

ETHICS IN INNOVATION :
POWER (ELECTRICITY) SECTOR REFORMS IN
INDIA WITH SPECIAL REFERENCE TO THE RAJASTHAN STATE

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In the last five decades, the governments in South Asian countries have focused their attention on the growth of power sector and invested huge capital (both public and private) in the power sector to increase the production of power i.e. electricity. In India, power sector was not well attended even the investments in the sector were very high. Most of the investments were in the form of loans and debentures to generate more and more power for industry, agriculture and the domestic as well as of the public sector utilities. The institutional devices for such investments were in the form of Electricity Boards (as a public sector undertaking) at the state governments' level. The Union government has not directly involved itself in the production of power except in the atomic power generation. Such electricity boards were not successful in their responsibilities as the State governments were over dominated by the political considerations. Consequently, low power generation, mismanagement and capital losses emerged at the state level electricity boards in most of the states. Hence, the Indian economy was in the doldrums and experienced severe problems of the development in most of the economic areas. Basically, the strategy adopted to develop the infrastructure sector in the country has been faulty both at the policy and the institutional level. In a highly centralized planned and over controlled economy, the means of production were not properly designed and managed.

Malhotra (Dec 1997) has identified six reasons of mal-development of the infrastructure sector: (i) investment requirements exceed the national capacities; (ii) the performance of the infrastructure sector has not met the international standards; (iii) the managerial and the technical resources were inadequate; (iv) innovations in technology have been enormous; (v) new approaches of economy (privatization and independent regulation) were ignored; and (vi) the limited coverage and quality of infrastructure sector has not been able to catch the global competitiveness. Besides these reasons, political reasons like politics of poverty have stifled the efforts of the public sector in India. Further, the state and Union governments have exploited the resources of the State Electricity Boards (SEBs) for their own purposes by ignoring the capital and generation capacities of the SEBs and these boards have incurred huge losses. Moreover, the policy of government to subsidize the agriculture sector in the uses of electricity have crippled the efforts of the SEBs to generate capital as the subsidy was not paid back to the SEBs by the state and Union governments. Last but not least, some of the results of the welfare policies could also be seen in the huge losses of the SEBs. On the whole, the institutional device (public sector undertaking) was not proper to bear such big responsibility due to lack of power, overstaffing, low quality of technology, manpower and over-bureaucratization.

After the crisis of 1991(when the problem of balance of payment emerged), India has reviewed its economic approaches under the compulsions of the donor agencies like the World Bank and the IMF and adopted new economic policy in which the policy was focused upon the infrastructure development. In the Ninth Five Year Plan, it was envisaged that Rs.6000 billion will be required for the infrastructural development in this country which is mostly impossible to generate by the government and also beyond the capacity of the government to invest in this sector. It has now been clear that the infrastructure sector could only be developed with the investments, technology and manpower of the foreign investors. Therefore, the Indian economy will depend upon the foreign direct investments in the next few years. Further, the increasing demands in the infrastructure sector on the one hand and the economic depression in the capital market due to 11 September, 2001 event and then subsequent terrorism will loom around the Indian economy and would further require more foreign investments, management capacities and institutional choices with technical capabilities in the sector. Moreover, there are several threats in the infrastructural development strategy like the international events, foreign policy, nuclear options, signing of CTBT and resultant economic sanctions which would direct or indirect effects upon the foreign collaborations. Last but not least, the socio-cultural setting of the Country may also pose severe problems in the infrastructure development. Poverty ridden society adopts different ways and means to extract benefits freely like in the power sector where electricity theft is a major problem. Basically, India needs huge investments, technology, trained personnel accompanied by liberalized economic policy, non-bureaucratic setup, roper distribution, low subsidized services, change in the socio-cultural milieu and a conscious consumers. The problems of investments may be solved in near or far future but the problem of management, distribution, tariffs, regulations, peoples' cooperation etc. seem difficult to resolve as politics of poverty, distribution and tariff determination, bureaucratic dominance in management, high subsidy to agriculture sector, rural areas are the crucial issues of the infrastructure sector. The government has to take stand above the party and political lines and a conscious policy approach has to be adopted to develop the infrastructure sector especially the power (electricity) sector in India

POWER (ELECTRICITY) SECTOR DEVELOPMENT POLICY :-

The Union government has given top priority to the power sector in the infrastructural development strategy. The Power Policy announced in 1996 and subsequently modified by the Vajpai government to uplift the national agendas has emphasised upon the crucial role of the power sector in achieving the targets of the 21st century. The major thrust of the government is to provide sufficient electricity primarily to the industrial and agriculture sector by 2010 although full and sufficient supply to all sectors of the Indian economy will remain dream .The policy is to attack on three major areas of the sector i.e. investment, institutions and management.

