

POLICY
FOR
HYDROPOWER GENERATION PROJECTS
2006

Government of
Khyber Pukhtunkhawa

PREFACE

The need for harnessing the immense hydropower potential existing in Khyber Pukhtunkhawa to produce cost-effective electricity for consumption within the province and the rest of Pakistan cannot be over-emphasized. The Hydel Power Policy 2001 announced by the Govt. of Khyber Pukhtunkhawa was mainly based on the concept of installing captive power plants upto a maximum size of 20 MW for catering to the electricity needs of industries attached thereto.

The Policy for Power Generation Projects issued by GOP in 2002 included several investor friendly changes in the methodology and approach to implementing new projects. Under the policy 2002 the provinces are also authorized to receive and approve proposals for hydropower projects up to 50 MW capacity instead of 20 MW as provided in the previous policy.

These developments called for a revision of the Govt. of Khyber Pukhtunkhawa's Hydel Power Policy of 2001. Efforts have been made to revise the Policy making it easier to follow and attractive to project sponsors. The fiscal incentives offered in this Policy intended to be given to the project sponsors through this policy include all items, which are a part of Federal Power Policy of 2002. Govt. of Khyber Pukhtunkhawa has offered some additional incentives to the hydel projects, particularly the projects below one MW, and integrated industrial projects thereto at the provincial level. To that extent this Policy is being announced by the Govt. of Khyber Pukhtunkhawa with the approval of the GOP.

The Govt. of Khyber Pukhtunkhawa is further pleased to designate SHYDO as the Agency to implement this Policy in the Province to harness hydel resources and to help in achieving the goal of the government for boosting up the industrial sector.

ABBREVIATIONS

AEB	Area Electricity Board
AJK	Azad Jammu and Kashmir
BOOT	Build-Own-Operate-Transfer
CBR	Central Board of Revenue
CPP	Capacity Purchase Price
COD	Commercial Operation Date
DISCOs	Distribution Companies
EPP	Energy Purchase Price
FBS	Federal Bureau of Statistics
GoKHYBER PUKHTUNKHAWA	Government of KHYBER PUKHTUNKHAWA
GOP	Government of Pakistan
IA	Implementation Agreement
ICB	International Competitive Bidding
IPP	Independent Power Producer
IRSA	Indus River System Authority
KESC	Karachi Electric Supply Corporation
kV	Kilo Volt
kW	Kilo Watt
kWh	Kilo Watt Hour
LOI	Letter of Interest
LOS	Letter of Support
MW	Mega Watt
NBP	National Bank of Pakistan
NEPRA	National Electric Power Regulatory Authority
NTDC	National Transmission and Despatch Company
PAEC	Pakistan Atomic Energy Commission
PEPCO	Pakistan Electric Power Company
PEPA	Pakistan Environmental Protection Agency
PESCO	Peshawar Electric Supply Company
PIDA	Provincial Irrigation and Drainage Authority
PPA	Power Purchase Agreement
PPIB	Private Power and Infrastructure Board
PPC	Private Power Cell
RFP	Request for Proposals
Rs	Pakistan Rupees
SECP	Securities and Exchange Commission of Pakistan
SHYDO	Sarhad Hydrel Development Organization
SRO	Statutory Rules and Orders
TESCO	Tribal Area Electric Supply Company
TFC	Term Finance Certificate
US \$	United States Dollar
WAPDA	Water and Power Development Authority
WPI	Wholesale Price Index
WUC	Water Use Charges
WUL	Water Use License

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For further information please contact us on

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1. INTRODUCTION

1.1 Prelude

1. Consumption of electrical energy is a universally accepted indicator of progress in the agricultural, industrial and commercial sectors of economy, as also of the well being of the people of any country. No major economic activity can be sustained without adequate and reliable supply of power. It plays a critical role in employment generation, regional development and poverty eradication.
2. During the course of forward planning undertaken by the government and public sector utilities it has transpired that there will be a huge gap between the demand and supply of electricity. The projections indicate that power shortages up to 500 MW will appear in the country from the year 2005-06. These shortages would increase to 5,500 MW by the year 2010 if substantial investments are not made to set up power plants in various parts of Pakistan. There is a need to create an environment for the improvement of energy sector in the country, so that the people have access to adequate, reliable and affordable energy.
3. With a view to addressing the projected power shortages, the Government of Pakistan (GOP) announced the Policy for Power Generation Projects 2002, which provided a clear set of incentives, along with a regulatory regime, that effectively gave a roadmap to attract the much-needed investment in power generation at competitive prices. The policy offered incentives for development of power projects based on local resources. It also allowed the provinces/AJK to manage investments for power projects upto 50 MW capacity while those above 50 MW would be handled at the federal level. Thus, the government of Khyber Pukhtunkhawa, after thorough deliberation, has revised its own Power Policy of 2001 by offering more incentives and concessions to attract private sector investments with a goal of developing several hydropower plants that would supply electricity for use by domestic, agricultural and industrial consumers not only in Khyber Pukhtunkhawa but also in other parts of Pakistan. Enlarging the industrial base in Khyber Pukhtunkhawa is one of the important aims of the Policy.
4. Nature has gifted Khyber Pukhtunkhawa with immense hydropower potential. A number of organizations and their experts have carried out

surveys and identified locations with an aggregate power potential of nearly 25,000 MW. The landscape is ideal for development of high head, medium-head and small head power stations across the rivers and their tributaries over the length and breadth of the Province. Govt. of Khyber Pukhtunkhawa identified several sites for Hydrel Power Projects and offered ready-made packages to the investors, under its existing policy of October 2001, which pertained to projects upto 20 MW capacity.

5. The hydrel power projects under the revised Hydropower Policy of Govt. of Khyber Pukhtunkhawa will not only produce low cost power for use by domestic and commercial consumers but can be utilized for poverty alleviation through integrated agro-based industrial projects.

1.2 Overview of Generation Capacity and Future Development Program

6. Pakistan has a total installed generating capacity of 19,505 MW. The installed capacities owned by various agencies operating in the country are as follows:

i	WAPDA	=	11242 MW
ii.	KESC	=	1756 MW
iii.	PAEC	=	462 MW
iv.	IPP'S (WAPDA/KESC/AJK)	=	6045 MW

7. In the year 1960, the share of hydrel generation was 70 percent while that of thermal generation was only 30 percent in the energy mix. The 1994 Energy policy reversed the ratio in favor of thermal because of the induction of a large number of oil fired and gas fired IPPs. By the year 2001, over 70 percent electricity was based on thermal while 30 percent was generated through hydrel plants. Over the last four years, due to commissioning of Ghazi Barotha Hydropower Project, the share of hydrel generation has slightly increased from 30 percent to 42 percent and accordingly the share of thermal has declined from 70 percent to 58 percent.
8. The optimal utilization of the hydroelectric potential has been accorded priority in the future power development strategy. According to the current schedule Malakand-III (81 MW) and Pehur (18 MW) are planned to be commissioned in 2007. Khan Khwar (72 MW), Allai Khwar (121 MW),

Duber Khwar (130 MW), Keyal Khwar (130 MW) are expected to be completed in 2008 along with Golen Gol (106 MW), and Jinnah (96 MW). Later on Matiltan (84 MW), New Bong Escape (79 MW) and Rajdhani (132 MW) are likely to be commissioned by 2009 while Taunsa (120 MW) may be completed by 2010. In order to meet the remaining power demand in the coming years, it is planned to install high efficiency combined cycle power plants using natural gas at various locations. The power plants at Thar coal fields with the assistance of the Peoples' Republic of China are also being planned.

9. WAPDA has prepared a "Hydropower Development Plan" titled "Vision 2025". This plan suggests the ways and means of meeting the upcoming deficits through additional power generation. The plan has been updated and a consolidated list of potential projects to be implemented in the short, medium and long terms has been finalized.
10. The identified projects will be implemented by the public sector, private sector, or through public-private partnership. The choice of implementing projects at these platforms will depend upon the urgency of meeting the power demand keeping in view the resource availability position.

