

## Rajasthan Power Sector reforms policy statement 1999

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## **Power Scenario in Rajasthan**

At the time of the formation of the State in 1949 the installed capacity was a mere 13.27 MW and electricity supply was limited to the princely States and few towns. The power sector in Rajasthan received impetus after the formation of RSEB on 1<sup>st</sup> July 1957 and planned growth in installed capacity, transmission network and rural electrification took place with the State investing 28-30% of its plan outlay in the initial years in the power sector.

The State grid, as on March 99, has access to 3356 MW of installed capacity. Of this 1302 MW is exclusively owned and operated by RSEB where as the State has a share of 949 MW in the inter-state partnership projects, both hydel and thermal, and has an allocation of 1105 MW in the central sector power stations. The transmission & distribution system covers a large geographical area of 342,000 Sq. Kms., 2/3rd of which is desert with low population density, serving over 50 lac consumers from different categories. Electricity sales have been growing at an annual average of 11%. The unserved demand is significant, as evidenced by a backlog of over 6 lac applications in service connections.

At present Rajasthan State Electricity Board (RSEB), a vertically integrated State owned utility constituted under the Electricity (Supply) Act, 1948, is the sole supplier of electricity to consumers of the State. However, without Government's subvention, RSEB has not been able to achieve the rate of return of 3% on net fixed assets after interest, as stipulated in the Electricity (Supply) Act 1948.

Like most other States in the country, the power system in Rajasthan is characterised by problems of frequent service interruptions, high system losses, unexpected voltage and frequency swings, restrictions on demand, poor cost recovery and heavy commercial losses. The State is also facing chronic power shortage, both in terms of peaking availability as well as energy availability to the extent of 36% and 11% respectively. The State's power scenario is unlikely to improve in the next few years and shortages, both in terms of MW and energy, would continue till the end of the 10<sup>th</sup> Five Year Plan.

## **Policy initiatives taken by the Government of Rajasthan**

In 1991, Government of India opened the power generation industry to private sector investment in an effort to mobilise resources for power generation. In 1993, Government of Rajasthan decided to reform its power sector with the objective of creating conditions for sustainable development of the power sector and improving efficiency and quality of service to the consumers by allowing private participation in the State power sector, particularly in generation. This was followed by a Broad Reform Policy Statement, issued in September 1995, with the aim of attracting private investment and expertise to expand and improve electricity services in the State and to enable the sector to gain access to capital markets and commercial financing.

In the past almost exclusive reliance was placed on facilitating private power generation through Independent Power Producers (IPP's) and transfer of selected existing generating stations to the private sector adopting the international competitive bidding route. Letters of intent were issued for liquid fuel based power plants of smaller capacity ranging between 50 MW to 166 MW

having low gestation period and Power Purchase Agreements (PPA's) were signed for 2646 MW capacity. PPA's were also signed for 702 MW naphtha based and 500 MW lignite based projects. Though these two projects received the techno-economic clearance of Central Electricity Authority (CEA), yet in neither case financial closure has been attained. Thus there has been virtually no progress in regard to implementation of these projects. Slow progress of private sector projects have given rise to the need to pursue the power generation projects in the State sector with greater vigor, while continuing to support private sector initiatives in generation.

With this end, the State Government has decided to take up the 2x250 MW Suratgarh Thermal Power Station Stage II in the State sector. Simultaneously, on the basis of the recommendations of a Cabinet Sub Committee, especially set up for this purpose, some of the PPA's, previously signed, have been reviewed with a view to increase the prospects of their achieving quick financial closure.

Government of Rajasthan has also announced a policy to encourage generation based on non-conventional energy sources, on 11<sup>th</sup> March 99, in which a number of concessions have been offered.

### **Investment Requirements of Power Sector**

In order to meet the expected shortage during the X Plan Period, installed capacity will be required to be raised by 5000 MW. . This would require an investment of about Rs.20,000 crores in generation and an equivalent amount in developing the transmission & distribution system. With its limited resources and the competing needs for investments in other sectors of economy and for welfare of the weaker & other vulnerable sections of society, the State will not be able to support such a program without mobilising private investment in a big way.

