditional investments, it is like a framework project that develops hydropower and renewable energy program for KP. All investments in this were not designed in detail upfront. As reflected in PAD and PPSD of March 2020 only detailed design of GKH had been completed and future investments were to be prepared during project implementation.

In first phase procurement for subcomponent (A1) for construction of 88 MW Gabral- Kalam Hydropower project (GKHPP) has commenced through three packages. Unfortunately, bids were not received in December 2022 and May 2023 for the two main packages. Key reasons were the security concerns and lacked wider participation. The reasons are described in detail in the Bid Evaluation Reports. Rebidding process has now started after addressing those concerns. Request for Bids (RFB) have been issued for rebidding of Package-1 (Civil Works) and RFB for rebidding of Package-2 (E&M Works) is expected to be issued shortly, for Package 3 the Contract is awarded and works has commenced

The detailed design including preparation of environmental and social documents of Madyan HPP for subcomponent A2 are now being carried out under KHRE (by the design consultants) and along with it the procurement strategy and packaging has been developed. Madyan Pre-Qualification documents for both Civil and E&M works have been received from the applicants and are under evaluation. Sub-component A2 will also support investment in other hydropower projects and sub-component A3 will help install solar PVs on hydropower assets.

Program for up gradation of PEDO's capacity as a world class entity for development of renewable resources (Component B and D of the Program) will run in parallel. The program is designed to facilitate expansion of hydropower and renewable energy development in KP that are technically sound, environment friendly, socially sustainable and investment ready. It is structured in a way that supports commercial financing and private investments for development of renewable energy (RE) projects in Khyber Pakhtunkhwa (KP). Detailed assessment of future projects is taken care of under Component-B wherein access roads for such projects will be built to attract private investors and financiers.

First approved PPSD (March 2020) covered investment in GKH and there key consultancies. PPSD is now being updated to add 2<sup>nd</sup> investment under KHRE – 157 MW Madyan HPP, a project of the Swat River Basin and other renewable energy investments to be financed through KHRE.

## 1.2 Components of the Program

**Component A: Development of hydropower and renewable energy investments (US \$ 594 m).** This component will support development of public sector investments in hydropower and renewable energy projects in a sequenced manner through following sub-components.

(A1) **Gabral-Kalam Hydropower Project (US\$ 182 m).** Construction of Gabral-Kalam HPP (GKH) located on Gabral River. It is 88MW run-of-river hydropower project that will generate 339giga-watt-hours (GWh) annually. Major activities under this sub-component are:

(A1.1) construction of river diversion, weir, tunnel, power house building/cavern, access roads, project colony, offices, houses, and other ancillary infrastructure;

(A1.2) installation of turbines, generators and electro-mechanical equipment for power plant, the sub-station/switch-yard and transmission line, and auxiliary electromechanical equipment.

(A2) **Cascade Development of River Basins. (US\$ 400 m).** This sub-component will finance the construction of HPP(s) of the Swat River Basin (SRB) and other river basins. Presently, 157 MW Madyan HPP on the Swat River has been selected for inclusion under this sub-component. Its detailed design, including the environment and social assessment, is being carried out financing and implementation under this sub-component.

(A3) **Solar Photo Voltaic (PV) on hydropower assets and other possible locations (US\$ 12m).** This component would support installation of floating or land based solar PV systems on hydropower assets and other sites. The project targets about 10-15 MW of solar energy which could be scaled-up to other locations and assets by mobilizing private financing.

**Component B: Institutional Strengthening and Energy Sector Development (US \$ 25 m).** This component is aimed to provide strategic road map and business plan for development of KP energy systems and associated infrastructure to promote renewable energy, attract investments and enhance government revenue. It will also entail strengthening of institutional systems of Energy and Power (E&P) Department, GoKP and PEDO so that these organizations can work efficiently and effectively to develop renewable energy programs including O&M of existing and future energy projects.

**Component C: Environment and Social Management (US\$ 59 m).** This component will improve environment, local living and boost economic development in the project areas of hydropower and solar projects.

**Component D: Project Implementation Support and Technical Assistance (US\$ 30 m).** Consulting and other services will be financed to implement hydropower and renewable energy projects along with capacity

building of PEDO and Project Management Organization (PMO) to effectively implement projects.

### 1.3 PDO Statement

The project’s development objective is to increase renewable energy generation and strengthen the capacity of associated institutions in Khyber Pakhtunkhwa.

### 1.4 Key Results Indicators

- (i) Renewable energy including hydropower capacity constructed to shift the energy mix to domestic clean resources;
- (ii) Mobilization of commercial financing and private capital to accelerate renewable energy development in KP;
- (iii) RE and hydropower projects prepared for continued investment in the sector.

## 2 Operational Context

Operational Context considers factors that can have impact on procurement approach, have potential to negatively affect the ability to encourage competition among quality suppliers, or impact the successful implementation and management of the program. Key aspect are:

Governance	The implementation agency of this program is PEDO. A Project Management Organization (PMO) is established to manage the project. Procurements in the public sector are structured as provincial rules are followed which cater for transparency, economy, efficiency and equal opportunity; delays in payments and adequate contract management is however an issue. High levels of scrutiny by Pakistan oversight agencies commonly creates high risk aversion within organizations and tendency is to refer decisions to higher authorities or broad committees for approval. Such matters result in lack of decisions or delayed decisions.
Economic	The contracts identified in the project would provide an impetus to the economic activity for the construction related industry as well as to the local residents and businesses. The Pakistani Rupee is subject to depreciation pressure, therefore, contracts for duration longer than 12 months should include price adjustment provisions.
Sustainability	Project interventions are identified with ownership of the provincial government. Capacity building support will be



	provided to PEDO to maintain these new assets. Low maintenance solutions will be prioritized where feasible.
Technology	As mentioned above the sustainable technology will be used with introduction ERP and other IT related software. Technically sound E&M equipment is priority.

### 3 Client’s Capability & PIU Assessment

#### 3.1 Governance Structure of PEDO

Pakhtunkhwa Energy Development Organization (PEDO) is the main implementing entity of the program. It is a statutory organization that was formed in 1993 through an enactment by the Provincial Assembly of KP. The organization is under the administrative control of Energy and Power Department of Provincial Government. PEDO is an autonomous and operationally independent body governed by a Board of Directors that has representation of relevant provincial ministries (energy, finance and planning) and other departments & private sector. It has its own act which allows it to plan, construct, own, operate, maintain and dispose-off generation, transmission and distribution assets. PEDO organization chart is given in Annex 1.

PEDO, since its inception, has been instrumental in identifying and developing hydel potential in Khyber Pakhtunkhwa. PEDO has so far identified a number of promising hydel potential sites of more than 6000 MW capacity, which can be developed in a systematic manner either through Public sector or Private sector or with Public-Private-Partnership (PPP).

PEDO has defined procurement arrangements. A Project Director is appointed for every project, a management committee and an evaluation subcommittee is notified, which comprises of technical and finance experts. The contract is signed by the CEO. There is also a contract management section comprising of experts who provide support during contract implementation. There are defined delegations of financial powers in Chapter 14 of the delegation document; the Board is fully authorized to approve the highest value contract and there are no external approvals required. PEDO has a procurement manual which is very detailed but needs some clarity on the service standards.

The last three years audit reports have not made any major procurement related observations.

#### 3.2 Procurement Capacity and Arrangements

PEDO has already developed seven HPPs with a total capacity of 162 MW and five with accumulative capacity of 475 MW are under

construction. This Project is Bank's first engagement with PEDO, but PEDO also has extensive experience of working with development partners particularly ADB that has funded two small hydropower and a 300MW hydropower project at Balakot. The Project has been helping further build PEDO's capacity to plan, prepare and implement renewable energy projects in KP.

Assessment Done at Appraisal Stage. PEDO has a considerable outlay of procurement and they procure consultancies, medium to large works and also some goods. About eight major contracts have been awarded in last 10 years, with average cost of works about US \$ 97 m (the largest costing US \$ 200 m). A number of consultancy assignments have also been done. Average cost of consultancies at about US \$ 1.7 m (the largest costing US \$ 3 m). The selection procedure does not necessarily include shortlisting even for large contracts. There are no reported major delays in selection procedures and generally evaluations take four to six weeks and award is preceded by 10 days of disclosure period. Participation of consulting firms has been encouraging and the 5-8 firms participate in proposals, however very few international firms have been applying probably due to the limitation of payments made only in local currency, and for PEC registration requirement for government funded contracts.

PEDO follows the KP Public Procurement of Goods, Works and Services Rules 2014, which provide reasonable fiduciary assurances. These rules acknowledge the principles of fairness, transparency, equal opportunity, economy, and efficiency; stipulate general competition as the default method of procurement; provide for pre-disclosed evaluation criteria; limitation on post bid negotiations; disclosure of contract award information, and complaint redressal. Bidding opportunities are essentially advertised on the publicly available websites, and national newspapers. KPPRA has posted Standard Bidding Documents on their website. These documents consider the requirement of qualification information, evaluation criteria and award process. Bids are required to be awarded to the lowest evaluated responsive bidder. Likewise selection methods for consultancies take into account quality and cost (LCS, QCBS, QBS, FBS).

To implement the program, PEDO has established a separate unit called Project Management Organization (PMO). PMO is headed by full time Head with dedicated staff for key technical, engineering, environmental, social, procurement & Contract management and financial management. PMO structure is given in Annex 1. Through office order dated December 30, 2020 the Head PMO has an effective delegation of powers from PEDO for Project management, administration, technical and financial approvals including drawing and disbursing. Head PMO

have powers of Chief Engineer and reporting to CEO of PEDO. PMO will be supported by Management Support firm, Planning firm and Project Implementation firm, besides a set of individual experts. Adequate staffing is essential in PMO after which training would be provided. A complaint redressing mechanism is agreed with the Board as tier one and a subcommittee of the Coordination committee as tier 2. It is mandatory to post details of redressing mechanism on project website and refer to it in each SPN/Procurement/Bidding Document. Project Steering Committee, chaired by Additional Chief Secretary KP provides strategic guidance, inter-departmental support/guidance and high level oversight.

