F/A

SAR ENERGY (PRIVATE) LIMITED

Ref: No. ________

Date: June 23, 2012

Dy. No. 3006
Dated 09-7-12

For information & n/a pl.
- AD(MR) + PA
- M/F
9/7/12

The Registrar
National Electric Power Regulatory Authority (NEPRA)
OPF Building,
Shahrah-e- Jamhuriat
G-5/2
Islamabad.

Subject: **TARIFF PETITION FOR 1.3 MW SAR HYDROPOWER PROJECT (PROJECT) AT MACHAI CANAL, MARDAN PAKISTAN**

Received 1 original (02) two copies

Dear Sir,

1. The letter of Interest (LOI) to conduct the feasibility study of the Project was issued to SAR Group (Pvt.) Limited , by Sarhad Hydel Development Organization (SHYDO) under KPK Power Generation Policy, 2006.The Policy is mainly the adoption of Power Policy 2002 announced by the Federal Government. A project company, SAR Energy (Pvt.) Limited, (Petitioner) has been formed to undertake the Project.

2. Sponsors have conducted the feasibility study through reputable Consultants and the same has been approved by the Panel of Experts.

3. This Tariff Petition is being submitted for the determination of Generation Tariff as per the Guidelines for the Determination of Tariff announced by GOP and the " Mechanism for Determination of Tariff for Hydropower Projects" announced by NEPRA on 18th July,2008.

4. The deficiencies pointed out by your good office vide your letter No. NEPRA/TRF-205/SARGPL-2012/4519 i.e. board resolution as well as the fee amount have been resolved and the present submission has taken care of the same.

5. It is respectfully submitted to the Authority to determine Generation Tariff for the Electricity produced by the Project with due consideration to the assumption forming the basis of the Petition.

Thanks and best regards

(Syed Mazhar Ali Qasim)
Chief Executive Offcer

107, NEW SHAMI ROAD PESHAWAR CANTT. PH: 091-5272554
Cell : 0300-9592308

F/A-1

SAR ENERGY (PRIVATE) LIMITED

Ref No. ______

Date: July 0_ 20__

For information & n/a PA
-AD(MR) + PA
- Copy to
• SA(T)
• DD(LIC)
• M/F
13/7/12

The Registrar
National Electric Power Regulatory Authority (NEPRA)
OPF Building,
Shahrah-e- Jamhuriat
G-5/2, Islamabad

Subject: Tariff Petition for 1.3 Mw SAR Hydropower Project (Project) at Machai Canal, Mardan Pakistan

Dear Sir,

1. The letter of Interest (LOI) to conduct the feasibility study of the Project was issued to SAR Group (Pvt) Limited, by Sarhad Hydel Development Organization (SHYDO) under KPK Power Generation Policy 2006.The Policy is mainly the adoption of Power Policy 2002 announced by the Federal Government. A project company, SAR Energy (Pvt) Limited, (Petitioner) has been formed to undertake the Project.

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Thanks and best regards

(Syed Mazhar Ali Qasim)
Chief Executive Officer

Registrar
Dy. No. 5726
Dated. 12-7-12

... SHAMI ROAD PESHAWAR CANTT. PH: 091-...
Cell : 0300 9592508

Before

THE NATIONAL ELECTRIC POWER REGULATORY AUTHORITY (NEPRA)

PETITION FOR THE DETERMINATION OF FEASIBILITY STAGE GENERATION TARIFF

FOR A HYDROPOWER POWER PROJECT (SAR Hydropower Project) OF APPROX. 1.3 MW - GROSS

AT

MACHAI CANAL (Fall 17 & 18) District Mardan, Khyber Pakhtunkhwa

SAR ENERGY (PVT) LIMITED

GLOSSARY

Abbreviation	Name / Term	Abbreviation	Name / Term
AY	Agreement Year	MO	Maintenance Outage
CAPEX	Capital Expenditure	MoF	Ministry of Finance
CED	Central Excise Duty	MWh	Mega Watt Hours
COD	Commercial Operations Date	NDT	Non Destructive Testing
CPI	Consumer Price Index	NEO	Net Electrical Output
CPP	Capacity Purchase Price	NEPRA	National Electricity and Power Regulatory Authority
CY	Calendar Year	NPCC	National Power Control Center
DC	Dependable Capacity	NTDC	National Transmission & Despatch Company Ltd.
DCS	Distributed Control System	O&M	Operation & Maintenance
		OEM	Original Equipment Manufacturer
ECC	Economic Coordination Committee	PEPCO	Pakistan Electric Power Company (Private) Ltd.
EIA	Environmental Impact Assessment	PPA	Power Purchase Agreement
EMP	Environmental Management Plan	PPIB	Private Power and Infrastructure Board
EPA	Environmental Protection Agency	PRI	Political Risk Insurance
EPC	Engineering, Procurement & Construction	ROE	Return on Equity

EPP	Energy Purchase Price	ROW	Right of Way
		SBP	State Bank Of Pakistan
FBR	Federal Board of Revenue	SECP	Securities and Exchange Commission of Pakistan
FM	Force Majeure	SO	Scheduled Outage
		SOP	Standard Operating Procedures
GOP	Government of Pakistan	LPC	Late Payment Charges
GST	General Sales Tax	LTSA	Long Term Services Agreement
IA	Implementation Agreement	MI	Major Inspection
IDC	Interest during Construction	MIGA	Multilateral Investment Guarantee Agency
IEE	Initial Environmental Examination		
IPPs	Independen Power Producers	Producers	
KIBOR	Karachi Inter-bank Offered Rate	Rate	
LC or LoC	Letter of Credit		
LDs	Liquidated Damages		
LIBOR	London Inter-bank Offered		

1. PROJECT BACKGROUND , HISTORY and Basis for the Petition

1.1 Sarhad Hydel Development Organization (SHYDO) issued Letter of Interest (LOI) No. 216-18/SHYDO/DPP/SAR Group dated March 22, 2010 in favour of sponsors M/s SAR Group to conduct feasibility study on MBC-17 (RD:72+472) & MBC-18 (RD: 74+085).

1.2 The Sponsors prepared the feasibility under the guidance and supervision of SHYDO /POE appointed by SHYDO. Feasibility study has been approved by the POE appointed by SHYDO. SHYDO conveyed approval of Feasibility study vide letter No. 240-47/SHYDO/DPP/SAR Group. Therefore the Sponsors would like to plead before the Authority for the submission of Tariff Petition based on feasibility study approved by POE.

1.3 SAR Group , (the Sponsors) intend to develop the project on IPP model as per GOP Policy for Power Generation Projects-2002 as adopted by Government of Khyber Pakhtukhwa in Power Policy -2006 on BOOT basis. Project Specific Company , SAR Energy (Pvt) Limited has been registered with SECP to undertake the project.

1.4 Under the Regulation of Generation, Transmission and distribution of Electric Power Act (Act No. XL) of 1997 (the "NEPRA Act"), the Authority is mandated to determine tariffs and other terms and conditions for the supply of electricity through generation, transmission and distribution.