1.3 National Power Sector at a Glance

11. Pakistan has two vertically integrated public sector power utilities--the Pakistan Water and Power Development Authority (WAPDA) and the Karachi Electric Supply Corporation (KESC). WAPDA supplies power to the whole of Pakistan, except the metropolitan city of Karachi, which is supplied by KESC. The systems of WAPDA and KESC are interconnected through 220 kV double circuit transmission lines. Pakistan Atomic Energy Commission (PAEC) operates one plant at Karachi and supplies power to KESC and another plant at Chashma which is connected to WAPDA system. The other major group is the IPPs operating in almost all the provinces.

1.3.1 Pakistan Water and Power Development Authority (WAPDA)

12. WAPDA was established in 1958 and entrusted with a massive agenda, which included generation, transmission and distribution of power along with irrigation, water supply, drainage, flood control, etc. It owns about 60

percent of the country's total power generation capacity and serves 88 percent of all electricity customers in Pakistan. It has a customer base of over 13 million.

13. The privatization of WAPDA is underway. Its distribution network has been divided into eight electric supply companies, which are successors of former Area Electricity Boards (AEBs). The AEBs were departments within WAPDA to administer the supply and distribution, construction, expansion, maintenance and operation of the distribution system. The AEBs have been re-structured into independent power companies, i.e. eight distribution companies (DISCOs). Another company has recently been set up in the Tribal Areas under the title of TESCO. Side by side four generation companies (GENCOs) and a National Transmission and Dispatch Company (NTDC) have been created. Presently, these entities are incorporated under the management of Pakistan Electric Power Company (PEPCO).
14. So far Kot Addu Thermal Power Station has been privatized. DISCO at Faisalabad (FESCO) and GENCO at Jamshero are next on line for privatization.

1.3.2 Karachi Electric Supply Corporation (KESC)

15. KESC was incorporated in 1913 and is responsible for the generation, transmission and distribution of electricity in Karachi and its adjoining areas. It has a customer base of 1.5 million predominantly urban consumers.
16. Privatization of KESC has recently been formalized with a strategic investor, after prolonged international competitive bidding.

1.3.3. National Electric Power Regulatory Authority (NEPRA)

17. In order to promote fair competition in the electricity industry and to protect the rights of consumers as well as producers and sellers of electricity, the GOP has enacted the Regulation of Generation, Transmission and Distribution of Electric Power Regulation Act, 1997 (NEPRA Act). Under this Act, the National Electric Power Regulatory Authority (NEPRA) performs three main regulatory functions i.e., licensing of generation, transmission and distribution of electric power, tariff

determination of each agency involved and prescription of standards and rules for conduct of business under the NEPRA Act.

1.3.4 Private Power & Infrastructure Board (PPIB)

18. PPIB is a board, which was established under the Ministry of Water & Power, GOP in 1994. It is chaired by the Minister for Water & Power and includes representatives from each of the four provinces of Pakistan as well as Azad Jammu and Kashmir. It has been set up to provide one window support to IPPs. The day-to-day coordination between various agencies to assist the PPIB in taking decisions on various matters relating to the implementation of power projects is carried out by a Committee headed by the Minister for Water & Power. This Committee consists of representatives of PPIB, WAPDA, KESC, Federal Planning & Development Division and the concerned officials of Provincial Governments. It is meant to oversee the implementation of the 2002 Power Generation Policy.
19. PPIB is to mainly provide one window facility for implementation of Projects above 50 MW capacity. It issues LOI and LOS, prepares Prequalification Documents (PQDs) and bid documents, pre-qualifies sponsors, evaluates the bids of pre-qualified sponsors, assists the sponsors in obtaining necessary consents/permissions from the concerned government agencies, carries out negotiations on the Implementation Agreement, assists the power purchaser and the provincial authorities in the negotiations, execution and administration of the PPA and WUL respectively, issues and administers the GOP Guarantee on behalf of the power purchaser, the Federal entities and the Provincial Governments to fulfill their contractual obligations and follow up on implementation and monitoring of the Projects. The projects up to 50 MW capacity fall under the purview of the respective provincial governments. However, the Federal Government provides guarantee for performance of all federal entities.

1.4 Power Structure in Khyber Pukhtunkhawa

20. At present, Peshawar Electric Supply Company (PESCO), which is a part of WAPDA, is operating as the main distribution company in the Khyber Pukhtunkhawa. Recently Tribal Electric Supply Company (TESCO) has

also been incorporated. Simultaneously NTDC is looking after the entire power transmission network (220 kV and 500 kV) spread in the province. All the three organizations are federal entities. SHYDO, a provincial entity under Govt. of Khyber Pukhtunkhawa is operating and maintaining some power plants, transmission lines and distribution systems in isolation from PESCO. At some places, SHYDO is selling power to PESCO under specific terms and conditions.

1.4.1 Sarhad Hydel Development Organization (SHYDO)

21. Sarhad Hydel Development Organization (SHYDO) was established under the Sarhad Hydel Development Organization Act, 1993 to identify and explore the hydel potential of the province of Khyber Pukhtunkhawa and to install small plants upto 5 MW capacity. The organization is under the administrative control of Irrigation and Power Department of Provincial Government and is governed by a Board of Directors, headed by the Chief Minister of Khyber Pukhtunkhawa.
22. Under the NEPRA Act, SHYDO was deemed to be a provincial licensee at par with WAPDA for generation, transmission and distribution of electric power. However, the Govt. of Khyber Pukhtunkhawa has entrusted role to SHYDO for implementation of power generation projects up to 50 MW in the province.

1.5 Overview of Past Power Policies in Pakistan

23. In late 1980's and early 1990s, the Government of Pakistan (GOP) undertook the initiative to induct private sector investment in power generation, and framed for the first time, a security package of agreements for the development of energy sector in Pakistan. An Energy Task Force was constituted at the end of 1993 to devise a consolidated and comprehensive policy for revamping and rejuvenating the power sector.
24. The last decade has been crucial with regard to policy developments focusing on the involvement of the private sector in power generation, with the introduction of three distinct power policies in 1994, 1995 and 1998. In all the policies, the Government of Pakistan gave high priority to the development of power sector. While the policy of 1994 attracted a lot

of investments, the cost of electricity went very high due to liberal tariff. It was also realized that the policy of 1998 had failed to attract the private power investors for the following reasons:

- Bulk Supply Tariff was not fixed
- Limitation on front-end loading was imposed
- Lack of one-window operation existed.
- No specific incentives for the hydel power producers/promoters were provided.

25. To address the above issues, the GOP issued a revised power policy in late 2002, which is currently in effect. All previous power policies in the country have been formulated primarily for the thermal and hydel power generation sectors, and do not address power generation from renewable resources in any substantive way.
26. The present policy not only encourages setting up of power capacity based on indigenous resources (hydel, gas and coal), but also seeks to enhance the use of non-conventional and renewable sources of energy. It emphasizes the need for energy conservation and environmental protection.

1.5.1 Power Policy of Govt. of Khyber Pukhtunkhawa

27. The GOP's Power Policy of 1998 allowed the provinces to make their own policies for projects upto 20 MW. Accordingly, the Govt. of Khyber Pukhtunkhawa issued its policy in October 2001. The policy narrates in its outlines that the sponsors shall establish captive hydel power units for industry with equity from their own resources or as a joint venture with public sector or foreign investors. Moreover, the electricity so produced shall be utilized for operation of integrated industrial units, offices and allied facilities only. It did not envision installation of power plants for supply of electricity to any utility or power purchaser like WAPDA or PESCO.
28. Hardly any plants have been established under the Khyber Pukhtunkhawa Power Policy of 2001. Consequently, the primary goal of industrializing the province has not been achieved, probably, for the

following shortcomings:

- The policy tied up the completion of construction of the industry with the erection of captive power plant.
- Time period of two years allowed for the construction of the power plant, which was too short to complete the project.
- There was lack of clear incentives for the industries integrated with the power plants.

29. Under this Policy for Hydropower Generation Projects, the size has been increased from 20 MW to 50 MW. Also the new projects will not necessarily be captive power plants as envisioned in the Policy of 2001. They can supply power to any power purchaser.

