Ministry of Water and Energy of Afghanistan

Coordination of Policy ,Legal & Regulatory Framework

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Date : 24 July 2013

Introduction

- Afghanistan's consumption of electricity is one of the lowest in the world. In November 2012, the Ministry of Energy and Water (MEW) estimated1 that 28% of the household was connected to the power supply systems, the vast majority of whom live in urban centers. Rural power supplies continue to rely on hydropower, with limited diesel and battery options, and are estimated to cover less than 9% of the rural population. This lack of access is significant in light of the fact that more than 75% of Afghans live in rural areas2 and 67 per cent of the national Gross Domestic Product (GDP) comes from rural areas3.
- The implication is that the potential for development and growth in the rural sector, given appropriate investment, is significant, with access to energy as a contributory element. The 2012 Asia Foundation Survey of the Afghan People found that 14 per cent of respondents identified lack of electricity as a major problem in their local areas.
- Thus, the Afghan Government needs to initiate a sustained, long-term expansion of rural energy,
  as identified in the Afghanistan National Development Strategy (ANDS), which emphasizes that
  the overall policy focus for rural areas should be the expansion of rural energy and electricity
  services.

Energy Potential in Afghanistan

- **Solar Energy potential**
- *Solar , Solar power potential in Afghanistan , as per USAID satellite pictures and rough study is (222,000MW),*
- **Wind Energy potential**
- *Is approximated by the same source of information (67,000MW),*
- Hydro Power potential 23000MW.
- Cruel Oil reservoirs 1.569 Billion CM.
- Gas 15.687 Billion CF.

Afghanistan as a transit country for Energy between Central Asia and South Asia

- *Regional cooperation in energy enables integration of markets for higher economic development, and is an effective way to address energy security as well as promote energy efficiency. Each country has individual energy needs and resources; integrated regional planning allows for identification of the most cost-effective and environmentally sustainable regional projects. Afghanistan has abundant natural resources which can be effectively traded in large energy markets in neighboring countries, thus benefiting all parties. CASA-1000 & TAPI projects are the symbol of good cooperation in support of this idea.*
- *An enabling policy framework for regional trade of power and gas is needed, along with the regional infrastructure to encourage regional cooperation and trade in the energy sector.*

Law on Electricity Services

- **Article 7. Role of Regulation**
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- 7.1 Through a process for the development and adoption of regulations, as defined by Article 8 of this Law, the AERA shall:
- 7.1.1Provide balance to all of the varying interests of the Electricity Service sector, which is necessary to attract private investment, protect the environment, allow for economically and financially healthy Electricity Service operations, and ensure quality Customer services in the sector.
- 7.1.2Perform the duties and functions defined by this Law by exercise of independent decision-making, based upon international regulatory practices and standards, and in an objective, transparent, and non-discriminatory manner
- 7.1.3Issue Licenses, and regulate the activities of Licensees, in accordance with the provisions of this Law.
- 7.1.4Monitor compliance by Licensees with international treaties, agreements, contracts, and obligations entered into by the GIRoA in the electricity sector.
- 7.1.5Determine tariff methodologies, categorize Customers for purposes of tariffs, approve or adjust tariff schedules of Licensees in accordance with the provisions of this Law.
- 7.1.6Respond to complaints of Customers and the Electricity Service Providers and resolve disputes.

Article 9. License Eligibility

- Any Person willing to construct, own or operate any Electricity Service at their own financial risk shall have the right to do so, provided they comply with the conditions of this Law, and with other applicable laws of Afghanistan.
- Any Licensee operating any electricity Transmission System or electricity Distribution System authorized by this Law must make that system available to any Person who seeks use of such system on equal terms to any other Person, at fair Tariffs and terms of access established according to the Tariff principles stated in this Law.
- Any high voltage Transmission System owned by the Government of Afghanistan or by a government-owned Electricity Enterprise on the date of passage of this Law, or subsequently acquired or owned by the Government of Afghanistan or by a government-owned Electricity Enterprise following the date of passage of this Law, shall not be transferred to non-government ownership, and must meet other conditions of fair and open access to all potential shippers as required by this Law.

Afghanistan's Tariff Policy

- 1.1. In compliance with Article 10 the Energy Law of Afghanistan the Government of Afghanistan hereby notifies the Tariff policy in continuation of the National Energy Policy (NEP) drafted on 11th January 2012.
- 1.2. The National Energy Policy has set the goal of adding new generation capacity of more than one hundred thousand MW during the 20 years Plan periods to have per capita availability of over 1000 units of Energy per year and to not only eliminate energy and peaking shortages but to also have a spinning reserve of 5% in the system. Development of the power sector has also to meet the challenge of providing access for Energy to all households in next 20 years.