### **Need for Reforms in Power Sector**

The State Government is convinced that rapid and self-sustaining growth of power sector and its financial viability is essential for a speedier and sustained socio economic development of the State. Given the grave difficulties being faced by the power sector in terms of investment, its management, and regulation, Government of Rajasthan recognises the need to bring about comprehensive reforms in the power sector to facilitate and attract investments in the power sector, bring about improvements in the efficiency of delivery system and create an environment for growth in the power sector for the overall benefit of the people of the State. A healthy, dynamic and growth oriented power sector will pave the way for rapid industrialisation of the State and growth and stability in agricultural production.

### **Emerging Environment of Reforms**

Recognising the need for reforms in the power sector, the Government of India has endeavored to evolve a national consensus for reforms. Two conferences of Chief Minister's were convened in 1996, towards this end, leading to the adoption of the Common Minimum National Action Plan on Power. The Electricity Regulatory Commission Act was enacted by Government of India in July 1998. More recently, in a conference of the Chief Minister's in December 98, a Power

Reform Initiative was endorsed. However, a number of steps are required to be taken at the State level to provide a comprehensive solution for restructuring the power sector. In the recent past many States have initiated measures to reform the power sector and to set up regulatory bodies. Orissa, Andhra Pradesh and Haryana have already enacted the required legislation for supporting reforms. Many other States have either established the Regulatory Commission or are in the process of doing so as also restructuring their power sectors.

### **Objectives of Power Sector Reforms**

The power sector reforms programme of the Government of Rajasthan will endeavor:

- To supply electricity to the consumers under the most efficient conditions in terms of quality and cost in order to support the economic development of the State;
- To take effective steps to enable the power sector to mobilise, from within the sector, adequate financial resources for financing grid expansion requirements;
- To create an operating and regulatory environment conducive to investment and competition so as to foster entry of private participants into power generation, transmission and distribution and to attract the capital and expertise required to support power system upgradation, expansion and service quality improvement

### **Agenda for Reforms**

The Government of Rajasthan is firmly committed to bring about comprehensive reforms in the power sector to achieve the aforesaid objectives and accordingly, this Statement of its Policy on Power Sector Reforms Programme is being issued replacing the Policy Statements of 1995, revised in 1997 and 1998.

The main components of the proposed reform programme are:

- Establishment of an independent Regulatory Commission to regulate the functioning of the power sector on sound commercial principles; to safeguard the interests of customers in respect of quality, reliability and fair price for electricity; to set cost and efficiency based tariffs to ensure the creditworthiness and viability of the power sector and to progressively eliminate tariff distortions and subsidies;
- Segregation of the generation, transmission and distribution functions into separate services to be provided by separate autonomous companies;
- Reconfiguration of the distribution system into distinct economically viable geographical zones each served by an autonomous distribution company;
- Corporatisation and commercialisation of the emerging power sector entities to make the power sector attractive for the prospective investors;
- Retention of the role of policy formulation with the State Government;
- Promotion of competition among various power sector entities;
- Management of demand to conserve and promote efficient use of energy and ensure environmental protection.

## **8. Structural Changes in the Power Sector**

The power sector will be restructured to encourage functional specialisation; decentralisation, autonomy and accountability in decision making; to facilitate and encourage private sector participation; to progressively promote competition in different segments of the sector; and to ensure an effective, efficient and independent regulation of the sector. The new power companies will operate within an independent regulatory regime which promotes efficiency and makes the companies accountable for the quality and reliability of the service provided to the customers.

The functions presently being performed by the vertically integrated RSEB will be segregated into separate generation, transmission and distribution companies to be incorporated under the Indian Companies Act, 1956. Separate profit centres will be established within these companies to further promote productivity and efficiency. To grant appropriate managerial and operational autonomy to the new companies, while these are State owned, the Government will ensure that at least one fifth of the Directors are from outside the Government entities, and that for each company the Directors are appointed exclusively on the basis of professional merit

The existing generation stations of RSEB will be grouped under a separate power generation company. Transmission of power will be entrusted to a separate transmission company. Power distribution will be assigned to a number of independent power distribution companies.

The State Government has decided to set up the Rajasthan Electricity Regulatory Commission (RERC), under the Electricity Regulatory Commission Act 1998, enacted by the Government of India, for establishing a regulatory framework which will seek to balance the interests of various stakeholders e.g. customers, investors, lenders, suppliers, the government as the trustee of the public interest, the utilities and the people of Rajasthan.