1.6 Objectives of the Khyber Pukhtunkhawa Power Policy - 2006

30. The main objectives of the Policy are:

- To provide sufficient capacity for power generation at the least cost.
- To encourage and ensure exploitation of indigenous resources, which include renewable energy resources, human resources, participation of local engineering and manufacturing capabilities;
- To ensure that all stakeholders are looked after in the process
- To be attuned to safeguarding the environment.
- To encourage the private sector to develop hydel potential and utilize the power generation for the industry as well as for other purposes in accordance with the Interim Power Procurement (Procedures and Standards) Regulation 2005, which is the basis of the standard power needs of the DISCOs operating in Khyber Pukhtunkhawa or in other parts of the country, through NTDC by paying wheeling charges.

1.7 Scope of the Khyber Pukhtunkhawa Power Policy - 2006

31. The scope of the Power Policy covers development and implementation of Power Generation Projects by:

- Private sector;
- Public sector;

- Public-private partnership; and
- Industrial sector, if the industry is integrated with the proposed hydel project

1.8 Features of the Khyber Pukhtunkhawa Power Policy 2006

32. International Competitive Bidding (ICB) will be carried out offering any hydel potential site with estimated capacity of power potential above 5 MW to 50 MW. The basic criterion for the approval of any project will be the highest bid offered above the baseline lease price of Rs.1000/- per kW per annum of the potential (MW) at the proposed site for solicited proposals (where feasibility studies have been done) as well as for the raw sites. The selection procedure will include prequalification, issuance of RFP, bidding and bid evaluation as per RFP criteria. The power tariff will, however, be negotiated by the sponsor with the buyer and approved by NEPRA.
33. The feasibility study will be done only for the raw site(s) by the private sector after its initial proposal has been reviewed / accepted by SHYDO and a Letter of Interest (LOI) has been issued after the receipt of the required bank guarantee. The term could be extended by mutual negotiations between SHYDO and the Sponsor.
34. All projects upto 50 MW capacity in Khyber Pukhtunkhawa will be implemented on Build-Own-Operate-Transfer (BOOT) basis and shall be handed over to Govt. of Khyber Pukhtunkhawa on the expiry of 50 years as concession period. The projects already awarded under the previous Power Policy of Khyber Pukhtunkhawa will also have the privileges provided in the Power Policy Khyber Pukhtunkhawa-2006.

1.9 Incentives in the Policy

35. Govt. of Khyber Pukhtunkhawa through SHYDO can offer hydropower projects up to 50 MW through private/public sector development with the following incentives:
 - (i) Project sites, with estimated power potential of more than 5 MW, will be offered for lease through International Competitive Bidding

(ICB), on the basis of available power potential at site of the proposed project. The baseline lease price for the purpose of ICB is fixed as Rs.1000/- per kW per annum. The site will be awarded on the basis of highest bid received above the baseline lease price. The approved lease price will be escalated @ 25% after every 10 years of the lease period. For solicited sites, the power potential determined in the feasibility report will be considered for estimating the total lease money payable per annum to SHYDO. However, for the raw sites the annual payable lease amount will be adjusted later-on in accordance with the firm capacity in terms of available power potential of the site determined in the feasibility report duly approved by the SHYDO.

- (ii) The agreed lease price shall be payable to SHYDO at the commissioning of the plant and every year thereafter.
- (iii) Lease of site could be transferred to another buyer of the project plant with prior approval of SHYDO upon payment of lease transfer fee equivalent to lease money for the period of six months of the subject site.
- (iv) SHYDO will provide one window facility and technical help to the private investors in setting up hydropower projects in Khyber Pukhtunkhawa.
- (v) To develop the raw sites, where feasibility studies are not available, unsolicited proposals would be welcomed.
- (vi) Two-part tariff structure consisting of fixed capacity and variable energy component is recommended with the proviso that fixed capacity payment for hydel projects would fall between 60% to 66% of the total tariff.
- (vii) Hydrological risk will be borne by power purchaser (DISCO's or any other party).
- (viii) No provincial taxes will be levied on the sponsors of power plants based on hydel and other renewable sources. No Water Use Charges will be levied.

1.10 Transition Period

- 36. The intended privatization of the power sector (WAPDA and KESC) will be an evolutionary process over a period of time for competitive electricity

industry through the processes defined in GOP's Privatization Policy. Along with the privatization process, the Govt. of Khyber Pukhtunkhawa will undertake active solicitation of offers to build new generating plants, selling power under contracts to public sector utilities including the distribution companies [DISCOs] or the legal assigns/successors of the public sector utilities as required in the framework of NEPRA or to any other customers.

37. As defined in NEPRA Act, the DISCOs shall be responsible to operate and provide safe, reliable transmission and interconnection services on a non-discriminatory basis, including supply to a bulk power consumer who proposes to become directly connected to their facilities. Without prejudice to the foregoing responsibilities, the concerned power purchaser (DISCO or any other party) shall:
- a) make available to the general public the tariff specifying the NEPRA's approved rates, charges and other terms and conditions for transmission and interconnection services;
 - b) not levy any rate or charge or impose any condition for the transmission of electric power which has not been approved by the NEPRA as a part of tariff;
 - c) not cause a division or any associated undertaking to engage in generation and transmission; provided that this clause shall not apply to the KESC and WAPDA so long as their electric systems remain integrated; and
 - d) develop, maintain and publicly make available, with the prior approval of NEPRA, an investment program for satisfying its service obligations and acquiring and selling its assets.
38. Hydel projects in the private sector will be implemented on Build- Own- Operate-Transfer (BOOT) basis. The projects shall be transferred to Govt. of Khyber Pukhtunkhawa free of charge at the end of concession period (50 years).

2. INSTITUTIONAL ARRANGEMENTS

2.1 National Electric Power Regulatory Authority (NEPRA)

39. While performing its functions under the NEPRA Act "Regulation of

Generation, Transmission and Distribution of Electric Power Act (XL of 1997)". NEPRA shall, as far as practicable, protect the interests of consumers and companies providing electric power services in accordance with guidelines laid down in the Act. According to the NEPRA Interim Power Procurement (Procedures and Standards) Regulations, 2005, NEPRA will provide to the SHYDO the standard forms required for tariff determination by it for supply of electric power services by the generation companies, which will be provided with the RFP to the bidders. SHYDO will facilitate the tariff negotiation among the parties including the sponsors, investors, power purchasers and NEPRA.

40. NEPRA's role in the power business, inter-alia, will be to issue licenses for companies and to regulate their operations according to NEPRA rules and regulations.
41. The prospective companies will be required to comply with all NEPRA rules/procedures, inter-alia, for grant of license before security agreements are concluded for any project.

2.2 Powers and Duties of SHYDO

42. The SHYDO under the Chairmanship of Chief Minister, Khyber Pukhtunkhawa will overview and organize the Power Generation Projects.
43. A committee, under Managing Director SHYDO as convener, comprising a representative from Finance Department not below the rank of Additional Secretary, a representative from P&D Department not below the rank of Chief of the concerned section, a representative from WAPDA not below the rank of Director and Director (Private Power) of SHYDO shall process and evaluate all the proposals for the projects under the policy. This committee shall submit the evaluation report and recommendations before the Chairman SHYDO Board of Directors, Khyber Pukhtunkhawa for approval.
44. The SHYDO will provide one-window support to Independent Power Producers (IPPs) and will co-ordinate between various agencies in taking timely decisions on various issues while implementing power projects. It will provide a one-window facility for implementation of power generation projects up to 50 MW capacity, and will issue the LOI and LOS, prepare

pre-qualification and bid documents, pre-qualify the sponsors, evaluate the bids of pre-qualified sponsors, assist the sponsors and the project companies, as the case may be, in seeking necessary consents and permissions from various governmental agencies, carryout negotiations on the Implementation Agreement (IA), assist the power purchaser and provincial authorities in the negotiation, execution and administration of the Power Purchase Agreement (PPA) and Water Use License (WUL). SHYDO will also arrange Govt. of Khyber Pukhtunkhawa's guarantees to project sponsors in respect of the contractual obligations of provincial entities involved in any of the Agreements comprising the Security Package. Similarly Govt. of Khyber Pukhtunkhawa/SHYDO will arrange GOP's guarantees in respect of the contractual obligations of federal entities such as DISCOs, NBP, SBP, and CBR etc.