The project follow the Bank's Procurement Regulations for Borrowers for Goods, Works, Non-Consulting and Consulting Services dated July 1, 2016, (latest version is November 2020). Project will be subject to the WB's Anti-Corruption Guidelines, dated October 15, 2006, and revised in January 2011 and July 2016. The Project will use the World Bank's on-line procurement and contract management system, "STEP" (Systematic Tracking of Exchanges in Procurement).

Under KHRE project, PEDO has awarded two large consultancies and these consultancy assignments are progressing well. Participation of international firms for these assignments was also very good and encouraging. The PQ process for GKH and Madyan HPPs also generated good interest. The current procurement performance rating is satisfactory after PEDO overcome some of the initial delays in the award of some of the contracts.

### 3.3 Key Conclusions for Project Implementation

There are adequate arrangements envisaged for swift and expeditious implementation of the Project. Main conclusions are:

- i. Head PMO should be delegated with full implementation authority.
- ii. PMO should be staffed as quickly as possible.
- iii. Project management will require adequate attention from within PMO (through the contract management staff) and the supporting consulting firms.

The PMO staffing is complete and is being headed by a Chief Engineer who was been delegated full authority to implement the project. In addition PEDO also engaged services of an International Procurement Specialist and one member of the Independent Panel of Experts (IPOE) is for Construction Planning and Contract Management.

## 4 Market Analysis and Procurement Approach

### 4.1 Project Preparation Stage (consultancies)

PEDO, using their own resources hired M/s AGES Consultants Peshawar (Pakistan) to conduct detailed feasibility studies and design for 88 MW Gabral- Kalam HPP. The feasibility studies covered basic engineering design and preparation of PC-1. The studies, among other parameters, included survey & topography, hydrological & sedimentation studies, climate, flow availability, dam break analysis, seismic hazard analysis & geophysical and geotechnical analysis. Based on these studies project layout planning & project components for both civil and E&M were assessed. ESIA of the project is completed. Cost estimates and construction planning & scheduling have been prepared. The construction schedule invariably takes into consideration local climate, culture, site access, remoteness of the area and design complexity of the project. Additional follow up studies are also underway in order to improve detail design parameters. Feasibility/design studies including environment and social assessment for other sub-projects will be carried out during implementation. These may form a basis to conduct the pre-qualification etc.

A Project Preparatory Advance (PPF) (US \$ 4 m) was made available to PEDO through which the selection of following three consultancies were initiated:

- i. Project Implementation Consultants (PIC)
- ii. Management Support Consultants (MSC)
- iii. Planning Consultants

Project Implementation Consultants are on board and have three major components; (a) for Gabral Kalam design review, preparation of bidding documents, support in procurement process and supervision of works contracts; (b) feasibility updation and detailed design of 2<sup>nd</sup> investment under KHRE - 157MW Madyan HPP; and (c) supervision of the 2<sup>nd</sup> investment under KHRE - 157MW Madyan HPP. Management support consultants OR Technical/Financial experts hired for specialized services would act a project management arm of the PMO and PEDO. Planning consultants have also been engaged and will provide the follow up cascade plan for the province.

Contract	Estimated cost M US\$	Review	Selection method	Status (as of July 2023)

1	PIC - Project Implementation Consultants	10	Prior	QCBS	Hired
2	MSC - Management Support Consultants	6	Prior	QCBS	Contract Negotiations under process. Likely to be cancelled. In lieu PEDO intends to hire individual consultants to meet the same objective.
3	Planning Consultants	20	Prior	QCBS	Contract Awarded and is effective from June 2023

#### 4.2 Approach for Consultancy Selection

All the three major consultancies have been advertised and two of them (PIC and PC) are awarded whereas the third consultancy is under process of hiring. QCBS has been kept as a selection method for the consultancies advertised, and the EOI gave requirement of international experience. This proved to be a very effective criterion as for the first time major international firms have applied for the above assignments. **Annex 2** provides the list of firms historically participating and firm participating in the above advertised assignments. There would be other smaller consultancies for which the suitable procedures shall be identified.

#### 4.3 Procurement Packaging for Key Works Contracts

This section of the PPSD covers the identified contracts for the construction of Gabral- Kalam Hydropower Project (sub-component A1) and 2<sup>nd</sup> investment under KHRE – Madyan HPP (sub-component A2) and for solar photovoltaic investments under sub-component A3. Also, future hydropower and solar investments if carried out under KHRE will follow similar procurement packaging. Cost estimate of GKHP is US \$ 150 m for civil works and US \$ 50 m Electrical & Mechanical works. Cost estimate of Madyan HPP is US \$300 m for civil works and US \$100 m for Electrical & mechanical works.

For construction of hydropower projects three distinct procurement options were considered, on technical and procurement optimization basis.

**Option 1 :** Break up of Works as two contracts:

- (i) Civil works - water conveyance structure (weir, diversion structure, tunnels, etc.), access roads, bridges,;
- (ii) Power house electrical & mechanical works; associated civil works; switch yard; and power evacuation line.

**Option 2:** Break up of Works as two contracts:

- (i) All Civil Works
- (ii) Electrical and Mechanical works, with switchyard and power evacuation line

**Option 3:** Single Contract for all Civil and E&M works.

**Analysis of Option-1:**

<p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>• Specialized contractors for specific jobs.</li> <li>• PIC can facilitate to optimize on specialization of the firms for timely completion</li> </ul>	<p><b>Weakness</b></p> <ul style="list-style-type: none"> <li>• Coordination in work plans will be required</li> <li>• Higher level of contract management required to raise early warning for delays</li> <li>• E&amp;M Bidders to be specialized in Civil Works also OR will be dependent on Civil Joint Venture partner.</li> </ul>
<p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>• In E&amp;M bidding document, evaluation can take into account enhanced performance/efficiency in offered bids.</li> <li>• Timely completion will provide better market interest for future projects</li> </ul>	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>• Delay in one contract may cause delay in the other, resulting in claim</li> <li>• Project cost may increase due to separate mobilization costs.</li> </ul>

### Analysis of Option-2:

<p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>• Specialized contractors for specific jobs.</li> <li>• PIC can facilitate to optimize on specialization of the firms for timely completion</li> </ul>	<p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>• Coordination in work plans will be required</li> <li>• Higher level of contract management to raise early warning for delays</li> <li>• Overlapping Site access requirements</li> <li>• Two separate contractors are more likely to file claims / disputes to the EA due to potential failure of the other contractor.</li> <li>•</li> </ul>
<p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>• In E&amp;M bidding document, evaluation can take into account enhanced performance/efficiency.</li> </ul>	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>• Delay in one contract may cause delay in the other, and cause claims</li> <li>• Extensive coordination required for E&amp;M related civil works by Works contractor, with E&amp;M contractors</li> <li>• Project cost may increase due to separate mobilization costs.</li> <li>•</li> </ul>

### Analysis of Option-3:

<p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>• One contracting entity responsible for all works</li> <li>• Ease of contract management</li> <li>• The Pros of Single Contract are further elaborated below under Section 4.3.2</li> </ul>	<p><b>Weakness</b></p> <ul style="list-style-type: none"> <li>• Single contract may require joint ventures between different specialized contractors, which may increase administrative burden on them.</li> <li>• As mentioned above, some of these specialized companies may choose not to participate in the tender.</li> </ul>
<p><b>Opportunities</b></p>	<p><b>Threats</b></p>

<ul style="list-style-type: none"> <li>• Larger firms and JVs would participate in bidding</li> <li>• Cost may be reduced due to one contractor mobilizing</li> </ul>	<ul style="list-style-type: none"> <li>• Failure of a single contractor might mean the failure of the whole Project.</li> </ul>
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Residential colony for GKHP awarded separately due to timelines and needs, it was envisaged that local contractors could take this up effectively. In case of GKHP which is in remote location, project colony is awarded through a separate NCB contract in which 2 bidders participated and was awarded to the lowest evaluated bidder.

The residential colonies will have health and education facilities that could be made available for the construction phase as well as local communities will have access to those facilities. For Madyan HPP, which is closer to main cities already have access to such facilities, the construction of colony has been made part of the main contract Package-1.

**4.3.1 Selected Option for Hydropower Projects including GKHP, Madyan HPP and other similar hydropower investments** From analysis of advantages and disadvantages of three options, the preferred procurement approach adopted both for 88 MW Gabral- Kalam Hydropower Project (Component A1) rebidding and Madyan HPP and future hydropower investments under subcomponent A2 is **Option-2**, for the following reasons:

- i. HPP performance is a major parameter indicating functionality of the project. The cost of civil works is higher and if the two components (civil and E&M) are merged, the bidding strategy of all bidders will be focused on costing of civil works, and meeting (rather than exceeding) the E&M performance parameters.
- ii. In case of separate packages of Civil works and E&M, the E&M bidder will find benefits in devising a bidding strategy to offer enhanced performance. Optimal E&M design will entail substantial savings during life cycle of the plant, with less outage/breakdowns and revenue loss.
- iii. O&M expenses are reduced.

In the first round of bidding for GKH, Option 1 was selected. However based on the feedback received and the consultation/market assessment done by PEDO, contractors prefer a separate E&M contract and therefore for the reasons mentioned above Option 2 has been



preferred for GKH rebidding as well as for other hydropower investments to be financed through KHRE.

List of potential bidders/participants is attached as Annex-3 (Civil, Table 1-5) and (E&M, Table 6-8) for the two packages.

The role of Project Implementation Consultants is extremely important in this approach, and it needs to be proactive and highly professional.