1.5 This Tariff Petition is being filed before National Electric Power Regulatory Authority (the "**NEPRA**" or the "**Authority**") pursuant to Rule 3 of the NEPRA (Tariff Standards and Procedure) Rules, 1998, read with paragraph 1.3 of the Guidelines for Determination of Tariff for Independent Power Producers issued by the Government of Pakistan in November 2005 and the applicable provisions of the Government of Pakistan's Policy for Power Generation Project, 2002 (the "**2002 Power Policy**") as adopted by Government of Khyber Pakhtunkhwa vide Power Policy 2006 and any amendments as agreed with the Petitioner during detailed negotiations on the Power Purchase , Water use license and Implementation Agreements. The cost estimates presented in the Tariff Petition are based on the fact that the provisions of Mechanism for the Determination of Tariff for Hydropower Projects-2008 shall be applicable

2. INTRODUCTION TO THE PROJECT

2.1 Name and Address of the Petitioner

Registered Office:

M/s SAR Energy (Pvt) Limited
House No. 107, New Shami Road
Peshawar

Business Address:
As above

2.2 Authorized Representatives of the Petitioner

Syed Mazhar Ali Qasim Shah, Chief Executive Officer, SAR Energy (Pvt) Limited

2.3 *SAR Energy (Pvt.) Limited*

SAR Energy (Pvt.) Ltd (SEPL) is a Private Limited Company, incorporated in Pakistan under the Companies Ordinance, 1984. Its registered office is located 107, New Shami Road, Peshawar. SEPL was formed to develop, design, construct own, posses, manage, and maintain 1.3 Mw electric power generation plant at Machai Canal in Pakistan, and in connection therewith to engage in the business of generation, transmission, sale, supply of electricity and to do all and everything necessary, suitable, proper, incidental or conducive to the accomplishment of this object and to do every other act or thing incidental or appurtenant to or arising out of or connected with this object.

2.4 Financial Structure

The planned financing of the Project is through long-term debt (80%) and equity (20%). SAR Energy (Pvt) Limited Shareholders will provide the equity for funding the Project. The Project will utilize conventional and Islamic long-term debt raised through an optimal mix of available financing options. The currently contemplated financing structure is:

S. No.	Item	Amount
1	Capital Cost	USD 5.038 million
2	Debt Equity ratio	80/20
3	Debt	USD 4.0303 million
4	Equity	USD 1.0076 million

It is assumed that all the lending for the Project shall be arranged locally and the tariff is calculated on the basis of KIBOR plus a margin/spread of 4.5%. In case of any change in the debt composition, the debt servicing component and the resultant Tariff shall be adjusted accordingly, as has been mentioned in the Determinations made by Authority in case of various other projects.

In case, the sponsors are able to arrange lending for the project below the benchmark rate of KIBOR plus 4.5%, the amount of the savings shall be shared between the sponsors and the Power purchaser as per the GOP guidelines for the determination of Tariff in the following ratio:

Power Purchaser: Sponsor

60 : 40

The financing structure and the associated terms in this proposal/petition are based on responses received from the financial markets. In today's volatile market environment, it is critical for the Authority (NEPRA) to recognize that the financing structure and associated terms are fully subject to adverse changes in the financial markets. This financing structure assumes that full indexation for foreign exchange (for foreign loans, if any) and interest rate changes related to the debt financing will be allowed under the tariff.

Development of Low HEAD Hydel Projects

The Energy Crises in the country demands an immediate relief by adding power supplies in the national grid system. The power supplies if come through the hydropower development will be very promising for its environmental friendly status as well as its cheaper rates.

The Low head hydropower development when compared to the high head projects are less economical but have the following advantages.

- The time for planning and implementation is shorter and thus can be pushed to meet immediate needs.
- Project locations are nearer to the load centers.

- Infrastructure in the form of existing civil works and national grid in the near vicinity reduces the main cost.

A catalyst in the economic development of remote areas in the form of employment offered to the locals, utilization of the local materials available for construction and other social & economical aspects in the project area and around.

2.5 Benefits Associated With the Project

Most specifically, the following benefits associated with SAR Hydropower Project will multiply once the SAR Hydropower Project connects to the grid. The Project will provide much needed electricity both for the province of KPK as well as strengthening the PESCO grid with reliable power without any fuel cost. Other benefits are discussed below:-

2.5.1 Economical Tariff

SAR Hydropower Project will save approximately **US$ 1.1 million** annually based on the current fuel prices and the exchange rate in terms of total billings to Power Purchaser based on actual generation when compared to an existing comparable size generation Plant utilizing inported Fuel Oil as well as the additional logistical issues with transferring oil upcountry in Pakistan. With prevailing oil prices and proposed expansion, this benefit will substantially increase.

2.5.2 Savings in Foreign Exchange

SAR's utilization of the hydel source within Pakistan not only benefits Power Purchaser but also saves precious foreign exchange to the national economy in terms of lower fuel imports required for similar generation in oil-fired plants. SAR Hydropower Project will be an important and valuable asset for Pakistan. Even without a significant power shortage, the Plant would be expected to be despatched at base load in economic preference to virtually all of the oil-fired thermal power stations in Pakistan. The Savings to the national exchequer during the term of PPA (30 years) based on current fuel price and exchange rates is USD 33 million

2.5.3 Environmental Friendly Operations

SAR Power Project will be environment friendly. The Environmental Impact Analysis confirms that the Project will cause no significant environmental impacts and no land or population relocations. The utilization of high efficiency low emission plant technology and the use of the existing plant site are major contributors toward achieving minimal environmental impact with low air emissions, and zero liquids discharges.

2.6 Synergies Associated with use of Existing Facilities

An addition of incremental capacity at the existing site along with other similar projects coming online as well provides several synergies specifically considering readily available land, basic infrastructure during construction; secured construction site; etc. The immediate availability of land alone is expected to save more than six months in the overall Project Development Schedule, a benefit factored into the Project development timeline.

The number of interfaces and synergies are as follows ; (1) land and access rights: (2) use of existing facilities;

2.6.1 Use of Land and Access Rights

SAR Hydropower Project will lease/obtain the main plant site from Irrigation department and be granted full rights of access and usage. The negotiations for the lease of land are in progress. Company intends to pay reasonable lease rental to the Gov. Terms and conditions of lease agreement will be accounted for in the tariff and project agreements, once agreed.
The Project will save upfront costs for land acquisition by developing the project on leased land currently owned by irrigation department, Go KPK.

2.6.2 Permanent Roads, Extra Construction and Fences

As discussed above, SAR Hydropower Project will use the existing road to the main highway, , and certain other roads, accordingly, by not constructing this infrastructure has resulted in these costs not being assumed in the overall EPC costs for the project other than the internal and connecting roads required for the expansion.

2.6.3 *Long Term Services Agreement/ Spare Parts*

SAR will sign a Long Term Services Agreement with the OEM to support the maintenance of the expansion. Costs and assumptions on the term and scope of this Agreement has been included in the overall tariff for the project.

3. TARIFF PETITION

This Tariff Petition is being submitted by SAR Energy (Private) Limited (hereinafter the "Petitioner") to NEPRA for the 1.30 MW Gross low head hydropower project. The details of the project and costs are provided below.

3.1 Plant & Equipment Procurement /Civil Works

The Petitioner has based the Tariff calculations on the basis of the cost of Electromechanical and Civil works as mentioned in the feasibility study duly approved. Since at the feasibility stage it is very difficult to determine the exact EPC cost for hydropower projects, therefore NEPRA upon the advice from ECC; issued Mechanism for the Determination of Tariff for Hydropower Projects. Pertinent details are as follows:

Quote:

"COST VARIATIONS (ESCALATION, RESETTLEMENT AND GEOLOGICAL RISK)

ECC of the Cabinet, through its decision dated 23rd May 2007 had interalia, decided that:

"NEPRA should stop the practice of accepting EPC costs on the basis of quotations etc. Instead, they should base their determination on firm (non-reopen able) competitive price duly initialed/ signed by the IPP/EPC contractors."