In power sector, investment is a major problem as the foreign investors are also in deep crisis. the example of the Enrone Company's bankruptcy is a major threat to the India's power sector development as foreign investors would be more cautious now to invest in India although the

Union government has opened the power sector fully for the foreign investors and the State governments have been authorized to clear foreign direct investment(FDI)proposals worth up to Rs.1500 million at their own level subject to the approval of the international competitive bidding norms and Power Finance Corporation(PFC).More than Rs.1500 million FDI proposals would be cleared by the Foreign Investment Promotion Board(FIPB) and the Cabinet Committee on investment and further approved by the Central Electricity Regulation Authority (CERA). Domestic investments in the power sector will be cleared by the State governments at their own level. However, private domestic investments with technology or foreign aided investments in technology would be subject of FIPB and the CERA. Beside this, the Union government has constituted an advisory panel to suggest a mechanism for promoting large scale trading in electricity. The mechanism will also lead to identification of sources matching consumers for the generated power. Further ,the government has evolved a technology development plan to have a cost efficient and environment friendly technology. The government has also established norms of viable technology, custom duty free imported technology and technical exchange and training in power generation. Fuel and raw material technology agreements will also be promoted through bilateral agreements. The government would also provide funds through PFC to subsidies lending's to the SEBs. The proposal for a five year tax holiday is also allowed on certain terms and conditions. In the event of unseen adverse effects, government may provide them protection through various schemes more particularly to the fast track projects.

The Coelho Committee on the matters of competitive bidding for selection of licensees in power distribution on the basis of mode of Memorandum of Understanding (MoU) has submitted its report and its recommendations have also been approved. Privatization or corporatization of the SEBs has been initiated in most of the states and about 15 states have abolished the SEBs in their own states and replaced them by power companies. The problem of overstaffing is being resolved through the absorption in the corporate system as has been done in Orissa state by the Gridco Company. Tariff related norms for the power sector have also been decided by the Ministry of Power. The basic thrust of the norms is to bring uniformity in power rates across the Country the government has indicated changes in tariff structure keeping in view the extent of cross subsidization between the industry on the one hand and domestic as well as agriculture on the other. Cross subsidization was preferred against huge losses or unrealistic bills of SEBs. The regulation of these norms will be done by the CERA. However, the CERA's scope will be limited to the tariff and power transmission network will be owned and operated by the Power Grid Corporation of India Limited (PGCIL).Some of the areas where transmission connectivity is not available, private sector is being introduced in the transmission tasks. Last but not least, government is also considering a possibility of taking electricity from the neighboring countries purely on the commercial basis like from Pakistan, Nepal or Burma. On the whole, the main thrust of the power policy is to attract foreign and private as well as domestic investments ;to bring uniformity in tariff, to evolve an independent regulatory system in the different areas and to redesign the or replace the SEBs in the context of the changing needs. The National agenda of the present government is to focus upon the "SWADESHI" (local/indigenous)investors in order to secure funding in the infrastructure sector as the foreign investors are to move on the basis of international events and relations and difficult to rely upon them. There are examples in some

states like Orissa, Maharashtra (Enron Co has become bankrupt and leaving the power projects), etc. In Rajasthan also, the foreign investors are not much enthusiastic to invest in the power sector due to some of the experiences in these states.

The above-mentioned strategy of power sector development is seemed a war footing strategy of the government not only to build capacity of power generation but also of investments in a competitive global economy. However, the past experiences in Orissa, Maharashtra, Haryana states clearly show that private sector and foreign investors are not much interested in the power sector projects not only due to politico-economic situations but also of the international events as well as of the economic depression after 11th September, 2001 event. The international donor agencies like the World Bank or the IMF or the ADB are such agencies which are financing the power sector projects on the tuff and rough terms and conditions which may be difficult for the developing country like India whose socio-economic conditions are difficult to implement such terms and conditions. It is also interesting to note the role of the institutional arrangements for the power sector development in a over-bureaucratic administrative system where Ministry of Power at the Central level and on the other hand the CERA are on the loggerheads on the question of implementing the recommendations of the Disinvestment Commission in the power sector. The coalition government led by Mr. Vajpai is not as strong as is desired in modern liberalization era. The Indian bureaucratic setup is much stronger than the managerial setup of the power sector in the Indian administration. In such a competitive World, foreign direct investment (FDI)² is a major challenging task. the FDI institutions are moving more towards China, Korea, Japan, Taipae etc. than to the South Asian countries and the reasons of such diversions are related to the political, economic, social and geographical situations.³ Therefore, the FDI is precarious and uncertain in the power sector. Private sector in terms of domestic and non-resident Indian investments are not very enthusiastic as the private capital is only 4% in the power sector while the SEBs capital is 53% and the foreign investments are 43%. The reasons may be attributed to the over-bureaucratic and corrupt administrative system, lack of autonomy, over control and regulation in the power sector. Electricity distribution and tariff determination mechanism is seemed highly politicized and over subsidized which force the private sector to avoid the power sector in terms of investments.