#### 4.3.2 Qualification Options

There are options of pre-qualification and Post-qualification. The following SWOT analysis provides the comparison for the two options:

##### **Pre-qualification**

<p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>• Gives early information on competition potential and The Employer is able to assess interest of qualified firms;</li> <li>• Enables insufficiently qualified bidders to avoid costly bidding process, or to form a JV for a better chance to success;</li> <li>• Enhances participation of more experienced contractors (since unqualified bidders are excluded);</li> <li>• Reduces high cost of bidding and potential complaints of disqualified bidders;</li> <li>• Reduces time in evaluating bids from unqualified bidders;</li> </ul>	<p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>• Increases procurement lead time (minimized by undertaking prequalification while preparing bidding document);</li> <li>• Review of all applications is mandatory whereas post-qualification requires review of only winning bid (although verification of information submitted by prequalified bidders during bidding exercise is required);</li> </ul>
<p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>• Modification of qualification requirements to ensure higher competition during the bidding process;</li> </ul>	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>• Risk of low competition and necessity for renewal of pre-qualification requirements and re-invitation of PQ</li> </ul>

<ul style="list-style-type: none"> <li>• Early Detection of Employer’s capacity to manage procurement;</li> <li>• Encourages firms to form joint ventures with other local or international firms, thereby benefiting from their resources and experience;.</li> </ul>	<ul style="list-style-type: none"> <li>• Increases the risk of collusion and probability of price-rigging among a limited number of prequalified bidders.</li> </ul>
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**Post Qualification**

<p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>• Reduces procurement lead time</li> <li>• Encourages bidders to exercise due diligence during bid preparation to minimize the risk of rejection on grounds of qualifications; clear-cut, fail-pass qualification criteria enables a bidder to make an informed decision whether to pursue a specific contract, either as a single entity or in a joint venture;</li> <li>• Reduces the risk of collusion and probability of price-rigging among a large number of bidders.</li> </ul>	<p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>• Gives no early warning of competition potential;</li> <li>• The risk of low competition during bidding that might result in cancellation of the tender;</li> <li>• Increases the amount of work and time involved by the Employer in evaluating bids from unqualified contractors;</li> <li>• Possibility of rejection of low-priced bids submitted by bidders of doubtful capability and, accordingly, the potential of complaints of disqualified bidders;</li> <li>• Historical reluctance to reject the lowest price bid that may prevent the Employer from awarding the contract to more qualified, technically responsive contractor offering relatively higher price bid.</li> </ul>
<p><b>Opportunities</b></p>	<p><b>Threats</b></p>

<ul style="list-style-type: none"> <li>• Encourages firms to form joint ventures with other local or international firms or act as subcontractors, thereby benefiting from their resources and experience</li> </ul>	<ul style="list-style-type: none"> <li>• Risk of low competition that might lead to cancellation of the tender and re-tendering with modified requirements;</li> <li>• Increased risk of awarding the contract to less qualified contractor with lowest price that will likely lead to delays in overall implementation</li> </ul>
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Project Implementation Consultants are on board and has completed the design of GKHP, and preparing design of Madyan HPP. Pre-Qualification option was adopted for GHKPP Package-1 & 2, but the evaluation process took time due to delay in hiring and commencement of PIC, the out dated bidders' qualification/information, followed by No-Show by the bidders due to lack of their interest in lengthy process and also in obtaining clearance from their embassies for security reasons. To save time, the Re-bidding of GKHP i.e; RFB without pre-qualification option was selected and has been launched for Package-1 whereas for Package 2 it will be announced shortly following similar approach.

As the security concerns of the bidders have been adequately addressed in the forthcoming bidding documents, and the detailed design is currently in progress, it is advisable to maintain the PQ (Prequalification) process for Madyan as it is. The PQ process has already been initiated, and PQ applications have been received. The issuance of RFB (Request for Bids) is anticipated to take place after the evaluation of PQ applications and the finalization of RFB documents in August 2023.

**4.4 Market Analysis**

The potential market for the project is large contractors for civil works and E&M works. Currently several hydel projects are under construction in Pakistan and renowned firms are operating in Pakistan. **Annex 3** gives the list of firms who participated in recent (40MW+) hydel projects of PEDO, as well as those which are participating in the ADB funded projects. These firms include those civil works firms which have a much larger annual turnover having up to US \$ 60 b to US \$ 100b, and E&M firms with annual turnover of up to Euro 6 b. The firms already working on much larger projects of Tarbela and Dasu hydropower projects also expressed interest. It is expected that GKHP & Madyan HPP would attract this potential market. Madyan HPP is second largest hydropower project being implemented by PEDO / GoKP and committed

financing from the World Bank generated good response/interest from the potential contractors during pre-qualification stage.

#### 4.5 Key Conclusions for Market and Procurement Approach

- i. There is ample market potential for the works and E&M contracts.
- ii. Selected option to slice or combine would depends upon timing, complexity and project specific needs
- iii. The project timelines are such that pre-qualification can be used for getting serious bidders in new investments. The approach is very useful to save time while the design is being prepared.
- iv. Response for EOIs in consultancy has been very encouraging with major international participation due to a bit stringent criteria.

### 5 Procurement Risks Analysis and Mitigation Measures

Efficient project implementation is pivoted on the aspects of timely capacity development of PIU and efficient design and bidding processes. It is also critical that the Head PMO is given adequate delegations for procurement and contract management decision to run the project in an efficient manner. At this stage the procurement risk is kept as **Substantial**. The risks and mitigation measures are tabulated below:

#### Risk Management Plan

S N	Risk Area	Mitigation measure	Responsibilit y	Timeline
1	Procurement processes and decision making	i. Procurement & contract management staff hired at PMO. ii. PMO staff trained in Bank procurement procedures iii. Head PMO delegated with authority for approvals of project related	i. PMO ii. World Bank iii. PEDO	i. Done ii. Done iii. Done

S N	Risk Area	Mitigation measure	Responsibilit y	Timeline
		decision making. SOP prepared for such delegations and working of PMO .		
2	Market response	<p>Packages are made aligned with market readiness.</p> <p>Analysis and mitigation of limited/no-bid, based on the discussions of bidding process for GKHPP Package 1 and Package 2</p>	<p>PMO</p> <p>PMO/PIC</p>	<p>Done</p> <p>July, 2023 - Rebidding process has started for Package 1.</p>
3	Design adequacy and cost estimation	<p>i. Consulting firm is hired for design review and preparation of adequate bid docs; market rates to be used for estimation.</p> <p>ii. IPOE to review design aspects</p>	<p>PMO</p> <p>PMO</p>	<p>PIC on board</p> <p>IPOE in place</p>
4.	Contract management	i. Contract management plans for all three contracts	PMO/Consulting firm	After contract award

S N	Risk Area	Mitigation measure	Responsibilit y	Timeline
		<p>prepared and regularly monitored. This will include monitoring of staff deployment and contractor's presence on site.</p> <p>ii. Contract Manager to monitor implementation of consultancy firm(s) contracts on the above lines.</p> <p>iii. Management support firm (MSC) and/or a set of individual consultants will support PMO for overall project management</p>	<p>PMO</p> <p>PMO</p>	<p>After award of all consultancies</p> <p>Contract Negotiations with MSC firm are under progress</p>
5.	Law and order perception in the province	GoKP undertakes to structure, implement and monitor a multi-layer security plan, specific to each	PMO	Bidding Documents includes provision of site security and a security plan.

S N	Risk Area	Mitigation measure	Responsibilit y	Timeline
		Contract. For this PEDO has engaged Special Security Unit (SSU) to assess the security risks and based on the assessment, has prepared a Security Management Plan.		
6.	Cybersecurity risks, threats and vulnerabilities that can compromise the confidentiality, integrity, and availability of information and systems within an ICT (Information and Communication Technology) Project	Implement strong access controls, deploy robust software, security patches & regular malware scans, regular data backups, Implement policy violations protocols, define security requirements in contracts and establish regular audits and security reviews.	PMO	The ICT procurement will include standard protocols as an integral component
7.	Solar Components/System	To enhance the mitigation of forced labor	PMO	These provisions and

S N	Risk Area	Mitigation measure	Responsibilit y	Timeline
	s (Forced Labor Risk Mitigation)	risks and strengthen the procurement processes related to solar energy, forced labor bidder declarations will be added to the bidding documents as defined in the World Bank Environmental and Social Framework		declaration forms will be included in the procurement documents for both international and national competitive procurement, as well as any direct selection or contracting within the specified scope.

**6 Project Procurement Development Objectives (PPDO)**

The project procurement development objectives are the following:

- i. To ensure procurement efficiency and value for money that contributes towards meeting the PDO.
- ii. To ensure healthy market participation and appropriate packaging in works and plant contracts
- iii. To ensure effective contract management for timely completion of the Project.
- iv. Application of value for money (VFM) approaches (including rated criteria and life cycle costs): Given the nature of the Project, the VFM approach for the project will apply during the selection process. This would allow qualitative aspects to be considered and will facilitate the selection of the supplier on an approach that recognizes the importance of quality, and overall value for money based on a combination of cost and quality. For this purpose selection of the bidder (especially for Civil works) will be based on rated criteria (technical+financial combined evaluation). Overall, applicable Bank’s standard procurement documents (which also include, among others, VFM approaches and relevant provisions



to manage environmental and social risks and impacts) shall be applied with appropriate fit for purpose Borrower's requirements.

- v. Since procurement/bidding of Madyan and GKHPP will be done in parallel, the bidders participating in both bidding processes and who want to be awarded both contracts, should meet the Financial Qualification Requirements (Average annual turnover and financial resources) on an aggregate basis for both contracts

### 6.1.1 Project Procurement Result Indicator

Achievement of the PPDO will be measured by the following indicators:

- i. 70% contracts awarded within the bid/proposal validity period.
- ii. Good competition and contract prices within  $\pm 20\%$  of the estimated costs.
- iii. 100% of the contract delays captured, and extensions provided in time prior to the contract closing date.

The PPDO will be measured through data retrieved from STEP. Current procurement performance is rated as Satisfactory.

## 7 Output of PPSD

### 7.1 Recommended Procurement Approach for the Project

#### 7.1.1 Works, Goods and Non-Consulting Services

The procurement approach for the identified goods, civil works and supply and install contracts will be open international competitive bidding (ICB), using request for bids based on single stage one envelope with pre-qualification. The procurements for smaller contracts within the country level threshold of US\$ 20 m will be procured using NCB procedures.

The World Bank's standard bidding documents shall be used for ICB procurements whereas the procurements targeting the National market would be carried out using the NCB bidding documents. The NCB documents used for bidding will be agreed with the Bank and will include provisions meeting the aspects given in section 5.4 of the Regulations. Evaluation and award of contract will be based on rated criteria i.e; high ranked responsive bid evaluated on technical and financial combined scoring. In the evaluation criteria, for electro-mechanical equipment concepts like "functional guarantees" (and adjustment of bid prices) will be used. Contracts are envisaged to be admeasurement, with price

adjustment for all contract exceeding completion period of 12 months. No specific contract conditions are identified.