The State Government also intends to redefine its role in the power sector from an operator and regulator of utilities to a facilitator towards greater investment and promoting productivity & efficiency. The State Government will be focusing on broad policy formulation in the power sector. With the reform programme the State Government is confident of channelising a larger investment in the power sector to rehabilitate and expand the transmission and distribution system.

### **Power Generation**

The existing power stations and those under commissioning in the State sector, will be transferred to a separate generation company to be registered under the Indian Companies Act, 1956. The company will start its operations, as a wholly State owned company and State Government may, at a later stage, invite private sector participation in this company. The company, like other IPPs, will sell power to the transmission company for further sale to the distribution companies. This Company will be responsible for generating power from all the existing generating stations of RSEB and complete the projects under commissioning by RSEB.

In future new power generation projects in Rajasthan will be mainly developed by:

- Independent Power Producers (IPPs) selected through international competitive bidding (ICB);
- Central sector generating corporations; or
- By the generation company itself or in joint venture with private partners, other States or Central undertakings

The Government of Rajasthan may make investments in power generation for extension of the existing power stations as well as to bridge the shortfall in the availability of power.

### **Power Transmission**

A State owned transmission company, to be incorporated under the Companies Act, 1956, will be entrusted with the power transmission network of extra high tension lines including O&M of inter state tie lines, in so far as they pertain to the State. The transmission company will be responsible for purchasing power from generating company and various IPPs in Rajasthan, importing and exchanging of power from and with central power generation corporations, jointly owned projects, regional projects, other SEB's, other power projects within or outside the country. The pooled power will be supplied to different distribution companies. The transmission company will be the principal transmission utility in the State.

The transmission company will take over the entitlements and commitments undertaken by RSEB regarding the procurement of bulk power and will fulfil them in accordance with its own corporate objectives, subject to the directives of the Regulatory Commission. The transmission company will dispatch the power on merit order basis, subject to the limitations of PPA's already entered into, so as to avail the least cost power available in the grid.

### **Power Distribution**

The State will be geographically divided into a number of distribution companies to be formed on considerations of viability and operational ease. These distribution companies will operate under a license to be granted by RERC. They will approach RERC individually for fixing their retail tariffs, and amongst the distribution companies, differential tariffs may progressively emerge based on relative costs and performance.

These distribution companies, though initially owned by the State Government will, in a phased manner, be converted into joint ventures (JVC) where the private partners will hold majority shares and management control including the obligation to bring in the required investments and to meet the performance obligations under the license. The selection of the private partner will be done through a carefully designed international competitive bidding process to ensure selection of a technically and financially competent partner.

To motivate the employees, who are important stakeholders in growth of these companies, Government of Rajasthan considers it desirable to invite the employees of RSEB and its successor companies, to participate in the equity of these new companies. The entire process of forming JVC's and transferring the distribution business to them is expected to be completed by end of 2004, although a more rapid schedule is targeted.

## **Regulation of Power Sector**

As stated earlier, Government of Rajasthan has already taken a decision to set up the Rajasthan Electricity Regulatory Commission (RERC) under the provisions of the Electricity Regulatory Commissions Act, 1998 enacted by the Government of India. The Rajasthan Power Sector Reforms Bill, 1999 will be enacted to provide for restructuring of the power sector. This Bill will also recognise the Rajasthan Electricity Regulatory Commission, being set up under the Electricity Regulatory Commissions Act, 1998.

RERC will, as an autonomous regulatory authority, regulate power purchase and procurement process of the transmission and distribution utilities, determine tariff for electricity transmission and supply, promote transparency, efficiency and economy in the operation and management of the power utilities, encourage competition and help the power sector in Rajasthan to attract private capital for development while ensuring a fair deal to the customers. The RERC will have three members each having a fixed tenure and appointed by the State Government on the recommendations of an independent Selection Committee as stipulated under the Act. It is also proposed to confer the power to issue licenses, to transmission and distribution companies, upon RERC under the proposed Power Sector Reforms Bill, 99.

The Government of Rajasthan is committed to take all necessary steps to facilitate and ensure the independent functioning of the RERC. The Government will also abide by the provisions of the Reform legislation with regard to fixation of tariff by the Commission and whenever the Government decides to subsidise the supply of power to specific groups of consumers, it will pay the required subsidies.