The Sponsors of Hydel Projects conveyed that it is difficult for them to obtain a firm and final cost for hydropower projects at the feasibility stage due to their site specific nature, geological risk, long construction period and environmental sensitivities, therefore, above mentioned ECC decision is not workable. In order to expedite the implementation of private sector hydropower projects, the ECC through its decision dated 22nd January 2008 decided as under:

"The above decision regarding firm cost may not be applicable to hydropower Projects" and that "Mechanism for determination of tariff for Hydropower Projects shall be issued by NEPRA."

NEPRA on 18th July 2008 has issued a "Mechanism for Determination of Tariff for Hydropower Projects" allowing the cost variations (Re-Openers) to be adjusted at EPC stage and/or at the Commercial Operation Date (COD). The Re-Openers allowed are as under:

Cost Variation due to geological conditions, limited to tunnel area; Civil works cost escalation, and ; Resettlement costs."

Unquote

Although experience and market exposure has been utilized to estimate the EPC Cost yet it is assumed that the Cost variations on account of the variations mentioned above shall be accounted for at the EPC and at COD and the Tariff shall be adjusted accordingly.

3.2 The objectives

The objectives being pursued during the preparation of specifications for EPC are as follows:

- ✓ High plant efficiency and low operating cost;
- ✓ Utilization of proven design directed toward extended plant life and total system
- ✓ Reliability;
- ✓ Redundancy of specific system and control to assure a high degree of plant
- ✓ Availability;
- ✓ Operational flexibility under various operating conditions; and
- ✓ Equipment layout for easy maintenance.

4. PROJECT COST

4.1 Cost Break-Up

Following is the break-up of the project costs:-

No.	COST ITEM	US $ Million
[illegible]	**EPC Contract /Construction Cost**	**3.0279**
2	Development Cost	1.076
3	Insurance during Construction	0.041
[illegible]	Cost of loan arrangement	0.170
5	Interest During Construction (IDC)	0.596
6	Duties and Charges	0.114
	Total Project Cost	**5.026**

4.2 EPCC Cost

The estimates given in the feasibility study provide an EPC cost of US$ 3.0279 Million. The break up is provided in Annexure B (Cost Estimates).Salient features of the Project/Complex including various components of civil works as well as electromechanical equipment are mentioned in Annexure A (Project Brief). The figure includes warranty spares provided under the EPC.

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4.3.1 Development Cost

The cost comprises of the costs associated with prequalification, feasibility study, field investigations, employer's office expenses before financial close, Owner's Engineer , technical and financial advisors and sponsor's office expenses during construction phase. The details are provided in Annexure B (Cost Estimates).The estimated figure is **USD 1.076 million.**

4.3.2 Insurance during Construction

Insurance during construction has been assumed @ 1.35% of the EPC Price. Any variation will be adjusted and the sponsors will provide documentary evidence in case of increase in the premium. The estimated figure is **USD 0.041 million**

4.3.3 Cost of loan arrangement

This cost comprises of the cost of due diligence by lenders, registration of documents and fees for the advisors appointed by lenders to the Project. The estimated figure is **USD 0.170 million.** The details are given in Annexure B (Cost estimates). It is pertinent to mention here that the figure is 4.2 % of the loan amount. It is requested that a cap of 5% of the loan amount may be approved as has been allowed to other projects and the percentage amount should be linked with the loan amount to account for any variation in loan amount because of variation in EPC price from that conceived herein.

4.3.4 Interest during Construction (IDC)

The estimated figure is USD 0.596 million. The IDC is calculated based on a Construction period of 32 months. The interest rate used is KIBOR (10.50 %) plus a Spread of 4.5%. The IDC figure shall be adjusted as per actual subject to provision of documentary evidence by the sponsors.

4.3.5 Duties and Other Charges

The estimated figure is USD 0.114 million. The number is arrived by the application of duties @ 5% on foreign component of EPC for duties and 3% for port clearance, handling and inland transportation.

4.3.6 Cost of Letter of Credit.

The Company is obligated to provide an LC of USD 27.5 /kW of the Contract Capacity. In addition lenders' would need an LC for the Cost overruns upto 25% of the Capital Cost of the Project. Likewise the Company shall provide LC's to Contractors LC's for EPC and O&M

Contractor. The estimated amount is **USD 50,000. Its cost has not been included in the cost estimates with the assumption that actual cost incurred on the provision of LCs would be allowed subject to the provision of documentary evidence.**

4.4 Tariff Structure & Summary

The Tariff is a two-part tariff, comprising Capacity and Energy charges, based on a 30 years term. This tariff will be incorporated into the PPA to be entered into in due course between the Petitioner and CPPA/PESCO. The Project is being developed on BOOT basis and at the end of the Term of PPA, it will be handed over to the Government at a nominal price of Re 1. This Tariff Petition contains detailed assumptions and adjustment formulae which will form part of Schedule 1 to the PPA.

The capital structure of the Project is as follows:

	US$ Million
Total Project Cost	5.026
Project Debt	4.0206
Project Equity	1.0051
Debt: Equity ratio	80 : 20

These numbers are based on the detailed assumptions stated in the appended assumptions and stated elsewhere in this Petition. Change in the assumptions shall result in a change in these numbers. The proposed tariff figures appended herein below are the result of a detailed financial analysis and consideration of technical, commercial and legal aspects.

4.5 Energy Charges

The Energy Charge is based on the actual net electrical output measured in kWh, and consists of:-

(i) Water Use Charges @ Re 0.15/kWh
(ii) Variable O&M component @ Re.0.320 /kWh

4.6 Variable O&M

This component primarily includes lubricant consumption, , consumables, imported spare parts to be changed on normal scheduled maintenance and unscheduled maintenance. Also, it includes specialized technical services from manufacturer during maintenance of the Power Plant. The equipment has manufacturer-recommended overhauling schedules that are based on actual running hours. The actual timing of the major overhaul depends on the dispatch provided to the Power Plant. The turbines are expected to be made in France; therefore,

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the spare parts and specialized technical services will be supplied from Europe. Based on the aforesaid, the variable O&M (foreign component) will be indexed to the European CPI. This tariff component will also be adjusted for currency indexation on a quarterly basis.

4.7.1 Non -Debt Capacity Component

This component represents the Fixed O&M costs (Foreign and Local), insurance, financing cost of working capital, return on equity, return on equity during construction and withholding tax. A summary of the Capacity charges is provided below:

4.7.1.1 Fixed O&M Local and Foreign

The fixed O&M component of the capacity payment represents the fixed costs of all the staff for O&M, Power Plant administration, security, transportation, overheads, office costs, professional fees such as audit, tax and legal, as well as some minor fixed operational costs such as environmental monitoring, that do not change with dispatch levels. This also includes the Insurance during operation period

4.7.1.2 ROE and ROEDC

Return on equity (ROE) and return on equity during construction (ROEDC) comprises a return on equity invested giving Return on equity of 22% p.a and an IRR of 20.5% net after deduction of withholding tax. This is based on the fact that as per the Guidelines for the Determination of Tariff for IPPs (November 2005), para 1.4 (c) , it has been mentioned that IRR should be equal yield on 10 years PIB plus a premium of X% to be determined by NEPRA.