### 7.1.2 Consultancies

For consultancies all the available options shall be used as permissible in the applicable Procurement Regulation. There are large contracts for PIC, planning and Management Support. As given in para 4.1 above, PIC and Planning Consultant have been engaged and negotiations for MSC are underway. Alternatively a team of experts (comprising technical & financial experts) will be engaged to facilitate PEDO & PMO. There are some additional consultancies for social and environmental support.

### 7.2 Procurement plan for key activities

The recommended procurement plan for the project is given in the Table below:

Sl. No.	Name	Estimated Cost (US\$ million)	Bank Oversight	Procurement Approach/ Competition	Selection Method	Evaluation Method
<b>CONSULTANCIES/SERVICES</b>						
1	PIC - Project Implementation Consultants	10	Prior	International firm selection /open	QCBS	Highest ranked firm (Awarded)
2	MSC - Management Support Consultants	6	Prior	International firm selection/open	QCBS	Highest ranked firm
3	Planning Consultants	16	Prior	International firm selection/open	QCBS	Highest ranked firm (Awarded)
4	Independent Environment	0.3	Post	Individual Consultants	Comparison of CVs	Best candidate

Sl. No.	Name	Estimated Cost (US\$ million)	Bank Oversight	Procurement Approach/ Competition	Selection Method	Evaluation Method
	& Social Consultants (Multiple contracts)			Competition /Limited		
5	Independent Panel of Experts (IPOE) - 6 or more individuals based on need (Multiple contracts)	0.7	Post	Individual Consultants  Competition /Limited	Comparison of CVs	Best candidate (hired)
6	Individual advisers/experts (On need basis and in replacement of MSC Consultant)	5	Post	Individual Consultants  Competition /Limited	Comparison of CVs	Best candidate
<b>MAJOR WORKS CONTRACTS</b>						
1	GKHPP (Rebidding) : Package 1: Civil Works - water conveyance structure (weir,	150	Prior	ICB	RFB (without pre-qualification)	Highest Ranked Bidder (Rated Criteria basis for technical

Sl. No.	Name	Estimated Cost (US\$ million)	Bank Oversight	Procurement Approach/ Competition	Selection Method	Evaluation Method
	diversion structure, tunnels, etc.), access roads and bridges.					l and financial combined scoring)
2	GKHPP E&M Package 2 (Rebidding): Power House (Supply & Install) - turbines, generators, electrical system, switch yard, power evacuation	50	Prior	ICB	RFB(without pre-qualification)	Highest Ranked Bidder (Rated Criteria basis for technical and financial combined scoring)
3	GKH Package 3: Residential colony, offices and roads	5	Post	NCB	Post qualification RFB	Lowest evaluated qualified bidder (Awarded)
4	Madyan HPP*: Civil Works	300	Prior	ICB	Pre- Qualification RFB	Highest Ranked Bidder (Rated Criteria basis for technical

<b>Sl. No.</b>	<b>Name</b>	<b>Estimated Cost (US\$ million)</b>	<b>Bank Oversight</b>	<b>Procurement Approach/ Competition</b>	<b>Selection Method</b>	<b>Evaluation Method</b>
						and financial combined scoring)
5	Madyan HPP*: Electrical & Mechanical Works	100	Prior	ICB	Pre-Qualification RFB	Highest Ranked Bidder (Rated Criteria basis for technical and financial combined scoring)
6	Solar PV Contracts - Phase 1*	12	Prior	ICB (because of market conditions)	Post qualification RFB	Highest Ranked Bidder (Rated Criteria basis for technical and financial combined scoring)
7	Schemes under Social Development Plan (SDP) and EMP for GKH and Madyan HPP	19	Post	NCB	Post qualification RFB	Lowest evaluated qualified bidder

Sl. No.	Name	Estimated Cost (US\$ million)	Bank Oversight	Procurement Approach/ Competition	Selection Method	Evaluation Method
	(Multiple Contracts expected to be less than 1 million)**					
8	Information Systems (ICT) - Hardware & Software and Deployment of ERP for PEDO	0.5	Post	NCB	Post qualification RFB	Lowest evaluated qualified bidder

**Notes:**

\* Future HPP investments under sub-component A2 and Solar PV investments under subcomponent A3) will follow similar procurement method respectively as outlined above. Solar PV is to be implemented in a phased/sequential manner. In the first phase small scale solar PV will be added to the hydropower assets and in subsequent phase(s) solar PV will be scaled-up at hydropower and other location.

\*\* Local area development schemes to be constructed as part of Social Development Plan and Environmental Management Plan of GKH and Madyan HPP for affected communities, businesses and households. Schemes could include water supply works, rehabilitation of irrigation channels, rehabilitation/construction of schools, dispensaries etc. Packaging and lots are to be decided based on designs, surveys, work requirements and sequencing.

**7.3 National Procurement Arrangements**

In accordance with paragraph 5.3 of the Procurement Regulations, when approaching the national market (as specified in the Procurement Plan tables in STEP), the country’s own procurement procedures may be

used. When the Borrower uses its own national open competitive procurement arrangements as set forth in KP Public Procurement Rules, such arrangements shall be subject to paragraph 5.4 of the Procurement Regulations and the following conditions:

- a. The eligibility of bidders shall be as defined under Section III of the Procurement Regulations. Accordingly, no bidder or potential bidder shall be declared ineligible for contracts financed by the Bank for reasons other than those provided in Section III of the Procurement Regulations.
- b. For national open competitive procurement, only the model procurement documents acceptable to the World Bank, shall be used.
- c. The request for bids/request for proposals document shall require that Bidders/Proposers submitting Bids/Proposals present a signed acceptance (in the form attached in the bidding document) at the time of bidding, to be incorporated in any resulting contracts, confirming application of, and compliance with, the Bank's Anti-Corruption Guidelines, including without limitation the Bank's right to sanction and the Bank's inspection and audit rights.
- d. Procurement Documents include provisions, as agreed with the Bank, intended to adequately mitigate against environmental, social (including sexual exploitation and abuse and gender-based violence), health and safety ("ESHS") risks and impacts
- e. Access to procurement opportunities shall not be restricted to firms that have pre-registered and/or paid a registration fee.
- f. No preference of any kind shall be given to national bidders in the bidding process.

When other national procurement arrangements (other than national open competitive procurement) are applied by the Borrower, such arrangements shall be subject to paragraph 5.5 of the Procurement Regulations.

#### 7.4 Prior Review Thresholds

The Procurement Plan shall set forth those contracts which shall be subject to the Bank's prior review. All other contracts shall be subject to Post Review by the Bank. However following matrix will be used for reference:

Table 1 -Mandatory Procurement Prior Review Thresholds (USD M)

<b>Type of Procurement</b>	<b>High Risk</b>	<b>Substantial Risk</b>	<b>Moderate Risk</b>	<b>Low Risk</b>
<b>Works, S&amp;I</b>	5	10	15	20
<b>Goods, Information Tech&amp; Non-consulting</b>	1.5	2	4	6
<b>Consultants: Firms</b>	0.5	1	2	4
<b>Consultants: Individuals</b>	0.2	0.3	0.4	0.5

## 8 Summary of PPSD

All project procurement shall follow the requirements set forth or referred to in the Bank’s “Procurement Regulations for Borrowers under Investment Project Financing (IPF)”, dated July 1, 2016 (latest version). Project will be subject to the WB’s Anti-Corruption Guidelines, dated October 15, 2006, and revised in January 2011 and July 2016.

The project procurement outlays comprise large works for civil construction (US \$150 m) , and E&M equipment procurement and installation (US \$ 50m) for GKHPP; and consultancies for Implementation Support (US \$ 10 m), Planning (US\$ 16 m) and Management Support (US \$ 6m). This PPSD has been updated to add Madyan HPP proposed as two packages, civil works and E&M as well as other major/minor investments eg; ICT procurement, procurement under SDPs and Solar Power Plants etc. The procurement approach for the main hydropower work contracts (civil and E&M) for new investments including Madyan HPP will follow open international, single-stage, one-envelope method (ICBs), following pre-qualification. the project timelines are such that pre-qualification can be done without causing delay in bidding process, and it will encourage serious bidders to participate. PPSD provides the background for packaging and procurement approach. Other hydel and solar projects under the program are to be identified during implementation for which the procurement method has been elaborated under section 7.2 above.

A dedicated Project Management Organization (PMO) has been established within PEDO, the implementation agency, to manage the



program effectively. Market based selection of contract management and procurement specialist has been completed and procurement unit is fully staffed. A strong coordination and reporting regime is established under PMO, with delegation of powers to the Head PMO and the roles and responsibilities documented in an SOP. Contract management plans for all large contracts will be prepared and monitored to ensure timely decisions. PIC and management support consultancy firms will support PMO in contract management and overall project management. Procurement Risk for the project is assessed as Substantial, with the above mitigation plan.

