

Foreign and Indian Experience in Policy and Regulatory Issues and Challenges for Private Investment in the Indian Power Sector

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The power sector in India is dominated by the State and Central Government sectors accounting for 42.91 % and 29.89 % of the generation capacity, respectively; while the private sector accounts for about 27.18 % as on 31.03.2012. The bulk of the transmission and distribution functions are with State utilities. The private sector has a small but growing presence in distribution and is making an entry into transmission. Power Sector, which had been funded mainly through budgetary support and external borrowings, was opened to private sector in 1991. Electricity is considered key driver for targeted 8–10 % economic growth of India. The vast Indian power market, today offers one of the highest growth opportunities for private developers.

1.0 INTRODUCTION

To meet the objective of rapid economic growth and “power for all” including household electrification, it is estimated that an investment of the order of ₹ 11,00,000 crores at 2010–2011 price level would be required to finance generation, transmission, sub transmission, distribution and rural electrification projects.

According to National Electricity Plan, role of private participation in generation, transmission and distribution would become increasingly critical in view of the rapidly growing investment needs of the sector. The Central Government and the State Governments need to develop workable and successful models for public private partnership. This would also enable leveraging private investment with the public sector finances. Mechanisms for continuous dialogue with industry for streamlining procedures for encouraging private participation in power sector need to be put in place. In view of the current investment climate specially for the private investment, paper studies, the great need to

address the various policy and regulatory issues which are adversely affecting the smooth private investment in Indian power sector in spite of its being a sector with promising growth potential.

2.0 PRIVATE INVESTMENT IN THE POWER SECTOR

The Indian economy suffered from politicalization of economic policies, nonprudent fiscal policy coupled with dissoluteness macro-economic imbalances; sustained competitive populism; excessive subsidization; and over concentrated central authority. This has affected industrial growth adversely. Therefore, Govt. of India introduced economic reforms in 1991, which induced the take off of the economy to the higher trajectory resulting in the flow of private capital from developed to developing economies for higher expected returns. The various factors influencing private investment are as follows.

2.1 Macroeconomic Factors

These factors include economic growth potential, inflation, consumption, investment

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apart from political stability. These factors influence investor's confidence and thus the foreign investment. Apart from this, foreign investment is often restrained by policies that regulate the flow of capital, repatriation of capital and dividends earned thereof. The policy and regulatory environment also influences, the financial viability of projects.

2.2 Legal Issues

These include a number of contractual issues such as Power Purchase Agreement, Fuel Supply Agreement land acquisition, environmental issues, etc. These are linked to the legal framework of the country. The bureaucratic delays stretch the project development process and often frustrate investors' sentiments.

2.3 Country-Related Issues

These issues determine the overall attractiveness of a country for foreign investment and also influence the international lenders' willingness to participate in a project. The policy interventions, with adequate commitment from the government, generally yield results over a period of time. Infrastructure projects with long-term exposure to investors are particularly vulnerable to country-specific factors, which influence global investment trends. The sector-specific interventions like liberalization of investment and sectorial reform are initial signals for private investors. The continuity and consistency of this process, which may include tariff reforms and privatization, are often influenced by political factors. This takes a toll on sustainability of investment in the sector.

2.4 Project Management Issues

The issues, which are part of the project development process, consume a significant effort of investors. The ability of the project developer to hedge risk rests on the policy and regulatory framework. These are often addressed through legal contracts among various stakeholders: investors, lenders, utilities, government and consumers. These issues are often ironed out

through a negotiation process, especially in the early phase of private investment in the sector. However, it is not a substitute for a transparent framework for private investment.

2.5 Poor Health of State Sector Distribution Utilities

The state sector distribution utilities in most of the states are in poor financial conditions due to high AT&C losses, high HT:LT ratio, low tariffs, poor collection efficiency, high subsidy and lack of political commitments for reforms. The efforts being made by MOP through intervention of RAPDRP are making a difference, but much is still required to be done in terms of the effective implementation and delivery.

3.0 FOREIGN EXPERIENCES

3.1 Investment Climate

Woodhouse [17], has studied the investment climate of nine countries and identified the following five key factors that are significant for private investment in the power sector:

- (i) Strong public finances
- (ii) Viability of the sector
- (iii) Efficiency of fuel markets
- (iv) Political climate including the role of civil society
- (v) Legal framework

A survey of international investors in the power sectors of developing countries reveals that while assessing country conditions, investors give priority to

- (i) Legal framework that defines investors' rights and obligations
- (ii) Payment discipline and enforcement
- (iii) Availability of a guarantee from the government or a multilateral agency

The following four factors seem to represent the mindset of Japanese investors in making

decisions for investment in the power sector of developing countries, i.e. sovereign guarantees, a strong local partner, demand growth and the rate of return.