For a similar project (Blue Star Energy Limited- 2 MW), the Authority allowed an IRR of 18%. The applicable yield in that case was 10.15% which means, a premium of 7.85% .In case of SAR Hydropower Project, applicable yield on PIB is 12.7%. With the same premium as was allowed for Blue Star, the IRR requested for approval is 20.5%)

Debt Component

The Debt component is calculated with the following assumptions

- ✓ Debt is 80% of the Capital Cost of the Project (Including IDC).
- ✓ Repayment in six monthly installments.
- ✓ Grace period equal to the construction period (32 months after Financial Close).
- ✓ Total amount of debt to be arranged from institutions at the bench mark rate of KIBOR (8%) plus a spread of 4.5%.
- ✓ Debt to be repaid in 10 years after Commercial operations date.

In case there is any change in the assumptions, the debt service component and the Tariff shall be adjusted accordingly.

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Redemption of Equity

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The Project is being developed on BOOT basis. As per the guidelines for the Tariff Determination, IPPs developed on BOOT basis are allowed equity redemption after the completion of debt servicing. The equity is redeemed in equal installments over the remaining term of the PPA. The exchange rate variation shall be allowed in the amount of equity redeemed.

1.ADJUSTMENTS After Finalization of EPC and at COD for EPC Cost .

After the finalization of EPC, Adjustment in EPC price shall be made as per the actual numbers in accordance with the mechanism for Determination of Tariff , mentioned at para 3.1 above. The agreed cost shall be further adjusted for reopeners at the time of COD in accordance with the mechanism mentioned at para 3.1 above.

2. ADJUSTMENTS AT COMMERCIAL OPERATIONS DATE

Total US Dollar Project Cost shall be updated at COD. Debt service, Return on Equity and Return on Equity during Construction shall be adjusted on account of actual variation in debt and equity drawdown, actual interest during construction and financing costs/fees, actual custom duties and taxes and Insurance during Construction. Once adjusted, the Debt service, Return on Equity and Return on Equity during Construction shall be updated accordingly and the relevant Capacity Charges calculated thereon.

The relevant reference tariff components shall be adjusted at COD on account of variation in US$/PKR parity.

3. MODIFICATION / ADDITIONS TO BE TREATED AS PASS THROUGH

The monetary impact of all or any modifications or additions required by the Power Purchaser that are not considered in the Project shall be treated as pass-through.

4. ESCALATIONS AND INDEXATIONS

After the COD, the tariff tables provided will be indexed to factors as described above and the Reference Exchange Rates. The details are provided herein below:

5.1 Inflation Factors

The following components are subject to inflation factors :

Water Use Charges	Pakistan WPI
ROE/ ROEDC/ Withholding tax	US CPI
Variable O&M – Local	Pakistan WPI
Variable O&M - Foreign	European CPI/US CPI
Fixed O&M - Local	Pakistan WPI
Fixed O&M - Foreign	European CPI/US CPI

5.2 Currency Indexation

The following components are subject to exchange rate indexation. The Reference Exchange Rates are 91.30 PKR/1 US$, 1.41 US$/1 € and 130.4 PKR/1 €.

Variable O&M – Foreign	PKR/ Euro and USD exchange rate
Fixed O&M – Foreign	PKR/€ and USD exchange rate
Insurance	PKR/US$ and on the basis of actual insurance payment
ROE /ROEDC	PKR/US$ exchange rate
Withholding tax @7.5%	PKR/US$ exchange rate
Foreign Loan principal	PKR/US$ exchange rate
Foreign Loan interest	PKR/US$ exchange rate

5.3 Interest Rate Indexation

The following components are subject to interest rate indexation:

Financing cost on working capital	3 months KIBOR+ 4.5%
Interest Charge Local	6months KIBOR+ 4.5%
Interest Charge	6 months LIBOR + 4.5%

6. Assumptions

1. Anticipated average mean site conditions, used in calculation, for the net output and heat rate are:

- Annual Plant Factor -65%
- Installed Capacity -1.3 MW
- Auxiliary Consumption -0.039 MW
- Contract Capacity -1.261 MW

1 Construction period of 32 months has been assumed as envisaged in the feasibility study..

1. Every maintenance cycle shall be as per manufacturer's recommendations.

2. Output degradation curve from the manufacturer and EPC contractor shall be applied to adjust the Capacity Cost component of the tariff.

3. Power Purchaser shall be responsible for financing, constructing, operating and maintaining the interconnection to the grid and the electronic communication equipment. However the cost of transmission line has been included in the cost estimates based on information provided by PESCO . The variation in the estimates considered in the Petition and

4. A tolerance of +1.5% in dispatch is assumed.

5. Reference exchange rate (PKR/US$) is taken PKR 91.30/US$ and US$1.41/Euro..

6. The tariff does not incorporate any inflation.

7. No cost of utilizing NTDC telecom media is assumed. Any costs incurred with regards thereto shall be treated as 'pass through'.

8. Main energy meter, CT's and PT's and electronic recorder for continuous recording of readings will be provided by NTDC at its own cost.

9. The Tariff shall be adjusted for the actual insurance costs.

   Payments from Power Purchaser have been assumed as follows:

   - 70% of Capacity Payment will be paid on or before 30th day of the month following the day invoice is received by Power Purchaser
   - 30% of Capacity Payment will be invoiced on first day of next month and will be paid on or before 30th day following the day invoice is received by Power Purchaser

- 100% of EPP and taxes will be paid on 24th day of subsequent month..
- All other pass-through items will be paid on or before 30th day following the day invoice is received by Power Purchaser.

10. Project contingency/debt service/O&M/maintenance reserves are not included in tariff calculations. If required by lenders, these shall be adjusted in the tariff. It has been assumed that Lenders will accept letter of credit to satisfy debt service reserve requirement. However, if the lenders would ultimately require cash to fulfill this requirement, the costs and tariff will be adjusted accordingly.

11. 7.5% withholding income tax has been assumed as pass-through (not mentioned in Tariff table) and will be billed on dividend distributions accordingly..

12. No tax on payments to be made to the EPC contractor has been assumed. Any withholding tax, if levied, shall be a "pass through" to the Power Purchaser and will be reimbursed on a monthly basis. Any delay in making payment will carry interest and will be reimbursed by Power Purchaser.

13. Custom duties on imported plant and equipment are assumed to be 5%. Numbers will be trued up to actual at COD. Any change in the custom duties or any other duty or tax on import of equipment and material will be 'pass through' to the Power Purchaser.

14. Sales Tax on purchase of materials and services after COD by the company has been assumed as fully adjustable against the sales tax on generation and sale of electricity by the Petitioner. If sales tax paid cannot be adjusted, it will be a pass-through to the Power Purchaser under the PPA. Sales Tax or any other taxes paid on services, equipment purchased or imported before COD has also not been assumed.

15. No tax has been assumed on in-house consumption of the electricity.

16. No taxes / levies / charges etc. on construction / maintenance / operation of the plant and use of diesel / gas / electricity at the plant have been factored in the tariff calculation.

17. The tariff table shall be updated at COD in order to correct the tariff according to the prevailing CPI, WPI, KIBOR, LIBOR and exchange rates (PKR/US$ and US$/ € and PKR / €).