3. IMPLEMENTATION ARRANGEMENTS

45. Implementation of new Power Projects will be processed either as Solicited Proposals i.e., where the feasibility study has already been conducted, or as Raw-site proposals i.e. the locations where no feasibility study has been carried out. Outlines of the Implementation Arrangement are given as under:

- (a) Solicited proposals will be processed for selection of the successful bidders on the basis of highest offer of lease price for the hydel potential available at the proposed site through an International Competitive Bidding (ICB). Process of selection will require pre-qualification, issuance of RFP, bidding and evaluation in accordance with the bidding criteria clearly laid down at para 35(i) above. However, site specific details will be provided in RFP.
- (b) Raw sites shall be offered to the sponsors, who will be pre-qualified on the basis of evaluation of the proposals and pre-qualification documents, submitted to SHYDO, by the sponsors at *suo-moto* or in response to the invitation by SHYDO. The proposal and PQDs will be evaluated under the committee described in para 43 above. SHYDO will invite bids from the pre-qualified bidders in accordance with the procedure described in para 35(i) above. The successful bidder will be asked to submit Bank

guarantee within the specified period. The Letter of Interest (LOI) will be issued, after submission of the bank guarantee of the specified amount in favor of SHYDO, for carrying out the feasibility study. The sponsors shall conduct the feasibility study at their own cost and resources. They shall submit the feasibility report to the SHYDO for approval. The success of the sponsor will depend on the acceptability of the feasibility study. A Panel of Experts (POE), consisting of one geologist/geo-technical expert, one hydropower engineer, one environment and resettlement expert and one power economist, to be appointed by SHYDO will monitor and approve the Feasibility Study.

- (c) If the sponsor, who would have completed the feasibility report does not succeed in negotiation of tariff with the power purchasers or NEPRA, within a period specified in the LOI, will be eligible to get back the cost of feasibility study under the procedure described herein, then the site will become a solicited one and ICB process (as explained for the solicited sites) will be followed.

- 46. The feasibility studies, inter-alia, shall contain detailed economic and financial assessment of the proposed project after taking into consideration all benefit and cost streams associated with the project. Simultaneously a thorough environmental and social impact of the project will be assessed along with the cost of compensation to and resettlement of the affected people. While the economic analysis may be conducted from the perspective of the net benefits to the national economy, the financial evaluation shall be carried out from the project sponsor's point of view. Key determining factors for a project's viability from both the perspectives would be economic and financial internal rates of return i.e. EIRR and FIRR. In order to qualify for consideration by the SHYDO, a raw site project's EIRR and FIRR shall at least be equal to 10% in real terms. With the purpose of conducting technical audit of the project sponsors' calculations, it shall be mandatory for the project sponsors to provide soft copies of their techno-economic and techno-financial computer models to SHYDO along with the hard and soft copies of the feasibility studies.

47. All the power projects in the private sector will be implemented on Build-Own-Operate-Transfer (BOOT) basis. The projects based on BOOT shall be transferred to Govt. of Khyber Pukhtunkhawa free of charge at the end of concession period of 50 years.
48. Power tariffs will comprise an Energy Purchase Price (EPP) and a Capacity Purchase Price (CPP) with adequate provision for escalation. The escalation factors are given in Section 8.2.5 hereunder. The CPP for the Projects will be approximately 60% to 66% of the levelized tariff, because of the relatively low EPP in hydel projects.
49. Govt. of Khyber Pukhtunkhawa shall guarantee that the terms and conditions of the Implementation Agreement (IA), Power Purchase Agreement (PPA), and Water Use License (WUL) including the payment terms, are maintained during the term of the agreements for the projects as defined in Section 10 para 112(b) hereafter as far as the parties to these Agreements are under the control of Govt. of Khyber Pukhtunkhawa. In case any federal entity such as the State Bank of Pakistan or CBR or DISCO or NBP is not under the direct control of Govt. of Khyber Pukhtunkhawa the guarantee of the Federal Government shall be arranged by the Govt. of Khyber Pukhtunkhawa. Any private power purchaser shall arrange its guarantee for covering its liability to the IPP.
50. Power companies will be allowed to import plant and equipment not manufactured locally at concessionary rates. Companies will also be completely exempted from the payment of income tax, including turnover rate tax, and withholding tax on imports, in accordance with the Federal Power Policy in force.
51. To promote indigenization, maximum efforts shall be made by the sponsors to engage, wherever feasible, the local expertise, manpower as well as the local industries in providing materials / equipment for the project directly or indirectly or in collaboration with other local / foreign manufacturers.

4. RECIEPT OF PROPOSALS AND TIME SCHEDULE

4.1 Proposals for Solicited Sites

4.1.1 Schedule of Activities for Proposals of Solicited Sites

52. A typical schedule to conduct competitive bidding for a private power project with capacity more than 5 MW to 50MW is shown below; however, a specific schedule will form part of the RFP to be circulated for each project.

S.#.	Activity	Time Allowed
(a)	Pre-qualification for specific projects SHYDO will invite Sponsors for registration and for collection of pre-qualification documents through the press and all other channels normally prescribed by the Asian Development Bank and the World Bank (on registration SHYDO will supply a copy of Power Policy 2006)	60 Days
(b)	Submission of pre-qualification documents to SHYDO	30 days
(c)	Evaluation of pre-qualification documents and notification to pre-qualified bidders by SHYDO	30 days
(d)	SHYDO's invitation for bids to pre-qualified bidders and collection of bidding documents by pre-qualified bidders	30 days
(e)	Time allowed for submission of bids to SHYDO together with bid bond and evaluation fee in favor of SHYDO	75 days
(f)	Evaluation of bids including tariff determination by NEPRA and notification of successful bidder by SHYDO	60 days
(g)	Submission of Performance Guarantee by Sponsors @ US\$ 3000 per MW (or equivalent Pak. Rupees. using for conversion, the inter-bank rate prevailing at the last working day of the preceding month) in favor of SHYDO after approval of tariff by the NEPRA.	30 days
(h)	Issuance of LOS by SHYDO	15 days
Total		330 days

4.1.2 Pre-Qualification of Bidders for Solicited Sites

53. Bids will only be considered from bidders who comply with at least the following conditions:

- a) One of the Sponsors, who will be designated as the 'Main Sponsor', will have at least 20% as stake in the equity and

together with other partners, will have direct and relevant experience and capability in the successful development or implementation or ownership or operation of projects of similar magnitude.

- b) Demonstrated capability for financing (equity and debt) for projects of similar size.
- c) The bidder, individually or collectively, has not been black listed previously for a similar project by the Federal or Provincial Governments or their entities in Pakistan.
- d) The bidder is not currently involved in any financial scandal or facing charges of financial corruption in any court of law either inside or outside Pakistan.

4.1.3 Lock-in-Period

- 54. The Sponsor identified as the "Main Sponsor" in the application for pre-qualification, having a lead role and possessing sufficient financial strength, will be required to hold at least 20% of the equity of the project company during the "lock-in period" which will be from the LOS issuance date until the sixth anniversary of the successful commissioning of the plant. The pre-qualified Sponsors must together hold 51% of the equity for the same period.