## **Financial Restructuring For Reforms**

Given the present financial situation of RSEB, major financial restructuring is critical to enable the new companies to start their operations on a financially viable basis. The financial restructuring will include rationalisation of tariffs; restructuring of the balance sheets of the functionally unbundled power sector entities through identification and write off of and provisioning for doubtful or non-performing assets; settlement of un-funded liabilities; and design and implementation of a suitable mechanism to clear the accumulated debt and overdue commercial liabilities.

Presently the agricultural sector, and to a lesser extent the domestic sector, are highly subsidised, resulting in annual revenue deficit of about Rs. 1000 crores. This shortfall is compensated by subsidies from the State Government and long term borrowings from the open market and financial institutions. The reforms programme aims to eliminate need for any State subsidies in a phased manner and make the power sector not only self-reliant but a net generator of resources for the State's economy over a period of time.

To meet the growing requirements of investment in power sector for improved availability of power, the State Government undertakes that the resources generated as a result of the divestitures of the existing entities shall be ploughed back specifically for the development of the power sector.

## **Power Sector Reforms Bill**

In order to pave the way for the reform process Rajasthan Power Sector Reforms Bill, 1999 will be enacted to provide the legislative framework for the setting up and functioning of the autonomous regulatory commission, segregation of specialised functions to the separate entities and creation of an environment for the growth and efficient functioning of the power sector.

## **Human Resource Development**

The Rajasthan Power Sector Reform Bill will provide for safeguarding the interests of the employees of the RSEB. It will ensure that any change in service conditions or rules will not be less favourable than those existing today. The benefits available to the employees and their service conditions are, therefore, ensured and protected. All the existing employees of RSEB will be absorbed in the new power utilities. Transfer of employees will be based on a time bound transfer scheme to be prepared by the State Government.

With the anticipated growth of the power system, the personnel policies and employment conditions of the companies would need to be much more progressive in attracting and retaining highly skilled staff and providing incentives to the staff for constantly upgrading their skills. The staff should be among the beneficiaries and not the losers of the reform program.

The reform process will be accompanied by training and other human resource development programs to improve skills and work environment and to enable the employees to discharge their responsibilities and functions in a more efficient manner under the commercially oriented companies. A key objective of restructuring is to create a culture where customer service and commercial functioning are paramount. The employees will have new opportunities to undertake greater responsibility, be accountable for delivering results and have higher opportunities for career advancement.

## **Intermediate Investment Plan**

The Government of Rajasthan recognises that the process of reforming the power sector is likely to be long drawn. In fact, it may take few years before the full benefits of the reforms are experienced. In the short and medium term, there is a dire need to address the most urgent needs of the sector, improve the quality of power in the most critically affected areas, improve the interface with consumers and improve the safety and working conditions of staff duly employing information technology tools to score radical benefits. An Intermediate Investment Plan will be developed and financed jointly by the State Government and external aid agencies to address these investment requirements.

## **Communication Strategy**

The Government of Rajasthan is conscious that success of the reform process critically depends on its acceptance by the stakeholders e.g. consumers, employees, investors, lenders, creditors, and above all the people of the State. In addition to ensuring that all the technical aspects of the reform process are properly addressed, the implementation strategy will use participatory



approaches to address and balance the genuine concerns of the various stakeholders and will aim at building a broad and durable constituency for change.

The Government and the management of RSEB and its successors will continue and intensify the communication campaign to educate and enlighten the stakeholders and public at large about the need for reforms, its various components, implementation strategy, time table and the expected benefits to various category of stakeholders. The communication efforts will necessarily focus on the various groups of RSEB employees, end users industrial, agricultural and domestic consumers, Government functionaries, academicians, opinion leaders, non-Government organisations etc. This feed back during this process will also help to improve the design and implementation of the reform measures.

### **Demand Side Management**

The reform programme will also focus on the demand side management (DSM) with the objective to improve efficiency in supply and end-use of electricity. All resources, including energy conservation and use of non-conventional and renewable energy sources, will be considered in the process of power planning to manage the power demand effectively and reduce the need for additional conventional generation capacity. The main focus of the strategy for demand side management will be on:

- Introduction of tariff linked demand side management
- Improvement of efficiency of agriculture tube wells and industrial installations
- Launching of consumer awareness campaign on various energy conservation measures.