ANNEX 1

Figure 2: PEDO Organization Chart

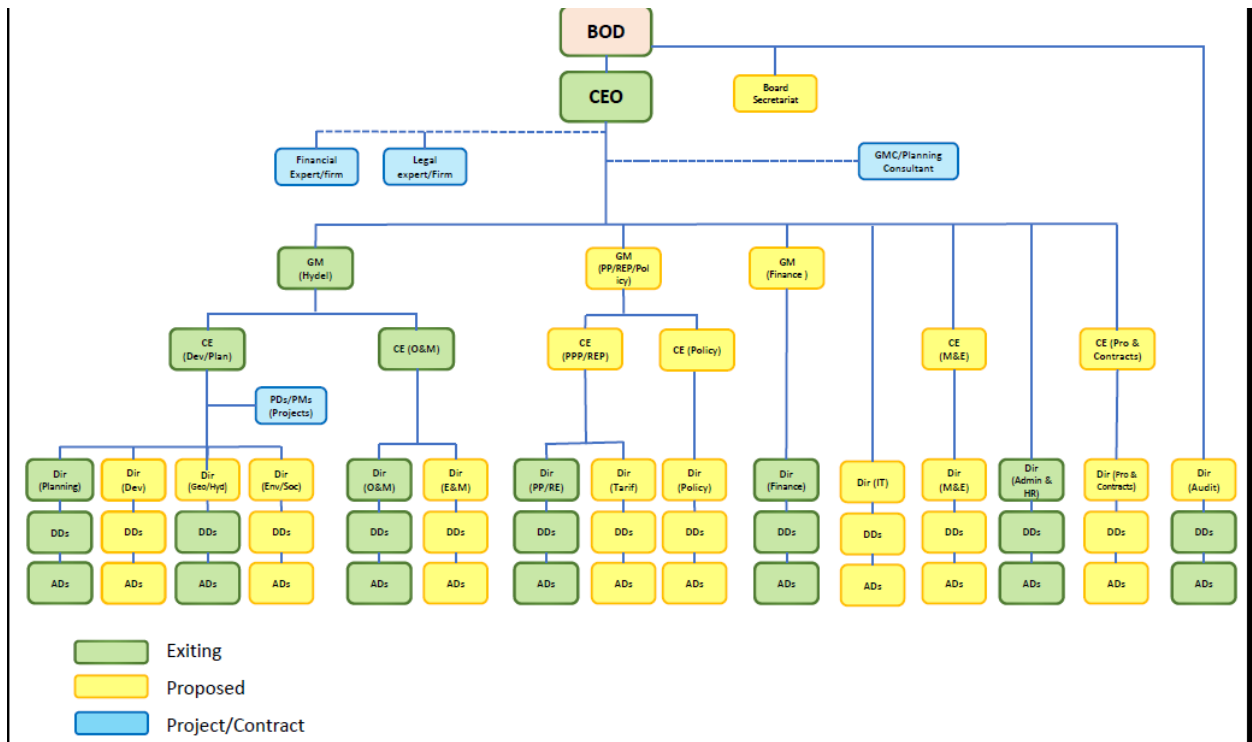
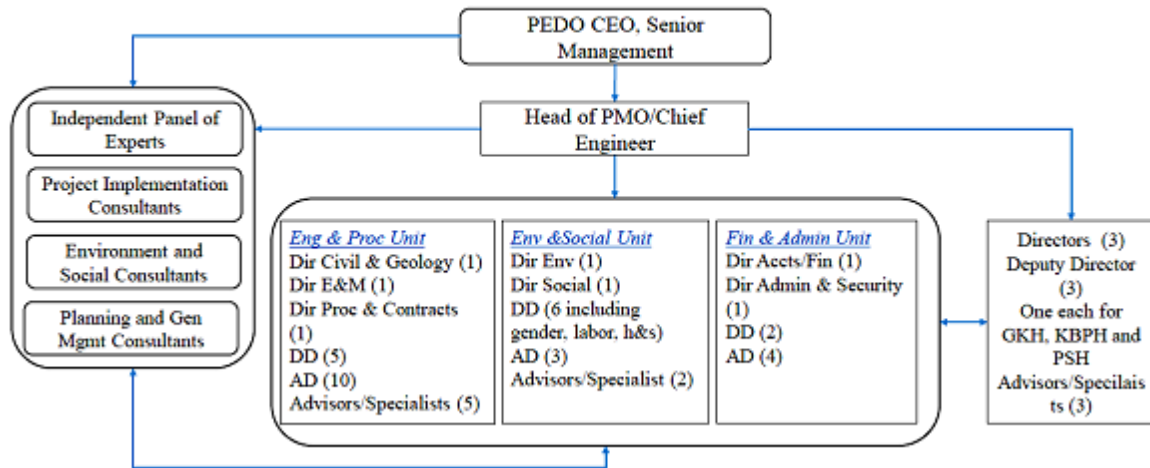


Figure 3: PMO Structure

**Project Management Organization**



## ANNEX 2

<b>List of Consultant Participated Bid for 10.2 -85 MW, and one 300 MW Consultancies for Design and Supervision</b>		
<b>No</b>	<b>Firm</b>	<b>Country</b>
1	National Engineering Services Pakistan NESPAK	Pakistan
2	Fichtner Gmbh (In JV)	Germany
3.	AGES	Pakistan
4	PES	Pakistan
5	Associated Consulting Engineers	Pakistan
6	SMEC	Australia
7	Electra Consultants	Pakistan
8	RSW international	
9	Integration Gmbh (in JV)	Germany
10	Shladia (in JV)	US
11	Barqaab	Pakistan
12	Norconsult	UK
13	DOLSAR	Turkey
14	Temelsu	Turkey

### **Response to the three EOIs for Consultancies under KHRE**

	<b>Firm</b>	<b>Country</b>
1	SOFRECO FRANCE	France
2	MWH USA	USA
3	GOPA - International Energy Consultants Germany	Germany
4	SMEC International (Pvt). Limited Australia.	Australia
5	M/s Cahngjiang Survey, Planning Design & Research Co., Ltd China (JV)	China
6	Beifang Investigation, Design and Research Co. Ltd (BIDR) China, and	China
7	M/s Integral ENGINEORS S.s. Columbia	Columbia
8	MM Pakistan	Pakistan
9	M/s Cahngjiang Survey, Planning Design & Research Co., Ltd China	China
10	Beifang Investigation, Design and Research Co. Ltd (BIDR) China,	China
11	Tractebel Engg. Gmbh Germany	Germany
12	SUIS PROJE Muhendislik ve Musavirlik Ltd Turkey' IM Maggia Engg.	Turkey Switzerland

13	Temelsu International Engineering Services Inc	Turkey
14	DOLSAR ENGINEERING INC CO. TURKEY (JV Lead Firm);	Turkey
15	Mahab Ghodss Iran	Iran
16	TYPSA	Spain
17	ILF Consulting	Austria
18	CIMA Global	Canada
19	Sogreah Gulf Fze (Artella Group) Dubai	Dubai
20	NESPAK	Pakistan
21	Integral Ingenieros Consultores	Columbia
22	Tractebel Engineering GmbH (TEG)	Germany
23	China Water Resources Pearl River Planning Surveying & Designing Co.,Ltd.	China
24	AQUALOGUS,	Portugal

### ANNEX 3

Table 1 below shows the list of Civil Contractors sent their proposal for GKHP and table 2 exhibits the list of other potential bidders.

**Table - 1 -Civil Works Contractors for GKHP**

No.	Name of Firm	Origin	Website	Annual Revenue* (Million USD)
1	China International Water & Electric Corp. (CWE)	China	<a href="http://english.cwe.cn/">http://english.cwe.cn/</a>	991
2	China Three Gorges Project Co., Ltd. (CTGPC)	China	<a href="http://www.ctg.com.cn/">http://www.ctg.com.cn/</a>	89
3	Sambu Construction Co., Ltd.	South Korea	<a href="http://www.sambu.co.kr/">http://www.sambu.co.kr/</a>	249.09
4	Shuifa Anhe Group Co., Ltd.	China	<a href="http://www.sdsf.com.cn">www.sdsf.com.cn</a>	100
5	M/s Khyber Grace (Pvt.) Limited	Pakistan	<a href="http://www.khybergrace.com">http://www.khybergrace.com</a>	16.35
6	Energy & Water International FZE	U.A.E.	<a href="http://energywaterintl.com/">http://energywaterintl.com/</a>	66
7	Age Insaat ve Ticaret A.S.	Turkey	<a href="https://www.ageinsaat.com.tr/">https://www.ageinsaat.com.tr/</a>	123
8	Sarwar & Company (Pvt.) Ltd. (Engineers & Contractors)	Pakistan	<a href="http://www.sarwarcompanyprivtltd.enic.pk/">http://www.sarwarcompanyprivtltd.enic.pk/</a>	15
9	Hasas Construction (Pvt.) Ltd.	Pakistan	<a href="http://hasasconstruction.com/">http://hasasconstruction.com/</a>	22.36

10	Dogus Insaat ve Ticaret A.S.	Turkey	<a href="https://www.dogusinsaat.com.tr/">https://www.dogusinsaat.com.tr/</a>	155.863
11	Descon Engineering Limited	Pakistan	<a href="https://www.descon.com">https://www.descon.com</a>	15
12	China Gezhouba Group Company Limited (CGGC)	China	<a href="http://www.cggc.ceec.net.cn/">http://www.cggc.ceec.net.cn/</a>	8719
13	China Road & Bridge Corporation (CRBC)	China	<a href="https://www.crbc.com/">https://www.crbc.com/</a>	4,145.71
14	China Anneng Group First Engineering Bureau Co., Ltd. (CANFE)	China		106.07
15	Sinohydro Corporation Limited	China	<a href="http://www.sinohydro.com/">http://www.sinohydro.com/</a>	5,367.72

**Table-2, Based on recent business outreach following additional Firms /Contractors shown interest for GKHP and Madyan HPP (Civil works)**

No	Name of Firm	Origin	Website	Annual Revenue* (Million USD)
1	OZKAAR Insaat - OZALTIN JV	Turkey	<a href="https://www.ozdogan.com.tr/">https://www.ozdogan.com.tr/</a>	105
2	Age Insaat ve Ticaret A.S.	Turkey	<a href="https://www.ageinsaat.com.tr/">https://www.ageinsaat.com.tr/</a>	123
3	Tunnel Sadd Ariana	Iran	<a href="https://www.ariana-co.com/en">https://www.ariana-co.com/en</a>	670
4	LIMAK CONSTRUCTION INDUSTRY & TRADE	Turkey	<a href="http://www.limak.com.tr">www.limak.com.tr</a>	4.2 billion

	INCORPORATION			
5	NUROL	Turkey	<a href="https://www.nurol.com.tr/en">https://www.nurol.com.tr/en</a>	530
6	DLE & C (DAELIM Industrial Co. Ltd)	South Korea	<a href="https://www.dlenc.co.kr/eng/main.do">https://www.dlenc.co.kr/eng/main.do</a>	-
7	SINOTECH Co. Ltd	China	<a href="http://www.sinotec.org.cn/en/index.html">http://www.sinotec.org.cn/en/index.html</a>	-
8	Sultan Mehmood & Company Engineers	Pakistan	-	-
9	Zahir Khan & Brothers ZKB	Pakistan	<a href="https://www.zkb.com.pk/">https://www.zkb.com.pk/</a>	331
10	Habib Rafiqe Pvt. Ltd	Pakistan	-	-

**Table-3 List of Other Potential Civil Works Contractors**

No.	Name of Firm	Origin	Website	Annual Revenue*
1	Skanska	Sweden	<a href="http://skanska.com">skanska.com</a>	USD 17 billion
2	Ranhill Engineering Construction	Malaysia	<a href="http://ranhill.com.my">ranhill.com.my</a>	USD 0.4 billion equivalent
3	Anadolu Group	Turkey	<a href="http://anadolugrubu.com.tr">anadolugrubu.com.tr</a>	USD 4 billion
4	Barnard Construction Company, Inc.	USA	<a href="http://barnard-inc.com">barnard-inc.com</a>	USD 0.2 billion
5	CCCC Second Harbour Engineering Co., Ltd.	China	<a href="http://sneb.com.cn">sneb.com.cn</a>	USD 1 billion
6	AstaldiSpA&GyM-Grana y Montero S.A.	Spain	<a href="http://astaldi.com">astaldi.com</a>	USD 3.3 billion
7	Limak	Turkey	<a href="http://www.limak.com.tr">www.limak.com.tr</a>	USD 4.2 billion
8	Walsh Group	USA	<a href="http://walshgroup.com">walshgroup.com</a>	USD 4.3 billion
9	Korea Midland Power Corporation	South Korea	<a href="http://www.komipo.co.kr">www.komipo.co.kr</a>	USD 3.6 billion
10	EidsivaVannkraft AS	Norway	<a href="http://eidsiva.no">eidsiva.no</a>	USD 0.2 billion

\* latest available figures converted into USD equivalent at current exchange rate from their respective currencies.