4.1.4 Request for Proposals (RFP)

- 55. The RFP for Power Projects with capacity more than 5 MW to 50 MW is likely to specify the following or as deemed appropriate, for each project offered for International Competitive Bidding (ICB):
 - (a) Type of Project
 - (b) Net capacity (MW)
 - (c) Reference annual plant factor (%)
 - (d) Transmission arrangements including the point of delivery to the Power Purchaser
 - (e) Term of Power Purchase Agreement
 - (f) Specific allowances for scheduled maintenance and excused forced outages.
 - (g) Cooperation arrangements/ agreement with local engineering companies, if any

- (h) Evaluation criteria
 - (i) Tariff, including;
 - Limitations on "Front-end loading". Front-end loading during first 10 years shall be allowed for Project Entity to meet its debt related commitments.
 - However, the average tariff in first 10 years shall not be more than 2.5 times the average tariff for the balance term of the project.
 - Limitations on proportion of capacity charge to overall tariff
 - Reference date (s) for indexation in terms of Section 8.2.5 hereof, which would be 30 days prior to the bid submission deadline, unless specified otherwise, for matching debt-related capacity charge stream with loan repayment stream will be adopted.
 - Sum of energy charge and non-debt-related capacity charge to be 'constant' or 'increasing' during the term
56. The following documents will also be included in the RFP:
- (a) Instructions to bidders
 - (b) General provisions for bidders
 - (c) Minimum technical standards
 - (d) Standardized forms for NEPRA's tariff determination
 - (e) Feasibility study of the project
 - (f) Copies of relevant standard security package agreements and documents i.e. LOS, IA, PPA, WUL (as applicable) etc.
 - (g) Environmental laws, rules, procedures and guidelines of the GOP (PEPA) and Khyber Pukhtunkhawa Environmental Protection Agency (Khyber Pukhtunkhawa-EPA)
57. If necessary, pre-bid conferences will be held to facilitate exchange of information with bidders in a transparent manner, giving equal and adequate opportunity to all the prospective bidders.

4.1.5 Evaluation of Bids

58. Bids will be opened on the prescribed date in the presence of bidders' representatives who choose to attend the bid opening.
59. Parties or groups already in possession of valid LOS issued by the

SHYDO shall have the first right of refusal for the particular project. However, this facility shall be subject to their acceptance of lease price being equal to or higher than the highest bid (received through ICB). In case the existing LOS holder does not fulfill above criterion, the subject LOS will become null and void while the project will be awarded to the other available highest bidder. In order to solicit the existing LOS holder's response, the SHYDO shall contact those parties directly before or after the conduct of the ICB.

60. Detailed evaluation criteria will be given in the RFP.
61. The bid with the highest lease price for the hydel potential will be ranked as number one. Once the bid is finally accepted by SHYDO, the successful bidder will be issued LOS by SHYDO against delivery of a Performance Guarantee in favor of SHYDO in the required amount valid up to three months beyond the Financial Closing date specified in the LOS, and upon payment of the cost of the feasibility study to SHYDO. Under normal circumstances, no extension in achieving the financial closing will be granted except on the Sponsors' written request. In such case, if the Committee referred to in terms of section 2.2 para 43, is satisfied that delays are due to factors beyond reasonable control of the Sponsors and the Financial Closing can be achieved shortly, a one-time extension of up to a maximum period of six months will be given on formal approval of SHYDO against extending the validity period of the Performance Guarantee and increasing the guarantee amount by 100% for another 9 months from the original financial closing date.
62. In case of more than one bidder for a particular site the debt-related costs of all bidders shall be accounted for calculation of the IRRs of each loan after accounting for interest as well as other financing charges associated with each type of loan at the discount rate given in the RFP. Bid embodying IRR of long-term debts shall be given preference.
63. SHYDO will reserve the right to reject any or all bids without assigning any reason thereof, and will not assume any liabilities or claims of compensation in connection therewith.

4.2 Raw Sites

64. The sites for which feasibility studies are not available and which could be developed for power generation are called raw sites.

4.2.1 Submission of Proposals

65. The initial proposals on raw sites for hydel and renewable energy projects with capacity more than 5 MW to 50 MW will be submitted by sponsors to SHYDO. They must include at least the following information:
- (a) Project name
 - (b) Project location
 - (c) Proposed capacity and plant factor
 - (d) Basic outline of structures and plant
 - (e) Summary program indicating specific milestones and completion date of the feasibility study
 - (f) Pre-qualification details as required by PQD Document obtainable from SHYDO.
 - (g) Previous history of the projects and proposals (if any), etc.
66. Proposals on raw sites will be examined by a Committee under MD SHYDO referred to above in Section 2.2 para 43. The Sponsor whose Proposal is approved by the Committee, after evaluation of proposal and pre-qualification documents, or in case of more than one sponsor for a project, the sponsor who acquires the 1st ranked position in terms of Section 3 will be processed for the issuance of LOI by SHYDO.

4.2.2 Letter of Interest (LOI)

67. Initial validity of the LOI will be up to 24 months with the condition that the sponsor has to provide a complete work plan and schedule of activities within three months. In case POE is not satisfied with the progress of work after six months, a penalty @ 20% of the bid money shall be imposed and a warning shall be issued. In case of no progress within 12 months according to the schedule, the LOI shall be liable for cancellation with forfeiture of bank guarantee with the approval of SHYDO Board. In case the study is not completed within the specified time, and on a written request from the sponsors for extension of LOI, if the Panel of Experts (POE) appointed by SHYDO, is satisfied that the Sponsor's progress during conduct of the feasibility study is reasonable and the feasibility study is likely to be completed shortly, a one-time extension may be granted by SHYDO on the recommendations of the committee referred to in Section 2.2 Para 43 up to a maximum period of 90 days.
68. Sponsors of approved projects will be eligible for issuance of LOI.

SHYDO shall intimate to the sponsors in writing the approval of the proposal and simultaneously demand submission of a bank guarantee in favor of SHYDO of the value of US\$ 500 per MW (or equivalent Pak. Rs. using for conversion, the inter-bank rate prevailing at the last working day of the preceding month) valid for a period not less than six months in excess of the validity of the proposed LOI.

69. Submission of a bank guarantee in favor of SHYDO in double the original amount and valid beyond 60 days of the extended LOI period will be mandatory to qualify for extension in validity of the LOI.
70. The LOI will require the Sponsors to carry out a complete feasibility study to be monitored by the POE. The Sponsors will have to meet the standards and milestones stipulated in the LOI. If the POE confirms that the Sponsors have failed to meet the relevant milestones and standards, SHYDO will terminate the LOI and en-cash the bank guarantee. The Sponsors will have no claim for compensation against the Govt. of Khyber Pukhtunkhawa or any other institution for the same cause.
71. On completion, the feasibility study will be reviewed and approved by the POE. If the feasibility study is approved, the Sponsors will be allowed to negotiate, within 60 days, a tariff with the power purchaser.

4.2.3 Negotiations on Tariff

72. SHYDO will be notified by the power purchaser, in case of successful tariff in interim negotiations between the power purchaser and the sponsors. The sponsors will file the application with NEPRA for tariff approval. After NEPRA's approval, SHYDO will issue the LOS against delivery of the Performance Guarantee of the value of US\$ 3000 per MW (or equivalent Pak. Rs. using for conversion, the inter-bank rate prevailing at the last working day of the preceding month) in favor of SHYDO, valid up to three months beyond the Financial Closing date specified in the LOS or as extended.

4.2.4 Participation in Bidding

73. In case negotiations on tariff between the power purchaser and Sponsors of the feasibility study are not successful, or the 60 days negotiation period lapses, the project will be processed as a solicited proposal based

on the feasibility study completed by the sponsor in accordance with Section 4.1 above, except that the sponsors who have conducted the feasibility study on the raw site, will be allowed to participate in the bid without submission of a fresh bid bond and will be given a chance to undertake the project at the highest lease price quoted in the bidding process. On their refusal, however, SHYDO will appoint an independent auditor, and the successful bidder will reimburse the reasonable and independently audited cost of the feasibility study to the initial Sponsors before obtaining the LOS.