Resettlement and Rehabilitation (R&R) Policy

- *The World Bank was the first multilateral lending agency to adopt a policy for Resettlement and Rehabilitation (R&R). The Bank's present policy is contained in the document "Involuntary Resettlement," Operational Directive (OD) 4.30, adopted June 1990. This is regarded by Afghanistan as applicable policy. Afghan delegation had participated in South Asia R&R Regional gathering. Jan.2012.*
- *The (R&R) policy broadens the treatment of resettlement issues beyond hydropower and irrigation projects to all types of investment operations. It emphasizes the need for:*
- *Minimizing involuntary resettlement;*
- *Providing people displaced by a project with the means to improve, or at least restore, their former living standards, earning capacity, and production levels;*
- *Involving both re-settlers and hosts in resettlement activities;*
- *A time-bound resettlement plan; and*
- *Valuation and compensation principles for land and other assets affected by the project.*

Energy Efficiency Policy for Afghanistan

- *Like in most other developing countries today, in Afghanistan the most cost-effective way of increasing electricity supply is to improve the efficiency of existing facilities and networks and to improve demand side management. This can be done by rehabilitating units out of service, improving the availability and efficiency of existing plants, and by reducing losses incurred in distribution and transmission. Demand side measures relate to energy saving lighting, low consumption electrical appliances, improved traditional cooking and heating, etc. The introduction of computer-designed turbine runners can increase the capacity of hydroelectric plants and their efficiency. Significant amounts of fuel can be wasted if thermal plants are not operated at optimal conditions of temperature and pressure. Preventive maintenance should be undertaken, since improving the availability of units reduces investment requirements for new plants. Simple corrective measures, such as cleaning blocked condensers or repairing leaking valves, can have payback periods as short as a few days. Adequate spare parts should be on hand. Staff training programmes need to be improved and expanded.*
- *This chapter has been contributed by Alain Streicher, International Resources Group (IRG), Energy Efficiency Advisor for the USAID-Afghan Clean Energy Program (ACEP)*

Energy Efficiency Policy for Afghanistan ……..continued

- *SCREENING ANALYSIS METHODOLOGY*
- *The three elements of our methodology are approach, key assumptions, and best available data sources:*
- *APPROACH*
- *Our approach uses financial and socio/economic analyses of energy demand reduction options subject to data constraints.*
- *KEY ASSUMPTIONS:*
- *1. Realistic number of possible measures based on international experience of IRG and others*
- *2. Tariffs: DABS (Exhibit 2)*
- *3. Potential savings per measure*
- *4. Hours of operation (per year): Kabul Energy End Use Survey*
- *5. Load period (AM peak, Off Peak, PM Peak): Kabul Survey*
- *6. Savings by load period: Kabul MEW Energy End Use Survey and KED data*
- *7. Savings by measure (kWh/year): MEW calculations based on (3), (6)*
- *8. Unit costs: MEW Appliance Market Survey*
- *9. Total installed cost (with management, indirect costs): MEW Survey and MEW database*
- *10. Total savings per year, by load period (MHz/y): derived from above*
- *11. Total savings to the customers (financial): based on (6) and (2)*
- *12. Total savings to the country (socio-economic) based on (6) and shadow prices (marginal costs of supply. Exhibit 18)*
- *13. Total program costs (computed from above)*
- *14. Financial payback (computed from above)*
- *15. Economic payback (computed from above)*
- *16. Key barriers (from research and interviews.)*
- *17. Difficulty of implementation (MEW experience and interviews)*
- *18. Time to 100 percent market penetration (MEW experience and interviews)*

2.0 Legal Position

- 2.1 the National Energy Policy for Afghanistan empowers the Government to formulate the tariff policy. It enables the Government to review or revise the tariff policy from time to time.
- 2.2 The Policy also requires that the Central Energy Regulatory Commission (CERC) which is under establishment process, and Provincial Energy Regulatory Commissions (PERCs) shall be guided by the tariff policy in discharging their functions including framing the regulations under the NEP.
- 2.3 The NEP states that Regulatory Commissions shall be guided by the principles and methodologies specified by the Central Commission for determination of tariff applicable to generating companies and transmission licensees.
- 2.4 The Forum of Regulators has been constituted by the Government under the provisions of the NEP which would, inter alia, facilitate consistency in approach specially in the area of distribution.

2.2 Legal and Regulatory Framework objectives

- An enabling environment requires the introduction of certain regulatory measures from the Government to attract private sector and promote sustainability. These regulatory measures will include:
- Developing an appropriate legal framework for pricing and tariff structures, working with rural communities to support the integration of renewable energy into the economy and attract private sector investment.
- To synchronies power generated from rural energy systems with the national grid, establishing procedures and charges for transporting power from the point of generation to the customer through the national electricity grid using existing infrastructure.
- Power purchase agreements between independent power producers, energy providers and beneficiary communities.
- · Development of a Grid Code for connecting existing micro hydropower plants to national and/or regional grids.
- The legal and regulatory frameworks will be developed in collaboration with existing
- frameworks for the overall development of energy sector, mainly coordinated through MEW and Da Afghanistan Breshna Sherkat.

Thank you

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