**Table 4: Firms that Expressed Interest in HPPs of PEDO in recent past**

No.	Firm	Project
1	DOGUS- DESCN-YENGUNIV- CWTW	84 MW Gorkin- Matiltan
2	CMC-GRC	"
3	SWEB -SCC	"
4	WENGFU- QINGYUAN- BANU MUKHTAR	"
5	GORKIN-MATILTAN (SINOTEC ETC)	"
6	DESCON - Koto JV	40.8 MW Koto HPP
7	Sichuan, Sarwar & Co., Silian and ChongQing JV	"
8	SHUNTAI-HRL-AFI-JINLUN JV	"
9	ZDWP-CIENL-NEL JV	"

**Table-5, List of Bidders of under Construction ADB funded 300 MW Balakot HPP**

1	M/S SINOHYDRO B7 CO. LTD. PAKISTAN BRANCH
2	M/S RVI GLOBAL PVT LTD
3	M/S GHULAM RASOOL AND CO. PVT.
4	M/S CHINA GEZHOUBA GROUP COMPANY LTD.
5	M/S SHAMXI HYDRALIC ENGINEERING CO. CHINA
6	M/S DESCN ENGINEERING LTD
7	M/S GE HYDRO CHINA CO LTD
8	M/S AL ZEB ENGINEERING PVT LTD
9	M/S MAQBOOL CALSONS JV, PAK
10	M/S MATRACON PAK PVT LTD.
11	M/S ZHONGMEI ENGINEERING GROUP LTD
12	M/S CHINA INTERNATIONAL, WATER & ELCTRIC PAK
13	M/S MULTILINE ENTERPRISES PAK
14	M/S SINOTECH CHINA
15	M/S SARWAR CO
16	M/S NUROL INSAAT VE TICARET A.S TURKEY
17	M/S GB IMPEX JV
18	MS CHMC
19	MS AL-FAJR
20	M/S ZAHIR KHAN & BROTHERS
21	M/S JSA CAPTIAL LLC
22	M/S TECHNICON ENTERPRISES



No.	Firm	Project
23	M/S ALBARIO ENGG	
24	M/S RM Gulistan	
25	M/S International Traders	

**Electrical & Mechanical Equipment/Major Machinery (Turbines/Generators):**

The list of the Hydropower electrical and Mechanical manufacturers which applied for prequalification for GKHPP is given below in Table 4. While other potential manufacturers for power plant equipment specializing in hydropower units is presented in Table-5. The market is competitive and is primarily dominated by China based firms. It is expected that some of the major manufacturers listed in Table 3 of hydropower generating units will be interested in the bidding process.

**Table- 6, E&M Contractors**

No.	Name of Firm	Origin	Annual Revenue (latest available figures) in Million USD	Manufacturing Capability - Installed Max-Capacity in MW)	Single Unit of Turbine Max-Capacity in MW
1	China International Water & Electric Corp. (CWE) <a href="http://english.cwe.cn/">http://english.cwe.cn/</a>	China	991.00	450	60
2	China Three Gorges Mechanical and Electrical Engineering Co., Ltd. (CTGME) <a href="http://www.ctg.com.cn/">http://www.ctg.com.cn/</a>	China	7.23	-	-
3	Harbin Electric International Co., Ltd. (HEI) <a href="http://www.china-hei.com">www.china-hei.com</a>	China	1,189.00	342	-

4	Harbin Electric Machinery Co., Ltd. (HEC) <a href="http://www.hec-china.com/eng/home.php">http://www.hec-china.com/eng/home.php</a>	China	598	784	243
5	Shuifa Anhe Group Co., Ltd. <a href="http://www.sdsf.com.cn">www.sdsf.com.cn</a>	China	100	150	30
6	Energy & Water International FZE <a href="http://energywaterintl.com">energywaterintl.com</a>	U.A.E	66	-	-
7	Zhefu Holding Group Co., Ltd.	China	152	720	85
8	Age Insaat ve Ticaret A.S. <a href="http://www.age.com.tr">www.age.com.tr</a>	Turkey	123	185	-
9	Sarwar & Company (Pvt.) Ltd. (Engineers & Contractors) <a href="http://www.sarwarcompanyprivatlimited.enic.pk/">http://www.sarwarcompanyprivatlimited.enic.pk/</a>	Pakistan	15	-	-
10	China National Heavy Machinery Corporation (CHMC) <a href="http://en.chmc.cc">http://en.chmc.cc</a>	China	278	246	-
11	Zhejiang Orient Engineering Co, Ltd. (ZOEC) <a href="http://www.orientengineering.com/en/about.php">http://www.orientengineering.com/en/about.php</a>	China	50	70	-
12	Hangzhou Resource Power Equipment Co., Ltd. (HRPE) <a href="http://www.hcdfd.com">www.hcdfd.com</a>	China	37	70	60
13	M/s Dongfang Electric International Corporation <a href="https://www.dongfang.com.cn/">https://www.dongfang.com.cn/</a>	China	328	1870	80
14	China National Electric Engineering Co., Ltd. (CNEEC) <a href="http://www.cneec.com.cn/english/">http://www.cneec.com.cn/english/</a>	China	639	143	50

15	Beijing IWHR Technology Co., Ltd <a href="http://en.iwhr.cn/">http://en.iwhr.cn/</a>	China	32	99	80
16	Andritz (China) Ltd. <a href="https://www.andritz.com/china-en">https://www.andritz.com/china-en</a>	China	523	1232	48
17	Ghulam Rasool & Company Pvt. Ltd <a href="https://grc.com.pk/">https://grc.com.pk/</a>	Pakistan	75	-	-
18	China Gezhouba Group Company Limited (CGGC) <a href="http://www.cggc.ceec.net.cn/">http://www.cggc.ceec.net.cn/</a>	China	8719	254	84
19	Powerchina Zhongnan Engineering Corporation Limited <a href="https://ec.powerchina.cn/contactUs_en.html">https://ec.powerchina.cn/contactUs_en.html</a>	China	966	180	60
20	Limited - Chongqing Water Turbine Works Co., Ltd. <a href="http://www.cccme.cn/">http://www.cccme.cn/</a>	China	69	-	-

**Table-7: List of Other Potential Hydropower Equipment Manufacturers/Bidders**

No	Name of Firm	Origin	Website	Annual Revenue (latest available figures)	Manufacturing Capability - Turbine / Equipment Size
1.	Chongqing Hydropower Equipment	China	<a href="http://www.cchpe.net">www.cchpe.net</a>	Not available online	0.5 to 100 MW
2.	Zhejiang Fuchunjiang Hydropower Equipment Co., Ltd.	China	<a href="http://www.zhefu.cn/en/about.aspx">http://www.zhefu.cn/en/about.aspx</a>	Not available online	10 to 600 MW
3.	Alstom	France	<a href="http://www.alstom.com">www.alstom.com</a>	EUR 6.2 billion	

4.	Toshiba Hydropower Hangzhou	China	<a href="http://www.toshiba-thpc.com">www.toshiba-thpc.com</a>		
5.	Voith Hydro	Germany	<a href="http://www.voith.com">www.voith.com</a>	EUR 4.2 billion	
6.	Andritz Hydro	Austria	<a href="http://www.andritz.com">www.andritz.com</a>	EUR 6.0 billion	
7.	RainPower Small Hydro	Norway	<a href="http://www.rainpower.eu">www.rainpower.eu</a>	Not available online	0.4 to 255 MW

**Table-8, Based on recent business outreach following additional Firms /Contractors shown interest for GKHP and Madyan HPP (E&M works)**

<b>No.</b>	<b>Name of Firm</b>	<b>Origin</b>	<b>Annual Revenue (latest available figures) in Million USD</b>	<b>Manufacturing Capability - Installed Max-Capacity in MW)</b>	<b>Single Unit of Turbine Max-Capacity in MW</b>
1	GE Hydro France - SAS Grid solution (France) <a href="https://www.ge.com/renewableenergy/hydro-power">https://www.ge.com/renewableenergy/hydro-power</a>	France	422.223	5172	862
2	IMPISA (Argentina) - Zahir Khan Brothers (Pakistan) JV <a href="https://www.impisa.com/en/">https://www.impisa.com/en/</a>	Argentina	23	1400	350
3	Dogus Insaat ve Ticaret A.S. <a href="https://www.dogusinsaat.com.tr/">https://www.dogusinsaat.com.tr/</a>	Turkey	155.863		
4	SINOTECH Co.Ltd <a href="http://www.sinotec.org.cn/en/index.html">http://www.sinotec.org.cn/en/index.html</a>	China	-	-	-
5	Power Machines Russia <a href="https://power-m.ru/en/">https://power-m.ru/en/</a>	Russia	-	-	-