4.2.5 Schedule of Activities for Raw Sites

74. The proposals received for raw site projects more than 5 MW to 50 MW capacity in the manner stated above would follow the typical schedule as given below:

S.No.	Activity	Time Allowed
(a)	Registration for raw sites, purchase of PQD and submission of proposal with PQD	60 days
(b)	Review of proposal and pre-qualification documents on raw site by the Committee under MD SHYDO	30 days
(c)	SHYDO's invitation for bids to pre-qualified bidder and collection of bidding documents by pre-qualified bidder	30 days
(d)	Submission of bank guarantee by sponsor @ US\$ 500 per MW or equivalent in Pak Rs. in favor of SHYDO	15 days
(e)	Issuance of the LOI by SHYDO	15 days
(f)	Initial time allowed to carry-out feasibility study in accordance with terms of LOI	Up to 24 Months
(g)	Interim tariff negotiations between Sponsors and power purchaser.	60 days
(h)	NEPRA's approval of tariff, including issuance of letter for acceptance of negotiated tariff by NEPRA	60 days
(i)	Submission to SHYDO of approved tariff; and submission of Performance Guarantee @ US\$ 3000 per MW (or equivalent Pak. Rs. using for conversion, the inter-bank rate prevailing at the last working day of the preceding month) by Sponsors in favor of SHYDO.	30 days
(j)	Issuance of the LOS by SHYDO	15 days
Total		315 days

4.3 Power Projects Up to 5 MW Size

75. Sites for power projects up to 5 MW potential size will be allocated to

sponsors on first-come first-served basis, after getting themselves registered with SHYDO on payment of prescribed fee for registration, after scrutiny of their technical and financial capability. SHYDO will issue NOC for the site on exclusive basis for an initial period of 3 years. The NOC will be withdrawn if no progress takes place during the 3 year period. For sale of energy the sponsor will choose its own consumer(s).

76. Following procedure will be followed for such projects:

Selection will be made on first come first served basis, however, if any dispute arises about the position of the first comer (in case more than one applications appear at one time and date, along with registration fee), the Committee under MD SHYDO referred above in Section 2.2 para 43 will examine the situation and would declare the name of first comer and would issue the registration certificate to the first comer within a period of 15 working days after receipt of the applications. Registration fee will not be refunded to any one in any case. The following procedure is defined for the site with potential of power production up to five MW.

- Registration fee @ US\$ 100 to be submitted with initial application.
- Submission of technical proposal along with financial capability of the sponsor within one month after getting registration certificate from the SHYDO.
- NOC for commencement of the project is to be issued by the SHYDO, if the proposal is found financially and technically reasonable, within one month with the request to the sponsor for submission of the bank guarantee, after evaluation of the technical and financial proposal. The committee described under para 43 above shall be responsible for evaluating the proposal.
- The amount of bank guarantee will be determined at Rs 500 per kW equivalent to the amount payable as lease price for a period of three years.
- Bank guarantee in favor of SHYDO is to be submitted within one month after issuance of the NOC. If the Bank guarantee is not furnished by the sponsor within a period of one month from the issue date of NOC, the NOC will become void. The sponsor would have no right to claim any damages in this regard. The period of one month allowed for submission of bank guarantee is not extendable.
- Maximum a period of three years will be allowed to construct the project and to bring the plant into power production.

- The annual lease money will be Rs 500 per kWh per annum and would be payable to SHYDO at the commissioning of the plant and yearly thereafter.
- Investors are responsible for sale of energy at their own, and if required by the parties, SHYDO will provide assistance in negotiations.
- No water use charges will be levied.

5. THE IMPLEMENTATION PROCESS

5.1 Fee Structure

77. Fees are to be paid by Sponsors or the project companies, as the case may be, in US Dollars (or equivalent Pak. Rs. using for conversion, the inter-bank rate prevailing at the last working day of the preceding month) to SHYDO. All fees are subject to revision from time to time.

Sr.	Description	Fee US\$ 1/	Remarks
(a)	Registration	100	SHYDO will provide copy of power policy upon registration
(b)	Purchase of Prequalification Documents for sites with potential of above 5 MW to 50 MW	500	
(c)	Bidding: (i) Purchase of RFP documents (ii) Evaluation Fee - > 1MW <= 5MW - >5MW <=20MW - >20MW <=50MW	1,500 500 5,000 10,000	The RFP by pre-qualified bidders shall also include the feasibility study and relevant documents (i.e. IA, PPA, WUL etc),
(d)	Legal fee		To be paid by Sponsors for negotiations or review of other legal matters on the basis of actual expenses plus 20% as ancillary charges. Suitable cap to this expense, however, will be suggested in the RFP

- 1/ or equivalent Pak. Rs. using for conversion, the inter-bank rate prevailing at the last working day of the preceding month.

5.2 Bid Bond, Letter of Support and Performance Guarantee

78. A bid bond of US\$ 500 per MW (or equivalent Pak. Rs. using for conversion, the inter-bank rate prevailing at the last working day of the preceding month) will be submitted by each bidder, for the projects above five MW, at the time of submission of bids. After selection of the successful bidder, the bid bonds of all bidders other than the sponsors of the successful bid will be returned, and the successful bidder will be required to post a Performance Guarantee of US\$ 3000 per MW (or equivalent Pak. Rs. using for conversion, the inter-bank rate prevailing at the last working day of the preceding month) in favor of the SHYDO valid initially for a period of three months in excess of validity of the LOS. After submission of the Performance Guarantee (PG) by the successful bidder, the bid bond will be returned. The Performance Guarantee will secure the successful bidder's obligation to execute the IA, PPA and other relevant agreements and achieve Financial Closing within the specified time period.
79. The LOS will normally be issued to the successful bidder for a period up to 12 months (to be specified in the RFP), by which date the sponsors/project company must achieve Financial Closing for the project (as defined in the LOS). The Performance Guarantee shall be in the form of an irrevocable direct-pay letter of credit issued by a bank acceptable to the Govt. of Khyber Pukhtunkhawa in favor of SHYDO. The Performance Guarantee must always remain valid for a period not less than three months in excess of the then-prevailing Financial Closing deadline.
80. The sponsors will have an option to terminate the LOS and any of the project agreements executed at any time before the required date for Financial Closing as per terms and conditions of LOS, The termination option may be exercised by forgoing a portion of the Performance Guarantee equal to the face value of the Performance Guarantee multiplied by the number of months since the issuance of the LOS (rounded up to the next whole number) divided by the total number of months allowed in the LOS to achieve Financial Closing.

81. The Performance Guarantee will be en-cashable on call by SHYDO. Neither the Sponsors nor the project company shall have any claims against the Govt. of Khyber Pukhtunkhawa or any of its Components/Organizations/Institutions on any ground(s) whatsoever. Until Financial Closing, the LOS will govern the project and supersede all documents and agreements; thereafter the security agreements will supersede the LOS. If the LOS expires on account of failure to achieve financial closing, the IA, PPA and WUL and all other agreements with any governmental entity, will automatically terminate.

5.3 Project Implementation

82. The successful bidder will be required to submit to SHYDO, on a format specified by SHYDO, a mutually acceptable implementation schedule with specific milestones for progress monitoring. SHYDO and the power purchaser will require the successful bidder/sponsor to submit periodic progress reports regarding the status of contractual obligations, consents, financial and physical progress reports including a summary table showing progress towards achievement of such milestones.
83. Delays in achieving Financial Closing due to events beyond the control of the successful bidder/sponsor will be accommodated through day-to-day extension allowed under the IA. Similarly, delays in achieving the Commercial Operation Date (as defined in the PPA) of the power complex, will incur liquidated damages as specified in the PPA. Equitable compensations against parties concerned may be specified in the IA/PPA for not meeting specified milestones under the security agreements.

5.4 Private Sector Hydro Power Development Fund

84. To encourage and attract private investment in the sector, SHYDO will establish a fund from all the revenues to be collected under the policy as described under para 77 above, in the name of "Private Sector Hydro Power Development Fund". This fund will be used to facilitate SHYDO in expediting the evaluation of proposals by hiring specialists for POE or appointing consultants for assisting SHYDO in providing one window facility to the investors. The mechanism for developing and utilizing the

fund will be decided by the committee defined under para 43 above.

6. SALE OF POWER

85. The power generated will be sold in order of priority to power purchasers in one of the following three modes or combination of more than one of the modes, mentioned in Sections 6.1 to 6.5 herein.
86. It may be understood by the prospective investors that the purchase of power from IPPs will no more remain a government concern after restructuring of WAPDA into independent corporate entities. In future the purchase of power would be at the discretion of the distribution company (or companies) - DISCOs - and bulk consumers to reduce their power purchase cost or to fulfill their increased power demand. Similarly DISCOs' purchasing power will endeavor to follow the principle of Least Cost Generation Expansion Plan to fulfill the increase in its system demand.