Various options to bring in demand side management measures will be explored and suitable policies will be notified in consultation with the RERC. Energy efficiency and DSM programs will be promoted through developing bankable strategies and programmes in consultation with the stakeholders.

### **Environmental and Social Aspects**

The Government reaffirms its commitment to ensure a fair, efficient and transparent handling of all matters relating to land acquisition and involuntary resettlement, including loss of assets and other negative impacts on Project Affected Persons (PAPS) resulting from various developmental projects, irrespective of sources of financing. In this context, the State Government is formulating the Rehabilitation & Resettlement (R&R) policy for the people affected by acquisition of land for various developmental projects.

Environmental aspects of power generation and supply under the reform programme will receive the utmost attention of the State Government. Environmental impact will be fully integrated into planning and implementation of all generation, transmission and distribution projects. The renovation and modernisation of existing power generation stations, already undertaken, will minimise the adverse environmental impacts on the surrounding areas. New projects will be developed in accordance with applicable environmental standards and resettlement and rehabilitation policies. Reform initiatives such as reduction in transmission and distribution

losses, improved metering, billing and collections, improvement in energy efficiency, and promotion of demand side management will have a positive impact on the environment.

### **Implementation Strategy**

In order to guide and closely monitor the implementation of the reform programme, the Government will formulate a Project Implementation Plan (PIP) which will spell out clearly the implementation actions, steps, resources, responsibilities, milestones and schedules. The implementation plan will constitute the reference framework for monitoring the progress in carrying out the reform programme.

A Reform Guidance Committee chaired by the Energy Minister is being set up to guide the reform programme. This will be in addition to the existing Steering Committee under the chairmanship of the Chief Secretary. A Task Force headed by Chairman, RSEB would operationalise the policy decisions taken by the State Government, Reform Guidance Committee and Steering Committee and would co-ordinate and monitor the implementation of the reform programme. A Reforms Office, headed by Executive Director in RSEB, to effectively manage the reforms process has been set up. Specialised working groups will be formed to study various aspects of the reform process, prepare the blue print, set time schedules and facilitate the implementation of the reform administration. Services of outside experts and consultants will be engaged to further professionalise the process.

### **Improved Consumer Interface**

Consumers have often been the most neglected segment in the state owned and operated infrastructure sector. Ensuring better quality of service and protecting the interest of the consumer is one of the key elements of the reform process. With greater investment flowing into the sector and its effective regulation, the availability as well as quality of power will improve benefiting all sections of the consumers. A vigorous campaign to educate the consumers on their rights, to disseminate information on the regulatory decisions and on the quality standards and mechanisms available for the redressal of consumer complaints will be taken up.

An Advisory Committee with representatives from consumer, agriculture, industry, commerce, trade, labour and licensees for transmission and distribution will be set up to advise the State Regulatory Commission on major policy issues and quality of service provided to the consumers.

### **Impact on the Development of the State**

The Government of Rajasthan believes that the reform programme will lead to a quantum jump in the productivity and efficiency of the power sector. Availability of ample power at competitive rates will have a multiplier effect on the economy of the State through increase in investments and improved productivity of agriculture, industry and commerce. With the turn around and self sustained growth of the power sector, huge resources presently being spent on the power sector will be available for investment in socially more desirable activities. In fact, the power Sector will become a major contributor to the finances of the State through inter-alia, returns on equity held by the Government. The Government of Rajasthan intends to use these

funds for poverty alleviation and socio-economic uplift of the oppressed sections of population through increased investments in programmes like education, health, family welfare and welfare of weaker sections.

Government of Rajasthan is, thus, fully committed to bringing about comprehensive reforms in the power sector in the State. The Rajasthan Power Sector Reforms Bill 1999 will put in place the required legislative framework. The institutional changes required to implement the reform process are already under implementation. Given its clear commitment to the people of Rajasthan to provide quality power, efficiently, reliably and at reasonable rates, the Government of Rajasthan dedicates itself to the task of reforming, restructuring and restoring the credit worthiness of the power sector for the larger benefit of the people of the State.