**PROCUREMENT PLAN** Pakistan : Khyber Pakhtunkhwa Hydropower and Renewable Energy Development

**General Information**

**Country:** Pakistan **Bank's Approval Date of the Original Procurement Plan:** 2019-04-04  
**Revised Plan Date(s):** (comma delineated, leave blank) 2023-10-26  
**Project ID:** P163461 **GPN Date:** 2020-12-21  
**Project Name:** Khyber Pakhtunkhwa Hydropower and Renewable Energy Development  
**Loan / Credit No.:** IBRD / 91640, IDA / V1780, IDA / 67790  
**Executing Agency:** Pakhtunkhwa Energy Development Organization

Activity Reference No. / Description	Loan / Credit No.	Component	Review Type	Method	Market Approach	Procurement Process	Prequalification (Y/N)	High SEA/SH Risk	Procurement Document Type	Estimated Amount (US\$)	Actual Amount (US\$)	Process Status	Draft Pre-qualification Documents		Prequalification Evaluation Report		Draft Bidding Document / Justification		Specific Procurement Notice / Invitation		Bidding Documents Issued		Proposal Submission / Opening / Minutes		Bid Evaluation Report and Recommendation for Award		Signed Contract		Contract Completion
													Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	
PK-PEDO-211744-CW-RFB / Gabral Kalam Hydropower Project: Package 1: Civil Works - water conveyance structure (weir, diversion structure, tunnels, etc.), access roads, and bridge	IBRD / 91640	Development of Hydropower and Renewable Energy Investments	Prior	Request for Bids	Open - International	Single Stage - One Envelope				125,000,000.00	0.00	Canceled	2021-01-20	2021-02-05	2021-05-17	2022-09-28	2021-05-27	2022-10-28	2021-03-06	2021-03-31			2021-08-05	2022-12-19	2021-09-04	2023-02-16	2021-10-09		2026-11-02
PK-PEDO-211748-CW-RFB / Gabral Kalam Hydropower Project: Package 2: Power House (Supply & Install) - civil structure; turbines, generators, electrical system, switchyard, power offices, and roads	IBRD / 91640	Development of Hydropower and Renewable Energy Investments	Prior	Request for Bids	Open - International	Single Stage - One Envelope				50,000,000.00	0.00	Canceled	2021-01-20	2021-02-03	2021-05-17	2022-09-29	2021-05-27	2022-12-13	2021-03-06	2021-03-31			2021-08-05	2023-05-03	2021-09-04	2023-08-21	2021-10-09		2026-11-02
PK-PEDO-211751-CW-RFB / Gabral Kalam Hydropower Project: Package 3: Residential colony, offices, and roads	IBRD / 91640	Development of Hydropower and Renewable Energy Investments	Post	Request for Bids	Open - National	Single Stage - One Envelope				5,000,000.00	0.00	Signed					2021-01-30	2022-05-20	2021-03-16	2022-05-31			2021-04-27	2022-07-05	2021-05-27	2022-07-05	2021-07-01	2023-01-31	2024-12-02
PK-PEDO-279716-CW-RFQ / Repair & Renovation Works of PMO office, EGP office and Site office GKHP - KHRE	IDA / 67790	Institutional Strengthening and Energy Sector Development	Post	Request for Quotations	Limited	Single Stage - One Envelope			Request for Quotations (Non Bank-SPD)	23,000.00	0.00	Pending Implementation							2022-03-05								2022-04-30		2022-10-27
PK-PEDO-339715-CW-RFB / Madyan HPP Civil Works: All Civil Structures including Weir, Intake, Tunnel, Tail Race, Power House Building, Colony, Roads, Bridges, Water Treatment Plant and Hydraulic Steel Structures.	IBRD / 91640	Development of Hydropower and Renewable Energy Investments	Prior	Request for Bids	Open - International	Single Stage - One Envelope			Request for Bids - Works SPD (after prequalification)	300,000,000.00	0.00	Under Implementation	2023-02-15	2023-03-07	2023-05-16	2023-10-25	2023-05-31			2023-03-02	2023-03-27			2023-07-15		2023-08-29	2023-10-03		2027-11-30
PK-PEDO-339716-CW-RFB / Madyan HPP E&M Works: Supply, Installation, Testing & Commissioning of Turbines, Generators, Control Room Equipment, SCADA, Auxiliaries, Power Transformers, Switch Yard, Switch Gear (GIS), Transmission Line, Control equipment at Weir and allied E&M work	IBRD / 91640	Development of Hydropower and Renewable Energy Investments	Prior	Request for Bids	Open - International	Single Stage - One Envelope			Request for Bids - Works SPD (after prequalification)	100,000,000.00	0.00	Under Review	2023-02-15	2023-03-09	2023-05-31			2023-06-15		2023-03-02	2023-03-29			2023-07-30		2023-08-29	2023-10-03		2027-12-15
PK-PEDO-344261-CW-RFB / Gabral Kalam Hydropower Project: Package-1, Civil Works (water conveyance structure (weir, diversion structure, tunnels, etc.), access roads and bridges).	IBRD / 91640	Development of Hydropower and Renewable Energy Investments	Prior	Request for Bids	Open - International	Single Stage - One Envelope			Request for Bids - Works (without prequalification) SPD	150,000,000.00	0.00	Under Implementation						2023-03-15	2023-05-26	2023-03-20	2023-06-02			2023-05-04		2023-06-18	2023-07-23		2027-07-22
PK-PEDO-370110-CW-RFB / GKHP-E & M Works (Package-2): Design, Supply, Installation, Testing & Commissioning of Turbines, Generators, Electrical System, Switchyard, Power Evacuation	IBRD / 91640	Development of Hydropower and Renewable Energy Investments	Prior	Request for Bids	Open - International	Single Stage - Two Envelope			Request for Bids - Works (without prequalification) SPD	50,000,000.00	0.00	Pending Implementation						2023-10-25		2023-11-10				2024-01-09		2024-03-09	2024-05-08		2027-11-16

Activity Reference No. / Description	Loan / Credit No.	Component	Review Type	Method	Market Approach	Procurement Process	Prequalification (Y/N)	Estimated Amount (US\$)	Actual Amount (US\$)	Process Status	Draft Pre-qualification Documents		Prequalification Evaluation Report		Draft Bidding Document / Justification		Specific Procurement Notice / Invitation		Bidding Documents Issued		Proposal Submission / Opening / Minutes		Bid Evaluation Report and Recommendation for Award		Signed Contract		Contract Completion	
											Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual		
PK-PEDO-248543-GO-RFQ / IT hardware is required to be installed, configured, and commissioned in the Committee Rooms, PEDO House Peshawar, Energy & Power Department, Civil Secretariat, and PMO KHRE Office, Peshawar.	IDA / 67790	Institutional Strengthening and Energy Sector Development	Post	Request for Bids	Open - National	Single Stage - One Envelope		191,000.00	0.00	Under Implementation					2021-12-28	2022-01-06	2022-01-02					2022-02-13		2022-03-15		2022-04-19		2022-07-18
PK-PEDO-276438-GO-RFQ / Supply of Goods with services for Office Renovation (PMO, EGP and BMMW-GKHP Site office) - KHRE	IDA / 67790	Development of Hydropower and Renewable Energy Investments	Post	Request for Quotations	Limited	Single Stage - One Envelope		95,000.00	0.00	Canceled							2022-02-26								2022-04-23		2022-10-20	
PK-PEDO-279713-GO-RFQ / Purchase of IT Equipment/Hardware (Goods) for BMMW-GKHP, KHRE	IDA / 67790	Institutional Strengthening and Energy Sector Development	Post	Request for Quotations	Limited	Single Stage - One Envelope		18,550.00	0.00	Pending Implementation							2022-03-05								2022-04-30		2022-10-27	
PK-PEDO-279714-GO-RFQ / Purchase of Electrical Appliances (Goods) for PMO office, EGP office and Site office GKHP - KHRE	IDA / 67790	Institutional Strengthening and Energy Sector Development	Post	Request for Quotations	Limited	Single Stage - One Envelope		10,650.00	0.00	Pending Implementation							2022-03-05								2022-04-30		2022-10-27	
PK-PEDO-279715-GO-RFQ / Purchase of Office Furniture (Goods) for PMO office, EGP office and Site office GKHP - KHRE	IDA / 67790	Institutional Strengthening and Energy Sector Development	Post	Request for Quotations	Limited	Single Stage - One Envelope		47,650.00	0.00	Pending Implementation							2022-03-05								2022-04-30		2022-10-27	

Activity Reference No. / Description	Loan / Credit No.	Component	Review Type	Method	Market Approach	Procurement Process	Prequalification (Y/N)	Estimated Amount (US\$)	Actual Amount (US\$)	Process Status	Draft Pre-qualification Documents		Prequalification Evaluation Report		Draft Bidding Document / Justification		Specific Procurement Notice / Invitation		Bidding Documents Issued		Proposal Submission / Opening / Minutes		Bid Evaluation Report and Recommendation for Award		Signed Contract		Contract Completion	
											Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual				