18. Actual equity investment profile will be used to up date Return on Equity During Construction, at the time of COD.

19. Actual IDC, using the actual spread above KIBOR and LIBOR, will be used to update the capital cost at COD Any assumptions on commitment fees, upfront fees, arranger costs and similar charges assumed in the funding plan including PRI, etc will be adjusted at financial close.

20. Funding cost of standby equity and debt has not been assumed Any benefit / concession provided to any other IPP shall also be provided to the petitioner. No cost of LCs has been assumed and any cost thereon shall be Pass through.

21. It is assumed that there will be no income tax, corporate or personal minimum tax or any local/provincial taxes / levies / surcharges etc. Any such taxes will be pass through. No payments on account of Workers Welfare Fund, Workers Profit Participation Fund, presumptive tax/ turnover tax, sales tax, excise duty or other duty, levy, charge, surcharge or other government imposition of a like nature (including without limitation, export tax, octroi) have been assumed and same shall be recovered as a Pass-Through Item whenever and wherever payable by the project within 30 days. Zakt: For so long as the majority of the shareholders of the Company are non Muslims or non-residents of Pakistan, the Zakat and Ushr Ordinance, 1980, as may be amended from time to time, shall not apply to the Company and the GOP shall exempt the Company from the payment of Zakat. The Zakat and Ushr Ordinance, 1980, as may be amended from time to time, shall not apply to shareholders of the Company who are not Muslims or are not residents of Pakistan and such shareholders shall be exempt from the payment of Zakat on dividends paid by the Company.

22. Any exchange losses on foreign currency loans as a result of devaluation of Reference Exchange Rates shall be capitalized as part of Fixed Assets. In case exchange losses are required to be expensed off in Profit & Loss, any consequential impact on revenues, costs and equity IRR shall be reflected in tariff accordingly.

23. Any change in applicable accounting standards which impact revenues, costs and equity IRR shall be reflected in tariff accordingly.

24. 10% custom duty and central excise has been assumed on purchase of spare parts after COD. Any excess duties and/ or taxes levied on spare parts shall be a

"pass through" to the Power Purchaser and will be reimbursed on a monthly basis.

25. Stamp duty and registration fee @1% has been assumed on principal amount of debt assuming that it will be registered in Islamabad and GOP will grant its consent to a consolidated 1% cost. In case, GOP does not provide its consent for 1% consolidated cost or it is required to be stamped and registered in the province of KPK then all incremental costs will be a pass-through to the Power Purchaser."

26. Land lease rental is under negotiations with the concerned government authorities. Terms and conditions of lease arrangement shall be treated as per actual in the project agreements and tariff.

27. During the Term, the Lenders and, as applicable, PRI providers, shall not be subject to taxation (or withholding of tax) in Pakistan on their income from mark-up, interest, and PRI premium in respect of money borrowed or debt incurred by the Company for purposes of the Project or a Restoration of the Plant and from any other financing (including short-term, bridge, working capital and permanent financing facilities) provided to the Company for the Project pursuant to the Financing Documents.

The foregoing tariff petition is most respectfully submitted for and on behalf of the Petitioner:

Signature of the Competent Authority representing Company

(Syed Mazhar Ali Qasim)

Date: June 23, 2012

Meezan Bank Ltd

F-8 Markaz Branch,
Panther Plaza F-8 Markaz,
Islamabad-Pakistan.

P.O. No. 0001205

PO.0308.0001205

Date 07/05/12

NOT OVER Rs. *116,640.00*

Pay *NATIONAL ELECTRICAL POWER REGULATORY AUTHORITY* or order

Rupees *ONE HUNDRED AND SIXTEEN THOUSAND SIX HUNDRED AND FOURT-
-Y ONLY*

A/C PAYEE ONLY

Rs. *116,640.00*

For Meezan Bank Ltd

PAYABLE AT ANY MBL BRANCH

DO NOT WRITE BELOW THIS LINE

Authorised Signature

Asif Shabbir C-657

Authorised Signature

⑈0001205⑈08903081: ⑈000⑈

21

1024

Meezan Bank Ltd

F-8 Markaz Branch,
Panther Plaza F-8 Markaz, HO.0308.0001333
Islamabad-Pakistan.

P.O. No. 0001333

Date 05/07/2012

NOT OVER Rs. *119,400.00*

Pay *NATIONAL ELECTRICAL POWER REGULATORY AUTHORITY* or order

A/C PAYEE ONLY

Rupees *ONE HUNDRED NINTEEN THOUSAND AND FOUR HUNDRED ONLY *

Rs. *119,400.00*

For Meezan Bank Ltd

PAYABLE AT ANY MBL BRANCH

Authorised Signature

Authorised Signature

M. Jamil Choudhry

B-73

DO NOT WRITE BELOW THIS LINE

C 657

⑈000133⑈⑈0890308⑆ ⑈000⑈

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SECP

SECURITIES AND EXCHANGE COMMISSION OF PAKISTAN
Company Registration Office
PESHAWAR

ACKNOWLEDGEMENT OF FILING

[See-regulation-13 (1)]

No. JR-PSH/0080345/5325/6022/Cos Dated: 27.06.2012

In the matter of SAR ENERGY (PRIVATE) LIMITED - 107, NEW SHAMI ROAD, PESHAWAR CANTT PESHAWAR, KHYBER PAKHTUNKHWA

The receipt of the under mentioned document(s) filed, registered and recorded pursuant to the provisions of the Companies Ordinance, 1984(XLVII of 1984), is hereby acknowledged.

1. Memorandum of Association dated 22.06.2012
2. Articles of Association dated 22.06.2012
3. Form 1 Declaration of Applicant for Incorporation dated 22.06.2012
4. Form 21 Notice of Situation of Registered Office dated 22.06.2012
5. Form 29 Particulars of Directors dated 22.06.2012

SECURITIES & EXCHANGE COMMISSION OF PAKISTAN
COMPANY REGISTRATION OFFICE
PESHAWAR
کمپنی رجسٹریشن آفس پشاور

(Saeedullah Khan)
Joint Registrar of Companies
1st Floor, State Life Building, The Mall,
Peshawar Cantt.

Fee. Rs.6,000/=

Process ID: 1620456

SECURITIES AND EXCHANGE COMMISSION OF PAKISTAN
COMPANY REGISTRATION OFFICE
(PESHAWAR)

CERTIFICATE OF INCORPORATION

[Under section 32 of the Companies Ordinance, 1984 (XLVII of 1984)]

Corporate Universal Identification No. 0080345

I hereby certify that **SAR ENERGY (PRIVATE) LIMITED** is this day incorporated under the Companies Ordinance, 1984 (XLVII of 1984) and that the company is limited by shares.

Given under my hand at **Peshawar** this **27th** day of **June Two Thousand and Twelve.**

Fee Rs. 10,000/-

(Saeedullah Khan)
Joint Registrar of Companies
Peshawar

No. 6021/2/5325/cos

027

F/A-II

Guidelines for Determination of Tariff for Independent Power Producers (IPPs)

Ministry of Water & Power
Government of Pakistan

Nov 2005

(h) NEPRA should give upfront tariff separately for each technology e.g CC plants, conventional steam and diesel engines after accounting for the financial issues of ROE, interest rate etc.