The international investors look for availability of fuel, land acquisition and tariff structure as enabling factors. The problem of land acquisition in India has compelled investors from USA and Japan to reconsider their plans. Many such investors are moving towards Middle East and Vietnam for ease of operations.

3.2 Governance Infrastructure

A study of data [21] of 155 developed and developing countries to conclusion that governance infrastructure is an important determinant of both inward as well as outward FDI. An able governance infrastructure enables an environment under which domestic multinational corporations emerge and invest abroad. Hence, the benefits of governance infrastructure for FDI inflows are more evident for smaller and developing economies.

3.3 Management

The economic literature related to emerging infrastructure policy issues in developing countries highlights the importance of governance and poor management in the sector [20]. Transparent policies and independent regulatory agencies bring in a of governance to the sector. A transparent policy framework and effective legal system help to protect property rights of investors. Poor management remains a key concern in improving the technical and financial performance of the sector. Countries that have succeeded in attracting financing for infrastructure projects have taken care of following legal aspects:

- (i) Establish a system for protecting private investment;
- (ii) create mechanisms for parties to bind themselves through contracts;

- (iii) provide for enforcement of agreements reached [20].

In the absence of a favorable policy environment that permits cost recovery, government guarantees or other forms of financial support, privatization of public assets are possible. The investors adequately discount the value of the assets they are purchasing and hence achieve an acceptable level of returns. This is, however, not feasible in the case of Greenfield investments in new projects, and failure on the part of the governments to provide a conducive policy and regulatory environment leads to a demand for government guarantees and other financial support [19].

3.4 Government Guarantees

Many developing countries with weak investment climates continue to provide government guarantees, which typically include payment and/or revenue guarantees. Other kinds of support from governments as well as multilateral institutions come in the form of credit enhancement mechanisms like maturity extension and performance-based grants [23]. The sovereign guarantees are not a substitute for an effective policy and regulatory environment. This has often been used as an instrument of comfort in the early phase of opening up of the power sector for private investors. Business risks, including those associated with variations in exchange rate and interest rate, should best be covered by the private investors rather than government providing a guarantee cover for the same [23]. Transparent and predictable government policies obviate the need for sovereign guarantees [22].

The failure of early IPPs in Mexico is attributed to a lack of a regulatory environment. An independent regulatory institution strengthens an effective policy implementation. This may not completely eliminate government guarantees, but could help reduce its scope and scale. Government support may still be required for viability support for many infrastructure projects including power supply schemes for poor and rural consumers.

3.5 Critical Factors for FDI

The time-consuming systems and procedures to be complied with, the bureaucratic layers and the multiple bodies to be dealt with lead to time and cost overruns. Procedural delay have accordingly been rated as 'quite to very serious' by 93 % of respondents and has been regarded as the most serious impediment to FDI investments in India [18].

For FDI to flow smoothly, the following improvements in India's investment environment are required:

- Rationalization of the tax structure
- Simplification of procedures for flow of funds
- Modernization of government systems and reduction in
- Improvement in infrastructure facilities
- Rationalization of labour laws
- Liberalization of employment visa rules

These surveys emphasize that policy certainty and political stability are major factors influencing future FDI growth in the Indian economy. This is a fitting explanation for the infrastructure sectors as well. The desire of investors for higher rate of return also stems from risk associated with uncertainties related to political instability and policy uncertainty. The ground-level administrative hurdles extend the project development phase and take a toll on investor sentiments, time and cost over runs.

4.0 DISTRIBUTION REFORMS UNDER THE MODIFIED MEGA POWER POLICY

On the modification to the Mega Power Policy by Government of India Ministry of Power in December 2009, following four distribution reform measures have been laid down required to be undertaken by the states purchasing power from the mega power projects:

- (a) Timely release of subsidy as per Section 65 of Electricity Act 2003.
- (b) Ensure that Discoms approach SERC for approval of annual revenue requirement/tariff determination in time according to the SERC regulations.
- (c) Setting up special courts as provided in the Electricity Act 2003 to tackle theft-related cases.
- (d) Ring fencing of SLDCs.