CONSULTING FIRMS																												
Activity Reference No. / Description	Loan / Credit No.	Component	Review Type	Method	Market Approach	Contract Type	Estimated Amount (US\$)	Actual Amount (US\$)	Process Status	Terms of Reference		Expression of Interest Notice		Short List and Draft Request for Proposals		Request for Proposals as Issued		Opening of Technical Proposals / Minutes		Evaluation of Technical Proposal		Combined Evaluation Report and Draft Negotiated Contract		Signed Contract		Contract Completion		
										Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned
PK-PEDO-107050-CS-QCBS / Project Implementation Consultants (PIC)	IBRD / 91640	Development of Hydropower and Renewable Energy Investments	Prior	Quality And Cost-Based Selection	Open - International		10,000,000.00	11,665,401.74	Signed	2019-04-15	2019-04-11	2019-05-16	2019-04-15	2019-06-29	2022-02-07			2019-07-27	2021-05-05	2019-08-28	2022-04-05	2019-09-30	2022-04-28	2019-11-04	2021-12-11	2020-11-03		
PK-PEDO-144022-CS-QCBS / MANAGEMENT SUPPORT CONSULTANTS(MSCS) KHYBER PAKHTUNKHWA HYDROPOWER DEVELOPMENT PROGRAM (KHPDP)	IDA / V1780	Development of Hydropower and Renewable Energy Investments	Prior	Quality And Cost-Based Selection	Open - International		6,000,000.00	0.00	Under Review	2019-11-12	2019-11-12	2019-12-12	2019-11-15	2020-02-16	2021-09-09			2020-03-15	2022-01-14	2020-04-14	2022-08-02	2020-05-19		2020-06-23		2026-06-23		
PK-PEDO-144028-CS-QCBS / PLANNING CONSULTANT - CONSULTING SERVICES FOR DEVELOPMENT OF COMPREHENSIVE PLAN FOR HYDROPOWER AND ENERGY SYSTEMS IN KHYBER PAKHTUNKHWA - UNDER KHYBER PAKHTUNKHWA HYDROPOWER DEVELOPMENT PROGRAM (KHPDP)	IDA / V1780	Development of Hydropower and Renewable Energy Investments	Prior	Quality And Cost-Based Selection	Open - International		20,000,000.00	0.00	Canceled	2019-11-12	2019-11-13	2019-12-12	2019-11-15	2020-02-16					2020-03-15		2020-04-14		2020-05-19		2020-06-23		2026-06-23	
PK-PEDO-238876-CS-QCBS / PLANNING CONSULTANT - CONSULTING SERVICES FOR DEVELOPMENT OF COMPREHENSIVE PLAN FOR HYDROPOWER AND RENEWABLE ENERGY SYSTEMS IN KHYBER PAKHTUNKHWA - UNDER KHYBER PAKHTUNKHWA HYDROPOWER AND RENEWABLE ENERGY DEVELOPMENT (KHRE)	IDA / 67790	Development of Hydropower and Renewable Energy Investments	Prior	Quality And Cost-Based Selection	Open - International		16,000,000.00	0.00	Signed	2021-06-21	2021-06-21	2021-07-12	2021-06-23	2021-08-25	2021-07-29			2021-09-22	2021-11-30	2021-10-22	2022-03-22	2021-11-26	2022-12-13	2021-12-31	2023-04-16	2027-06-23		

INDIVIDUAL CONSULTANTS																			
Activity Reference No. / Description	Loan / Credit No.	Component	Review Type	Method	Market Approach	Contract Type	Estimated Amount (US\$)	Actual Amount (US\$)	Process Status	Terms of Reference		Invitation to Identify/Selected Consultant		Draft Negotiated Contract		Signed Contract		Contract Completion	
										Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual
PK-PEDO-113884-CS-INDV / Environment Social Impact Assessment Consultant	IDA / V1780		Post	Individual Consultant Selection	Limited		125,000.00	0.00	Under Implementation	2019-07-24	2019-06-13	2019-07-29		2019-08-19		2019-09-16		2020-09-15	
PK-PEDO-113892-CS-INDV / Resettlement Action Plan Consultant	IDA / V1780		Post	Individual Consultant Selection	Limited		125,000.00	0.00	Under Implementation	2019-07-24	2019-06-17	2019-07-29		2019-08-19		2019-09-16		2020-09-15	
PK-PEDO-113907-CS-INDV / POE member for Dam, Tunnel and Geology	IDA / V1780	Development of Hydropower and Renewable Energy Investments	Post	Individual Consultant Selection	Limited		150,000.00	150,000.00	Signed	2019-11-08	2021-12-30	2019-11-13	2021-12-30	2019-12-04	2021-12-31	2020-01-08	2022-01-25	2022-01-07	
PK-PEDO-180925-CS-INDV / Tariff Consultant	IDA / V1780	Development of Hydropower and Renewable Energy Investments	Post	Individual Consultant Selection	Limited		20,000.00	0.00	Pending Implementation	2020-06-26		2020-07-01		2020-07-17		2020-08-07		2021-02-03	
PK-PEDO-220908-CS-INDV / PMO - Financial Management Specialist to manage the financial management matters of the Khyber Pakhtunkhwa Hydropower and Renewable Energy Development Program	IDA / 67790	Project Implementation Support and Technical Assistance	Post	Individual Consultant Selection	Limited		15,000.00	0.00	Pending Implementation	2021-03-10		2021-03-28		2021-04-07		2021-04-18		2021-10-15	
PK-PEDO-222667-CS-INDV / Technical Expert - Colony and Small Works	IDA / 67790	Project Implementation Support and Technical Assistance	Post	Individual Consultant Selection	Limited		15,000.00	0.00	Pending Implementation	2021-03-10		2021-03-25		2021-04-04		2021-05-09		2021-11-05	
PK-PEDO-244291-CS-INDV / Land Purchase Expert for Dealing with the purchase of land from farmers and various communities and government departments for World Bank projects namely Gabral Kalan HPP and Madyan HPP	IDA / 67790	Development of Hydropower and Renewable Energy Investments	Post	Individual Consultant Selection	Limited		9,000.00	18,000.00	Signed	2021-07-30	2021-08-02	2021-08-04	2021-07-26	2021-08-25	2021-08-02	2021-09-29	2021-08-12	2022-03-28	
PK-PEDO-264014-CS-INDV / International Procurement Specialist to be hired to assist KHRE PMO in the procurement process. This Specialist is mainly required because there are many parallel urgent procurement activities under pro	IDA / 67790	Development of Hydropower and Renewable Energy Investments	Post	Individual Consultant Selection	Limited		60,000.00	85,888.00	Signed	2021-12-15	2021-12-14	2021-12-20	2021-12-14	2022-01-10	2021-12-14	2022-02-14	2021-12-25	2022-08-13	
PK-PEDO-264016-CS-INDV / Independent Panel of Expert (IPE) Member Electrical	IDA / 67790	Development of Hydropower and Renewable Energy Investments	Post	Individual Consultant Selection	Limited		125,000.00	78,507.00	Signed	2021-12-15	2021-12-14	2021-12-20	2021-12-14	2022-01-10	2022-01-02	2022-02-14	2022-01-19	2024-02-14	
PK-PEDO-264635-CS-INDV / Independent Panel of Expert (IPE) Member Mechanical, KHRE	IDA / 67790	Institutional Strengthening a nd Energy Sector Development	Post	Individual Consultant Selection	Limited		125,000.00	0.00	Under Implementation	2021-12-15	2021-12-28	2021-12-20	2021-12-28	2022-01-10	2022-01-02	2022-02-14		2024-02-14	
PK-PEDO-113902-CS-INDV / POE member for Hydrology, Hydraulic Structures, Sediments and GLOF	IDA / V1780	Development of Hydropower and Renewable Energy Investments	Post	Individual Consultant Selection	Limited		55,000.00	14,973.93	Signed	2022-01-19	2021-12-28	2022-01-19	2021-12-28	2022-01-19	2021-12-28	2022-01-19	2022-01-28	2024-01-19	
PK-PEDO-113895-CS-INDV / POE Member for Environment and OHS	IDA / V1780	Development of Hydropower and Renewable Energy Investments	Post	Individual Consultant Selection	Limited		130,000.00	130,000.00	Signed	2022-01-20	2021-12-28	2022-01-20	2021-12-28	2022-01-20	2021-12-28	2022-01-20	2022-01-28	2024-01-20	
PK-PEDO-113927-CS-INDV / POE Member for Social and Resettlement	IDA / V1780	Development of Hydropower and Renewable Energy Investments	Post	Individual Consultant Selection	Limited		125,000.00	125,000.00	Signed	2019-11-08	2021-12-28	2019-11-13	2021-12-28	2019-12-04	2021-12-28	2020-01-08	2022-01-28	2022-01-07	
PK-PEDO-113923-CS-INDV / POE member for Construction Planning and Contract Management	IDA / V1780	Development of Hydropower and Renewable Energy Investments	Post	Individual Consultant Selection	Limited		55,000.00	55,000.00	Signed	2019-07-25	2022-01-28	2019-07-30	2021-12-28	2019-08-20	2021-12-28	2019-09-24	2022-01-28	2021-09-23	

PK-PEDO-276297-CS-INDV / Lead Technical Specialist / Coordinator, 88MW-GKHPP, PM O KHRE	IDA / 67790	Development of Hydropower and Renewable Energy Investments	Post	Individual Consultant Selection	Limited		50,000.00	0.00	Pending Implementation	2022-02-10		2022-02-15		2022-03-08		2022-04-12		2023-04-12	
PK-PEDO-363678-CS-INDV / Regulatory Affairs Expert	IDA / 67790	Development of Hydropower and Renewable Energy Investments	Post	Individual Consultant Selection	Limited		50,000.00	0.00	Pending Implementation	2023-05-27		2023-06-01		2023-06-22		2023-07-27		2025-07-26	
PK-PEDO-388470-CS-INDV / FINANCING AND PROJECT STRUCTURING EXPERT	IBRD / 91640	Development of Hydropower and Renewable Energy Investments	Post	Individual Consultant Selection	Limited		250,000.00	0.00	Pending Implementation	2023-11-10		2023-12-10		2024-01-09		2024-02-29		2026-08-17	
PK-PEDO-388475-CS-INDV / CONTRACT AND PROCUREMENT EXPERT	IBRD / 91640	Development of Hydropower and Renewable Energy Investments	Post	Individual Consultant Selection	Limited		250,000.00	0.00	Pending Implementation	2023-11-30		2023-12-30		2024-01-29		2024-03-20		2026-10-31	
PK-PEDO-388478-CS-INDV / LEGAL EXPERT	IBRD / 91640	Development of Hydropower and Renewable Energy Investments	Post	Individual Consultant Selection	Limited		250,000.00	0.00	Pending Implementation	2023-12-10		2024-01-09		2024-02-08		2024-03-30		2026-11-05	
PK-PEDO-388482-CS-INDV / MONITORING AND EVALUATION EXPERT	IBRD / 91640	Development of Hydropower and Renewable Energy Investments	Post	Individual Consultant Selection	Limited		150,000.00	0.00	Pending Implementation	2023-12-22		2024-01-21		2024-02-20		2024-04-11		2026-09-28	
PK-PEDO-388490-CS-INDV / TARIFF EXPERT	IBRD / 91640	Development of Hydropower and Renewable Energy Investments	Post	Individual Consultant Selection	Limited		150,000.00	0.00	Pending Implementation	2023-12-29		2024-01-28		2024-02-27		2024-04-18		2026-10-05	