6.1 Sale to Distribution Company (DISCO)

87. The power generated will be delivered to the nearest grid station of the DISCO whenever feasible in accordance with PPA between the sponsors and the concerned DISCO. The transmission line from the company's out-going gantries and the interconnection will be constructed by the concerned DISCO or the sponsor as negotiated in the PPA.

6.2 Sale to Industrial Estate as Bulk Consumer

88. The power generated may be delivered under a second tier authorization granted by NEPRA to the generation licensee in accordance with Rule 6(1) (b) of the Generation Rules, to an industrial estate in the vicinity of the power plant where the power will be delivered directly as bulk supply, to any single entity (purchaser), who will opt for the distribution of power to the industries at his own. The power purchaser, as licensee from NEPRA for construction, maintenance and operation of the power system, will construct transmission line from the power house out-going gantries and interconnect it with his premises for drawing the power. Design of the lines and interconnections will be as per standards adopted by the DISCO to keep uniformity with the existing system. The rights of

the DISCO of the area have to be respected. Also notice period and cross subsidy payment with respect to switching over of its existing consumers has to be followed as per Section 22 of NEPRA Act.

89. If the industrial estate falls in the exclusive service territory of a DISCO, the above arrangement would require consent from the concerned DISCO for surrendering the relevant part of its exclusive territory in favor of the industrial estate.
90. The Bulk consumer may have to arrange adequate alternate back up in order to take care of the seasonal variation of the hydel power capacity of the captive power plant for meeting the demand without load-shedding.

6.3 Sale of Power Exclusive for Industry or any other Special Purpose

91. Depending on the size of the power plant and the load of an industry or a group of industries, the power may be sold to a single purchaser for his exclusive use. The power purchaser will construct the lines connecting the sponsor's outgoing gantries with his system, which will be constructed as per Standard Design/Instructions adopted by DISCO to keep uniformity of the Power System. The seller shall be an independent license holder for construction, maintenance and operation of the power plant complex, whereas the purchaser will be responsible for maintenance of the transmission and distribution lines beyond the outgoing gantries under a license from NEPRA. Again the rights of DISCO mentioned in 6.2 above have to be respected.

6.4 Sale to Cooperatives

92. The Power generated may be sold in bulk to any Cooperative, who will opt for the local distribution of power to the villages, urban and rural areas for domestic or commercial purposes. The Cooperative, as licensee from NEPRA for construction, maintenance and operation of the power system, will construct transmission line from the power house out-going gantries for drawing the power. Design of the line and interconnections will be as per standards adopted by the DISCO having jurisdiction over the area of the Cooperative. It will, however, be mandatory to obtain consent of the DISCO to surrender exclusive territory if this cooperative sells power to other consumers.

6.5 Sale of Power Generated at Isolated Sites

93. The sites where the power generated could not be possibly connected to any part of national grid or sold out to any DISCO, Cooperative, Industry or to any other entity, the Sponsor at his sole discretion will be allowed by SHYDO, to carry out local distribution of power to the villages, urban and rural areas for domestic or commercial purposes. The sites would be identified before issuance of LOI. In such cases, the Sponsor will be allowed to propose a supply and demand based tariff, and obtain NEPRA's approval. The Sponsor, as licensee of NEPRA for construction, maintenance and operation of the power system, will construct transmission lines for distribution of power to the premises of end users.
94. Obligations of DISCO foreseen in its distribution license have to be kept in view by the supplier and the purchaser.

7. CAPTIVE USE OF POWER

95. If the sponsor of the power project succeeds to arrange funds, himself or through a joint venture with other investors, for building another legally permitted project of integrated industry of any type with captive use of the power project, the Govt. of Khyber Pukhtunkhawa will offer the following special incentives for establishing the industry provided that the commercial production from the Industry starts within a year from the date of commercial operation of the power plant:
- 5% duty on import of machinery required for the industry
 - Lease of public land for the life of the industrial plant, if available

8. TARIFFS

8.1 Point of Delivery

96. The power tariff payable under the PPA will be quoted at the point of delivery indicated in the RFP. The delivery point will either be the bus bar of the power plant or a specific location on the grid of the power-purchaser, depending upon one of the following options specified in the RFP:
- (a) The transmission line from the IPP's out going gantry up to the

Delivery Point including the Interconnection will be built, owned, maintained and operated by the power purchaser. In this case, the power tariff will be the bid as well as paid for energy and net capacity delivered at the out-going gantry of the power plant.

- (b) The transmission line from the IPP's outgoing gantry to the Delivery Point including the interconnection shall be built by the Power Purchaser on the cost to the IPP. The Power Purchaser shall maintain and operate the transmission line and the interconnection. In this case, the power tariff will be the bid as well as paid for energy and net capacity delivered at the IPP out-going gantry. The cost of constructing the transmission line will be recovered by the sponsor through an additional tariff agreed upon in the PPA.

8.2 Tariff Structure

8.2.1 Currency of Tariff

97. The tariff will be denominated in Pakistan Rupees.

8.2.2 Capacity and Energy Components

98. Bidders will be asked to quote their tariff in two parts:
- (a) Capacity Purchase Price (CPP)
 - (b) Energy Purchase Price (EPP)
99. The RFP may specify a maximum percentage of the overall tariff for the capacity component. The CPP of hydel projects, which traditionally have a relatively low EPP as compared to thermal projects, will be approximately 60% to 66% and the EPP will be approximately 40% to 34% of the levelized tariff.
100. The CPP will be expressed in Rs/kW/month and the EPP in Rs/kWh.
101. The CPP will be paid provided the plant is available for Dispatch to standards defined in the PPA. The EPP will be paid on the basis of the energy metered and delivered during each month.
102. The generation company shall negotiate the tariff with the power purchaser and shall specify the modes mentioned in section 6.1 to 6.5 for

supply, in the application to NEPRA for approval of the tariff and for obtaining the license from NEPRA.

8.2.3 Water Use Charges

103. The Govt. of Khyber Pukhtunkhawa will not levy any Water Use Charges for projects upto 50 MW capacity.

8.2.4 Exchange Rate Variations

104. Bidders may include separate components in the CPP and the EPP which are subject to adjustment only for variations in the exchange rate between the Pakistan Rupee and US Dollar, between the reference date and the date of payment.
105. The reference rate for foreign exchange shall be the National Bank of Pakistan (NBP) TT&OD selling rate of the US Dollar prevailing thirty (30) days before the required date of bid submission. The specific reference date will be stated in the RFP.
106. Adjustment for exchange rate fluctuations will be effected quarterly. Exchange rate fluctuations in excess of 5% during any month will be allowed. If fluctuation remains less than 5% during a quarter, it would be adjusted whenever it crosses the limit of 5%. However the foreign exchange adjustments shall be limited to the extent of foreign exchange components of debt servicing as well as equity.

8.2.5 Escalation

107. Escalation for dollar components to cover dollar inflation will not be provided. However, bidders may include components in the CPP and EPP, which are escalable for Pakistan Rupee inflation. Such Pakistan Rupee escalation will be effected from the bid submission date by the Pakistan Wholesale Price Index (WPI) for 'manufacturing' as notified by the GOP's Federal Bureau of Statistics (FBS). The reference value of the WPI for 'manufacturing' will be the most recent value notified (not less than thirty (30) days before the date of submission of the bid) unless notified otherwise in the RFP. The RFP will specify the actual date for this reference value of WPI for 'manufacturing'. Escalation will be effected quarterly.

8.3 Yearly Profile of Tariff

108. All sponsors would be required to submit yearly tariff profiles in real terms

at the time of bidding. The tariff including its structure is subject to final approval by NEPRA.

9. FINANCIAL AND FISCAL REGIME

9.1 Financial Regime

109. This policy offers the following set of financial incentives, which are already allowed by the Federal Government in its Policy of 2002.