5.0 COAL LINKAGE POLICY FOR 12TH PLAN PROJECTS

In October 2009, Government of India Ministry of Power had decided to adopt the following methodologies in the order of priority for allocating coal linkage for 12th Plan projects for allocation of coal linkage:

- (i) Power projects of Central Sector CPSUs, state sector and projects to be bid out by states on tariff-based competitive bidding.
- (ii) IPP Projects.
- (iii) Captive Power Projects.

Further, the government issued a Presidential directive in April 2012 to Coal India to sign fuel supply agreements (FSAs) with the power producers assuring them of at least 80 % of the committed coal delivery removing therein a great bottleneck in the growth of this sector.

6.0 NATIONAL ELECTRICITY POLICY FINANCING PRIVATE SECTOR PARTICIPATION

Power being most crucial infrastructure, public sector investments, both at the Central Government and State Governments, will have to be stepped up. Considering the magnitude of the expansion of the sector required, a sizeable part of the investments will also need to be brought in from the private sector. The I.E. Act 2003 creates a conducive environment for investments in all segments of the industry, both

for public sector and private sector, by removing barrier to entry in different segments. Section 63 of the Act provides participation of suppliers on competitive basis in different segments which will further encourage private sector investment. Public service obligations like increasing access to electricity to rural households and chase small and marginal farmers have the highest priority over public finances.

7.0 INDEPENDENT REGULATION AND PRIVATE INVESTMENT IN POWER SECTOR

There is a positive correlation between independent regulation and private investment in the generation and distribution segment as studied by Estache and Goicoechea [25]. The influence seems to be more pronounced in case of investment destined for the distribution segment. While 73 % of the Latin American countries have independent regulatory institutions, only half of the South Asian countries would qualify under this criterion. In this background, the percentage of countries with private participation in generation was 68 % and 38 % respectively in the Latin American and South Asian region. Private participation in the distribution segment was recorded lower at 61 % and 13 % in the two regions, respectively.

The experience with private investment in various countries also suggests a greater role of an independent regulatory regime. While Argentina and Brazil witnessed an increase in private investment in the presence of a regulator, China witnessed gradual investor pullout due to its absence. Private investment in China was welcomed as early as in the late 1980s. The uncertainty associated with the FDI approval process, electricity sector regulation and the risk of default on power purchase contracts continue to be the most significant institutional barriers for FDI investment in the PRC's power sector [24]. The absence of an independent regulatory institution and frequent tariff revisions made investors wary of prospects in the 1990s. This later also led to exit of investors from the country [11].

The literature reviewed in the previous section and the above analysis point out the importance of a transparent policy environment and independent regulatory framework in attracting private investment in the power sector in developing countries. Although a number of developing countries, including India, have undertaken regulatory reforms, the outcome in terms of attracting private investors varies. This seems to be a necessary rather than sufficient condition. The transition path and sustain ability of reforms provide along-term policy stability, thereby reducing investors' risk perception. There is a clear trend towards more effective regulatory governance in the electricity sector in India.

8.0 CONCLUSIONS

Thus the study indicates the need for policy and independent regulatory commissions facilitating smooth private investment in the power sector. But it is being seen that in spite of the existence of these frameworks, there is inadequate private investment in this sector due to following:

- Low level transparency in some of the policies.
- Independence and effectiveness of the electricity regulatory commissions.
- Risk of default in power purchase agreements.
- Uncertainty associated with FDI approvals.
- Poor inventory record/asset management of state electricity boards.
- Political stability and commitments.
- Poor paying capacity of some segment of population.
- Rebates to agriculture sector.
- Issue of cross subsidies.
- Conflicting policy issues concerning implementation.
- Commercial viability of the Electricity distribution sector.

- Back to Back Power Purchase Agreements (PPA) with Distribution Cos.

The above issues can be resolved only through strong political commitments, specially in the states, having very high AT&C losses with the help of public private partnerships. The Ministry of Power's efforts through RAPDRP for making distribution sector commercially viable have to be effectively implemented with adequate monitoring of the results. The Reserve Bank of India initiative for enhancing the external commercial borrowing (ECB) under the automatic route to further rationalize and liberalize the ECB guidelines for the enhancement of Refinancing limit for Power Sector on 20th April 2012 is a welcome step. According to RBI notification, the Indian, co. The power sector must be allowed to utilize 40 % of the fresh ECB raised towards refinancing of the rupee loan availed by them from the domestic banking system under the approval route, subject to the condition that at least 60 % of the fresh ECB proposed to be raised should be utilized for fresh capital expenditure for infrastructure projects. Electricity Act, 2003 [5], provides an enabling framework for accelerated and more efficient development of the power sector. The same needs to be implemented in letter and spirit with enabling policies and regulations.

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