1.3 Negotiation for Tariff – Avoidance of Multiplicity of Entities and Stages of Negotiations

If an IPP wishes to submit an un-solicited bid according to power policy of 2002 and wants to settle tariff through negotiations, NEPRA should determine the tariff in consultation with the IPP and the power purchasers.

1.4 Financial Assumptions Parameters for Determination of Tariff (upfront or negotiated tariff)

It is proposed that following principles be adopted

a) Tariff should be determined allowing reasonable Internal Rate of Returns (IRR) on equity investment

b) IRR be calculated over the life of the implementation agreement starting from the date of construction start (i.e. start of payments to contractors).

c) IRR should be equal to the long-term interest rates based on auction of ten year PIB held during the last

F/A-III Annex I

National Electric Power Regulatory Authority

MECHANISM FOR DETERMINATION OF TARIFF FOR HYDROPOWER PROJECTS

Preamble

Conservative estimates show total hydroelectric potential in the country to be 45000 MW. This consists of all categories of hydropower plants, including storage-based, run of the river, high head and low head schemes in the mountainous regions, as well as on rivers and canals in the plains. The present installed hydroelectric capacity of 6,608 MW amounts to less than 15% of the identified potential.

The present shortage and future growth in electricity not only requires induction of new power plants in immediate terms but additional capacity is also needed over medium to long term horizon. Hydroelectric being a renewable form of energy is certainly recognized as one of the most attractive options for the future supply mix.

Due to their unique nature however, hydropower plants present a number of risks which may be seen as hurdles by the prospective investors to invest in hydropower plants relative to investing in other forms of electricity generation.

Cost uncertainty is one of such areas which may render National Electric Power Regulatory Authority ("NEPRA") tariff determinations ineffective. While recognizing cost uncertainty as a genuine problem NEPRA in order to remove such ambiguities, has developed a mechanism ("Mechanism") which provides for determination of tariff and subsequent adjustments at different stages of hydropower project development. In this respect three distinct stages have been identified when costs may differ. These costs are;

(i) Feasibility Level Costs
(ii) EPC Level Costs
(iii) Final Costs which shall be no later than the Commercial Operation Date ("COD")

The Mechanism provides for NEPRA' tariff determination based on costs at feasibility study stage and then at EPC stage, adjustable at COD to reflect those changes which have been permitted in the Mechanism.

The following sections describe NEPRA's Mechanism for determination of tariff for hydropower projects:-

PART I

General

2. Purpose:- The purpose of this document is to provide a uniform, transparent, objective and predictable Mechanism and to remove ambiguities, that the sponsors of hydel projects and/or project companies, power procurers and power purchasers might have about the steps to be employed by NEPRA in determination of tariff of hydropower projects. This document shall not be read in a manner which undermines or over-rides any provision of NEPRA Act, Rules, Regulations and other applicable documents and in case of any conflict between this document and the NEPRA laws, the latter shall prevail over the former.

3. Applicability: - This Mechanism is available to all hydro licensee or Applicants for generation licence for constructing, owning, operating or managing of hydro generation facilities with the sole purpose of power generation, within the jurisdiction of NEPRA.

4. Definitions: - For the ease of understanding, key words used in the Mechanism have been defined for a consistent interpretation. These definitions shall not be read to substitute or replace the meaning asigned to them in NEPRA Act, Rules and Regulations.

(a) "Act" means Regulation of Generation, Transmission and Distribution of Electric Power Act (XL) of 1997, as amended from time to time.

(b) "Applicant" means project sponsors or project companies or hydro licensee for projects located in Pakistan and power purchaser or procurer for projects located outside the jurisdiction of NEPRA Act who have filed a petition for tariff determination under NEPRA laws,

(c) "Feasibility Study" means feasibility study conducted in accordance with Section-5 of this Mechanism, in the form and manner acceptable to NEPRA, and, where applicable, approved by the Panel of Experts of Private Power and Infrastructure Board (PPIB) in pursuance of Policy for Power Generation Projects, 2002.

(d) "ECC Decision" means the decision of the Economic Coordination Committee of the Cabinet (ECC) dated 22 January 2008, attached here as Annex.

(e) "NEPRA Laws" means the NEPRA Act and Rules and Regulations framed thereunder, together with codes and documents approved by NEPRA.

(f) "Panel of Experts" means consultant(s) or a team of experts appointed by PPIB or other relevant agency to monitor and approve Feasibility Study in respect of the project for which applicant has filed tariff petition,

(g) "Tariff Reopeners" means related costs of project components as identified in the Feasibility Study, which shall, unless approved otherwise, limited to the following;

- Cost variation due to geological conditions, limited to tunnel area;
- Civil works cost escalation, and;
- Resettlement costs.

(h) "Terms of Reference" means the terms of reference for conducting Feasibility Study of hydel project

(i) "Commercial Operations Date (COD)" – As defined under the standard Power Purchase Agreement (PPA) calculated [to be determined on a case to case basis] Months from the Financial Closing, as such date may be extended pursuant to the terms of PPA or by reason of a Force Majeure Event.

PART II

Procedural Requirements

5. **Feasibility Stage**

This is the first stage foreseen in the Mechanism for a tariff based on the Feasibility Study of the project.

5.1 Filing of Application for tariff: The applicant is required to file a petition before NEPRA for determination of its tariff in a form and manner as required under the NEPRA Laws.

5.2 Completeness of Feasibility Study:- (a) NEPRA will accept only such Feasibility Study which is complete and accurate and, where applicable, supported with a duly signed statement by the Panel of Experts about the quality of the Feasibility Study and performed following best international practices while satisfying the Terms of Reference and the information required under Schedule III to NEPRA (Application and Modification Procedure Regulation, 1999) (b) In addition to pertinent information, the Feasibility Study must include:

(i) Item-wise break down of major components of the project, Bill of Quantities (BOQ) and corresponding costs, capacity and energy data and tariff table(s).

(ii) A detailed implementation schedule and payment schedule during construction.

(iii) Details of Tariff Reopeners.

(c) For clarity, following format may be used to show relevant costs and quantities to work out final cost break-down. Other formats can also be used, with the objective to demonstrate transparently the costs and corresponding quantities;

No.	Item	Total Cost in US $		
		Local	Foreign	Total
A	Civil Works			
A-1	Intake			
A-2	Tunnels (If applicable)			
A-3	Power house			
A-4	Penstock			
......	Tail race			
......	Roads			
......				
B	Hydraulic Steel Structure, M&E Works with all sub-items			
C	Engineering and Supervision			
D	Administration costs if any			
E	Resettlement and Mitigation if applicable			
F	Interest During construction			
G	Debt and Equity and Financing costs			
H	Other items			

(d) Corresponding tables of above shall also include quantities in respect of each of the major structures and unit rates for them.

(e) Feasibility Study shall include, among other relevant information, complete details of the geotechnical investigations carried out and the conclusions arrived at regarding the nature, quantities and characteristics of underground rocks or soils along the tunnel. The report shall include a comprehensive classification of the expected rocks or soils.

(f) Feasibility Study shall clearly include, among other relevant information, formulae based on which the Applicant have arrived at unit rates for various activities such as soil excavation, rock excavation, fill, underground excavation, reinforcement etc. Calculations in Form I are included by way of example for tunnel excavation, and other formats may be used in the Feasibility Study document. A schedule of unit rates for constructing the tunnel in the zone of each classification shall be included

5.3 Recommendations of Provinces: Before determining a tariff, NEPRA will invite comments and consider recommendations of the respective province in which the proposed project is located, as required under Section 7(5) of the Act, including comments on resettlement costs and where applicable land costs claimed by the Applicant for resettlement.