- a) Permission for power generation companies to issue corporate registered bonds.
- b) Permission to issue shares at discounted prices to enable venture capitalists to be provided higher rates of return proportionate to the risk.
- c) Permission for foreign banks to underwrite the issue of shares and bonds by the private power companies to the extent allowed under the laws of Pakistan.
- d) Non-residents are allowed to purchase securities issued by Pakistani companies without the State Bank of Pakistan's permission and subject to the prescribed rules and regulations.
- e) Independent rating agencies are operating in Pakistan to facilitate investors in making informed decisions about the risk and profitability of the project company's Bonds/TFCs.

9.2 Fiscal Regime

110. This policy offers the following set of fiscal incentives, which are already approved by the Federal Government in its Power Policy of 2002.

- a) Customs duty at the rate of 5% on the import of plant and equipment not manufactured locally, including spares.
- b) No levy of sales tax on such plant, machinery and equipment as the same will be used in production of taxable electricity.
- c) Exemption is already available from income tax including turnover rate tax and withholding tax on imports of such machinery.
- d) Repatriation of equity along with dividends is freely allowed, subject to the prescribed rules and regulations.
- e) Parties may raise local and foreign finance in accordance with

regulations applicable to industry in general; GOP approval may be required in accordance with such regulations.

- f) Maximum indigenization shall be promoted in accordance with GOP policy.
- g) Non-Muslims and Non-residents shall be exempted from payment of Zakat on dividends paid by the Company.

111. The above incentives will be equally applicable to private, public- private and, public sector projects as per federal government's policy for power generation projects 2002.

10. SECURITY PACKAGE

112. The Security package for projects up to 50 MW provides the following salient features:

- (a) Model IA, PPA and WUL will be provided as applicable for private/public-private partnership power projects under this policy to eliminate the need for protracted negotiations. The following agencies shall be the executors of the Agreements to cover implementation and operational obligation of the projects:
 - (i) SHYDO & Project Sponsors for IA.
 - (ii) Concerned Power Purchaser and Project Sponsors for PPA.
 - (iii) Project Sponsors and Provincial Irrigation and Drainage Authority (PIDA) of Khyber Pukhtunkhawa, who is the custodian of water resources in the province for WUL.
- (b) Govt. of Khyber Pukhtunkhawa will:
 - (i) Guarantee the contractual obligations of the Provincial government and its entities. Where federal government entities are a party to any Agreement included in the Security Package, Govt. of Khyber Pukhtunkhawa shall obtain the guarantee of the Federal Government.
 - (ii) Provide protection against specified "political" risks, if they occur in the Khyber Pukhtunkhawa.

- (iii) Implement the taxes and duties regime and protect against any subsequent changes made in that by GOP.
- (iv) Ensure convertibility of Pakistan Rupees into US Dollars at the then-prevailing exchange rate and the remit-ability of foreign exchange to cover necessary payments related to the projects, including debt servicing and payment of dividends. Tariff components, however, will be adjusted and indexed in accordance with this Policy, against exchange rate variation, inflation, etc. As stated in Para 107 earlier for escalation to cover dollar inflation will not be provided.
- (v) Provide assistance in promoting/obtaining insurance against any type of risk in the remote areas.
- (vi) Ensure that the dwellers of the area would not demand any type of royalty after commissioning of the project.

11. THE ENVIRONMENT

113. All provisions of the Pakistan Environmental Protection Act 1997, IEE / EIA Regulation 2000 will be followed. The requirements as laid down by Pakistan Environmental Protection Agency (PEPA) and by the Provincial Environmental Protection Agency (Khyber Pukhtunkhawa-EPA) relating to National Environmental Quality Standards (NEQS) and Environmental and Social Impact Assessment (EIA) shall have to be met. The Assessment should cover the cost of mitigation including compensation to and resettlement of the affected people.

12. SPECIFIC PROVISIONS

12.1 Despatch

114. The load Despatch center shall Despatch plants in accordance with the most economical Despatch criteria (without any bias) wherever it applies, which will be on the basis of the lowest energy cost component, transmission line losses, system stability and reliability and other economic considerations. Because of their very low variable cost, run of

the river hydel plants are likely to have a high priority. A close coordination between the plant operator and the load Despatcher will be needed to ensure the best use of available water in order to achieve the required/ designated plant factor for ensuring financial sustainability of the project without any adverse effect on the tariff.

115. Sponsors will be asked to quote their plant's generation efficiency curve. If the efficiency of the power plant goes down, or the generation of electricity is reduced for any reason other than a reduction in water flows, the project company will be liable for the value of the electricity lost due to a fall in efficiency or reduced availability of the power complex. For run of the river projects with storage for daily peaking, specific measures will be specified in the RFP for monitoring plant performance.

12.2 Feasibility Studies

116. The feasibility studies will identify basic parameters of the proposed projects, such as, the hydrological characteristics of the site, geological conditions, optimum net capacity, estimated annual plant factor, monthly profile of energy potential, transmission line requirements, identification of power delivery point, interconnection voltage, etc. The transmission voltage may be 132kV, 66 kV or 11 kV or any other appropriate one depending upon the generation capacity and dispersal to individual or combined modes specified in section 6.1 to 6.3.
117. While feasibility studies will be carried out in accordance with internationally acceptable standards, the Govt. of Khyber Pukhtunkhawa will not guarantee their content or conclusions. The bidder/sponsor will have the right, at its own cost, to examine, evaluate and from its own conclusions on any or all aspects of the feasibility study, and to carry out any additional studies and investigations to make its own assessment about the feasibility and viability of the project, as part of its due diligence.

12.3 Hydrological Risk

118. The power purchaser will bear the risk of availability of water for hydel

projects with capacity up to 50 MW. The RFP will specify arrangements required for monitoring and record of water flows.

13. PUBLIC - PRIVATE PARTNERSHIP

119. The SHYDO encourages establishment of power projects in public-private partnership. In line with the objectives set forth herein above, the incentives/concessions available to private power projects will also be available to projects implemented under public-private partnership, as described under Section 1.9 above.

14. PRIORITY AND MOTIVATION ON RAW SITES

119. A large number of potential sites have been identified by German Agency for Technical Cooperation (GTZ) / SHYDO on the tributaries of Chitral River, Swat River, Indus and Kunhar River which could viably produce power upto 50 MW. Due to shortage of funds in the public sector, detailed feasibility studies could not be carried out for all those sites. The private sector is cordially invited to visit SHYDO and examine the relevant Identification Reports for selection of sites for development of hydel power stations in Khyber Pukhtunkhawa. SHYDO would be happy to offer assistance and guidance in this behalf.

**Amendments made on dated 12th
January, 2008 in Power Policy 2006**

Decisions in Cabinet Meeting Held on January 12th 2008

regarding amendments in clause 43 and 75 of the Policy for Hydro Power Generation Projects 2006.

Cabinet approved the amendment in the clause No.43 of the Power Policy. Under the said amendment, a committee, under Managing Director SHYDO as convener comprising a representative from Finance Department not below the rank of Additional Secretary, a representative from P&D Department not below the rank of Chief of the concerned section, a representative from WAPDA not below the rank of Director and Director (Private Power) of SHYDO shall process and evaluate all the proposals for the projects under the policy. This committee shall submit the evaluation report and recommendations before the Chairman SHYDO Board of Directors, Khyber Pukhtunkhawa for approval.

Moreover the said committee may also recommend the projects for further time extension over and above the policy provisions to the SHYDO Board.

Cabinet also approved the amendment in the clause No.75 of the Power Policy. Under the said amendment,

75 (a) sites for power projects up to five MW potential size will be allocated to sponsors on first-come first serve basis, after getting themselves registered with SHYDO on payment of prescribed fee for registration, after scrutiny of the their technical and financial capability. SHYDO will issue NOC for the site on exclusive basis for an initial period of 3-years. The NOC will be withdrawn if no progress takes place during the 3-year period. For sale of energy the sponsor will choose its own consumer(s).

Note:- (in the context of first come first serve basis, the potential of 1 MW may be read as 5 MW through out the policy.)

Clause No. 75 (b) – Private Sponsors will be allowed to combine more than one sites provided the total potential of the combined sites does not exceed 5 MW limit and the combination is feasible and technically workable.

The work plan of such projects would be put forward to the same committee mentioned in clause 43, for further recommendation to the SHYDO Board.