6. Engineering, Procurement and Construction (EPC) Stage:
All the applicants possessing NEPRA's determined tariff on feasibility costs shall be required to file a tariff petition based on EPC Costs in terms of NEPRA Tariff Standards and Procedure Rules-1998, if they wish to seek revision in tariff on the basis of EPC. NEPRA will allow such adjustments as shown in PART III herebelow, provided that the Applicant substantiates its costs to NEPRA's satisfaction preferably in the form of EPC contracts and/or in a form and manner as determined by the Authority.

While determining tariff;

> NEPRA may carry out detailed prudence of costs however, if the Applicant supports its petition by providing competitive bids from a number of reputable contractors, NEPRA may accept the lowest of bids without going in to detailed prudence exercise.

Those Applicants who desire to seek a tariff based on EPC costs without having obtained tariff based on feasibility costs shall also file a tariff petition in accordance with NEPRA Laws.

7. Commercial Operation Date (COD): Upon filing of an application for adjustment at COD in terms of NEPRA tariff determination, NEPRA will allow adjustments as elaborated under PART III.

PART III

Tariff Adjustments

8. Need for Adjustment

Recognizing that construction costs of hydel projects cannot be firmed till construction complete date, NEPRA will treat such uncertainties by allowing adjustments to different project components and corresponding costs limited to Tariff Reopeners and other adjustments as allowed by NEPRA. FORM II shows different adjustments, which will be allowed by NEPRA.

8.1 Adjustments at EPC stage: EPC level costs are understood to be based on more extensive investigations and as a result the nature and scope of work, specifically for the underground tunneling is relatively better known than that at the feasibility level. Similarly costs attributable to Mechanical and Electrical Works (M&E Works) and hydraulic steel structure are considered firm at this stage. Pursuant to ECC's decision (Annex), and where applicable, NEPRA will allow the following adjustments;

(i) Cost variation due to geology in the tunnel(s): (a) the construction cost of tunnel will be subject to variation due to geological conditions confirmed at EPC stage. The cost variation may be either due to unit rate for escalations allowed or changes due to different classification of rocks encountered than those considered at the feasibility level. (b) The overall quantities (length) of tunnel shall not be allowed to vary unless a change in the design, wherever applicable is approved by the Panel of Experts.

FORM III shows typical working of cost variation due to geology of tunnel(s)

(ii) Civil Works cost escalation: An escalation in the civil works cost shall be allowed from the date approved by NEPRA when it determined the tariff to a date approved by NEPRA. No revision in the quantities worked out at feasibility level shall be allowed. Typical working of civil works cost escalation is shown in FORM IV.

(iii) Cost variation in Hydraulic Steel Structure and M&E works: The costs included in determining the Tariff shall be adjusted to allow costs in EPC contract(s).

8.2 Adjustment at COD:

(i) Cost variation due to geology in the tunnel(s): Final revision in costs (arrived after EPC contracts) may be allowed at COD for variation in classification of soil and rocks during actual construction or escalations in unit rates over approved construction period in the following manner;

(a) geology related increase in costs shall be subject to provision of verifiable references to NEPRA and;

(b) escalation in units rates at actual will be allowed by NEPRA up to the date when the project is scheduled to achieve commercial operation (COD).

(ii) Civil Works cost escalation: escalation in units rates at actual will be allowed by NEPRA up to the date when the project is scheduled to achieve commercial operation (COD).

(iii) Cost variation in Hydraulic Steel Structure and M&E works: Adjustment shall be allowed at EPC/COD on account of hydraulic steel structure and M&E works.

(iv) Cost variation due to Resettlement Cost: The Feasibility Study shall provide details of all items included in the resettlement cost and their schedule of prices. Any variation in resettlement cost and land costs from that given in the Feasibility Study, will be allowed provided the initial schedule of rates and variation in them are certified by the government of the concerned province in which the project is located and approved by NEPRA.

PART IV

Monitoring and Verification

9. Verifiable References: The adjustments on account of Tariff Reopeners will be allowed at COD subject to following of such procedure as contained in respective PPA. NEPRA may require certification by power purchaser/procurer in that respect where applicable.

10. Reference Date: For the purpose of adjustment of any cost item, the reference date will be determined by NEPRA.

11. Effective Date for Adjustment: (a) For adjustment at EPC stage, price schedules prevailing one month before filing of such request by the applicant shall be considered. (b) For adjustment at COD price adjustment shall be the date that is one month before the scheduled date of completion of the item as given in the construction schedule contained in respective PPA.

12 Sources of Prices: The prices of elements subject to adjustment shall be to the extent possible as given in the Statistical Bulletins published by Statistical Division of the Government of Pakistan. Where

necessary statutory notifications and official price from public sector organizations like Pakistan Engineering Council will be used. The same shall be clearly specified in the cost of the project included in the approved Feasibility Study. For a particular escalable item(s), the same source shall be used throughout the construction.

13. Appointment of Consultant/Expert: NEPRA may appoint consultant or expert to review and comment on any aspect of the project. The applicant shall facilitate any site visits and investigations that the Consultant/Expert may carry out.

FORM 1

UNIT RATE CALCULATION FOR ROCK CATEGORY A

Average Unit Rate $R(A) = P/Z$ say in US$/meter³

P = X + Y Total Cost of Category "A" rock in US $

Z = Total quantity of Category "A" rock in meter³

X = x1 + x2 + x3........ Non adjustable Portion of Cost e.g. cost of equipment used, others

Y = y1+y2+y3+y4 Adjustable portion of Cost

Where,

Y1=wages of labor comprising of wages of skilled labor + wages of unskilled labor + ...

Y2= Costs related to cement to be used

Y3= Costs related to steel to be used

Y4= Costs related to Fuel to be used

Unit rates for rock Category B, Category C etc. and unit rates for civil works for other components can be worked out on similar basis.

Annex-I

1

ITEM NO.9

CASE NO. ECC-20/02/2008 DATED: 22.01.2008	FRAMEWORK FOR IMPLEMENTATION OF HYDROPOWER PROJECTS UNDER POWER POLICY 2002

DECISION

The Economic Coordination Committee (ECC) of the Cabinet considered the Summary dated nil submitted by the Ministry of Water & Power on "**Framework for Implementation of Hydropower Projects under Power Policy 2002**" and approved the proposals contained in para 6 of the Summary as follows:

i. ECC's decision dated 23rd May 2007, referred to in para-4 of the Summary viz: "NEPRA should stop the practice of accepting EPC costs on the basis of quotations etc. Instead, they should have their determination on firm (non-reopenable) competitive price duly initialed and signed by the IPP/ EPC contractions", may not apply to hydropower projects.

ii. NEPRA to determine tariff for hydropower projects based on feasibility studies approved by the Panel of Experts appointed under 2002 Power Policy with re-openers limited to those identified in Para-5 of the Summary. However, the re-openers and views of the Panel of Experts will not be binding on NEPRA.

iii. Mechanism for determination of tariff for Hydropower Projects shall be issued by NEPRA keeping in view the observations expressed by Planning Division, Finance Division, NEPRA and BOI within one month. NEPRA shall also consider recommendations of the Provincial Government where such generation facility is located.

......

FORM III
FOR ILLUSTRATION ONLY

TABLE OF COST OF CONSTRUCTING TUNNEL (FROM FEASIBILITY STUDY)

Rock or soil classification	Quantity in meter^3 (1)	Unit rate in ** equivalent US$ per meter^3 of tunnel (2)	Cost of construction in equivalent US$ according to feasibility report (1) x (2)
Category A	1,000	5,000	5,000,000
Category B	1,200	5,500	6,600,000
Category C	1,500	6,500	9,750,000
Category D	2,000	8,500	17,000,000
Total	5,700 *		38,350,000

* Total quantity is not allowed to vary. Only changes within different categories are allowed while total quantities remain constant.

** Unit rates may be worked out on format shown in FORM I

Two options of cost variation are shown here:

(a) Variation in soil/rock categories with no escalation in unit rates.

(b) Variation in soil/rock categories and escalation in unit rates.

TABLE OF FINAL COST OF CONSTRUCTING TUNNEL CORRESPONDING TO OPTION (a)

Rock or soil classification	Quantity in meter^3 (1)	Unit rate in equivalent US$ per meter^3 of tunnel (2)	Cost of construction in equivalent US$ according to feasibility (1)x (2)
Category A	800	5,000	4,000,000
Category B	1,000	5,500	5,500,000
Category C	1,600	6,500	10,400,000
Category D	2,300	8,500	19,550,000
Total	5,700 *		39,450,000 (adjusted cost of tunnel)

* total quantities same as in approved feasibility reports

TABLE OF FINAL COST OF CONSTRUCTING TUNNEL CORRESPONDING TO OPTION (b)

Rock or soil classification	Quantity in meter^3 (1)	Unit rate in equivalent US$ per meter^3 of tunnel (2)	Cost of construction in equivalent US$ according to feasibility report (1)x(2)
Category A	800	5,200	4,160,000
Category B	1,000	5,600	5,600,000
Category C	2,000	6,600	13,200,000
Category D	1,900	9,000	17,100,000
Total	5,700 *		40,060,000 (adjusted cost of tunnel)

* total quantities same as in approved feasibility reports

F/B

SAR GROUP
POWER PROJECT

Ref No.________

Date.________

Urgent process for
For mf & p1
AD(MR)+PA
8/5/12

The Registrar,
National Electric Power Regulatory Authority (NEPRA),
OPF Building, Shahrah-e- Jamhuriat,
G-5/2, Islamabad.

Subject: **Tariff Petition for 1.3MW Hydel Power Project (Project) at Machai Branch Canal (MBC), District Mardan, KPK, Pakistan**

Dear Sir,

1. The letter of Interest (LOI) to conduct the feasibility study of the Project was issued to SAR Group (Pvt) Limited ,("Petitioner") by Sarhad Hydel Development Organization (SHYDO) under KPK Power Generation Policy ,2006.The Policy is mainly the adoption of Power Policy 2002 announced by the Federal Government.
2. Sponsors have conducted the feasibility study through reputable Consultants and the same has been approved by the Panel of Experts.
3. This Tariff Petition is being submitted for the determination of Generation Tariff as per the Guidelines for the Determination of Tariff announced by GOP and the " Mechanism for Determination of Tariff fof Hydropower Projects" announced by NEPRA on 18th July,2008.
4. It is respectfully submitted to the Authority to determine Generation Tariff for the Electricity produced by the Project in accordance with para 4 and with due consideration to the assumption forming the basis of the Petition.

Registrar
Dy. No. 3171
Dated 8-05-12

Thanks and best regards

(Syed Mazhar Ali Qasim)
Chief Executive Officer

107, NEW SHAMI ROAD PESHAWAR CANTT. PH: 091-5272554
Cell : 0300-9592308

F/C

National Electric Power Regulatory Authority
Islamic Republic of Pakistan

2nd Floor, OPF Building, G-5/2, Islamabad
Ph: 9206500, 9207200, Fax: 9210215
E-mail: registrar@nepra.org.pk

Registrar

No. NEPRA/TRF-205/SARGPL-2012 6571 15 05 2012

Syed Mazhar Ali Qasim
Chief Executive Officer
SAR Group (Pvt.) Ltd. (SARGPL)
107, New Shami Road,
Peshawar Cantt.

Subject: **Tariff Petition for 1.3 MW Hydel Power Project at Machai Branch Canal, District Mardan, Khyber Pakhtunkhwa – SAR Group (Pvt.) Ltd.**

Reference: SARGPL's subject tariff petition filed vide letter dated 20.04.2012 (received on 08.15.2012.

While examining the subject tariff petition, the following deficiencies have been noted:

i) The tariff petition filing fee amounting to Rs. 116,640/- has been submitted alongwith the subject tariff petition whereas the exact amount of tariff petition filing fee is Rs.233,280/- (valid upto 2nd June, 2012) as per the requirement of Rule 3(1) of NEPRA (Tariff Standards and Procedure) Rules, 1998.

Please note that the current CPI is valid upto 2nd June, 2012. Therefore, in case the tariff petition is filed after 2nd June, 2012, please contact Mr. Qamar-uz-Zaman, Deputy Director (Finance) NEPRA, Tele: 9206798, to confirm the exact amount of tariff petition filing fee at the time of filing the petition.

ii) Board Resolution regarding Authorization to sign and file the subject petition and to attend proceedings thereof has not been submitted as per requirement of Rule 3(11) of Tariff Rules.

2. In view of above, the subject petition is hereby returned, in original, in pursuance of Rule 3(3)(a) of NEPRA (Tariff Standards and Procedure) Rules, 1998 with the advice to resubmit the subject petition along with the requisite fee and authorization.

Encl: [Original Tariff Petition alongwith P.O. No. 0001205 dated 07.05.2012 for Rs.116,640]

(Syed Safeer Hussain)

F/D

SAR ENERGY (PRIVATE) LIMITED

Ref: No. ________

Date: June 27, 2012

BOARD RESOLUTION

It is resolved that a tariff petition for 1.3 Mega Watt SAR Hydro Power Project on Machai Canal District Mardan, Khyber Pakhtunkhaw , be submitted to National Electric Power Regulatory Authority.

It is further resolved that Syed Mazhar Ali be authorized to sign and submit the said petition.

Directors

1. [signature]
2. [signature]
3. [signature]
4. [signature]

107, NEW SHAMI ROAD PESHAWAR CANTT. PH: 091-5272554
Cell : 0300-9592308

,TAN F/E 20 RS

TWENTY RUPEES پاکستان روپے (۲۰) بیس

AFFIDAVIT

I, Syed Mazhar Ali Qasim S/o Syed Qasim Shah holding CNIC No. 13501-4916246-9 born on 1st March 1976, Profession Business, do hereby solemnly affirm and declare on oath as under:-

1. That I am the authorized signatory of the company and Authorized to submit Tariff petition before NEPRA authority.

2. That the contents of Tariff Petition filed before National Electric Power Regulatory Authority (NEPRA) FOR 1.3 MW SAR Hydro Power Project are correct to the best of my knowledge and belief.

ATTESTED

JAVED ULLAH KHATAK
OATH COMMISSIONER
Advocate High Court Islamabad

Deponent:________________
Syed Mazhar Ali Qasim
CNIC No. 13501-4916246-9

042 2-3