In sum, the investment friendly power policy is absent and enable to generate trust and confidence among the private and foreign investors. It must be noted by the Indian policy-makers that development will be dream if the foreign and private sector investments are not made and the governments whichever party in government would not be able to generate resources at their own. Foreign investments are the necessity of the time. Private sector collaboration is the indicator of development. Public-private mix would definitely yield good results. The prevailing power policy is a half-way house and require deep changes and reforms in the power sector. A balance is also required between the demand and investment. Some of the recent policy reforms like the selling out the power sector undertakings (maximum 40% shares to be offloaded) in foreign currencies at the international level to corporatize the power sector; annual budget allocations are to be stopped and foreign and private sector capital would be generated; commercialisation of electricity; structural reforms and adjustments would be

implemented thoroughly; annual escalation of cost and rates of tariff would be marginalized; and counter and governmental guarantees of the foreign investors would be simplified in order to generate mutual trust. Such policy reforms and changes are not seemed effective as the environment and friendly behavior with the foreign investors is still absent. The increasing opposition of the foreign investors both at intellectual and operational level is creating hurdles in attracting the foreign as well as private sector investors. The big power projects being run under the control of the State governments should be directly undertaken by the Union government in view of the capital and operational problems. The Ministry of Power has moved a proposal to undertake the ownership of six power projects namely Maneri Bhali and Lakhwar Vashi hydel projects in Uttar Pradesh, Karbi-Langpo in Assam, Narmadasagar in Madhya Pradesh, Muzzaferpur Thermal power project in Bihar and Shahpur Kandi hydel project in Punjab. These projects will be transferred to the Union government for completion in the IX Five Year Plan

DISTRIBUTION :-

In a big country power distribution is a challenging task due to power shortage as well as of increasing demands from different sectors and states. In the new power policy, the distribution task would be based on competitive bidding in which the corporates, cooperatives and local government bodies would be preferred in comparison to the foreign companies, however, such foreign investors or companies may compete equally. The norms of distribution are at par of the power generation. the emphasis is being put up on those bidders who could earn better results in the event of efficient demand and supply management, bringing the distribution losses to the minimum. The Ministry of Power is to consider, from time to time, the different models proposed by the high powered Coelho Committee in its interim report on privatization of power distribution.. The major thrust of the privatization is to involve smaller entrepreneurs as well as cooperatives to take over small distribution units. The Ministry of Power is exploring the possibilities of financial support as well as attractive incentive packages for these cooperatives to take over the power distribution in villages and small towns. In the commercial areas and big cities ,corporates will take over the responsibility on commercial basis. Since the electricity is in the Concurrent list of the Indian Constitution, the issue of distribution would be resolved in states with the common approach evolved by the Chief Ministers of the state's time to time. However, it is clear that the main transmission lines(interstates) would be kept under the control of the Power Grid Corporation of India Limited(PGCIL).As such, the electricity distribution task would be resolved by the Union, States and the transmission Companies. The Union Government is also considering proposals to privatize the distribution tasks as early as possible in order to support the loss making units/boards. But the question remains how far it would be possible in the prevailing political circumstances ?

TARIFF :-

Since the electricity is the subject of the concurrent list, each state has autonomy to fix the tariff of electricity to its own conditions and requirements but it led to several problems for the Union

government in opening the power sector to the foreign and private companies. To resolve the problem, uniformity in pricing the electricity rates is being devised across the country. However, the basic problem in fixing uniform tariff across the country is the political and developmental problems. Most of the states are against the idea of uniform tariff as it may generate several political and social problems in their states. Tariff is a sensitive issue due to political reasons as the power tariff may become a reason of losing the political power. Efforts are being made to locate possibilities of cross subsidization between the industry and agriculture sectors including the domestic consumers. Tariff related norms would be rational and reasonable in view of the investment cost. although most of the states have established Electricity Regulatory Authority/commission but the power of fixing the power tariff is not solely given to them due to the fear of losing political power. In the Rajasthan state, the Administrative Reforms Commission under the Chairmanship of ex-Chief Minister Mr. Shiv Charan Mathur in its report has cautioned the state government on power sector reforms. Mr. Mathur has several times in his speeches on various platforms cautioned the state government over the ongoing power sector reforms and expressed apprehensions whether the present state government would be able to win again the general elections in 2003. The Union government is inclined to handover the task of fixing the tariff to the Central Electricity Regulatory Authority (CERA) in order to avoid any political effects of power tariff. The experience of telecommunication sector, where similar administrative arrangements have been devised, shows that tariff related matters would not be solely given to the CERA as has been the case of Telecommunication Regulatory Authority of India (TRAI). Here, the question is raised about the administrative morality and ethics as well as of the government's ethical side of business. On the one hand, the task of fixing the tariff is given to the independent regulatory body but the administrative interference of the concerned ministry/Department in the task of the independent body on the pretext of the policy-making area is the responsibility of the concerned Department and accountability of fixing the tariff is to rests with the Department is to generate a debate and several questions whether the institutional choices (independent body) are not properly located, or the administrative morality in any institution is missing or the administrative machinery is not ethically correct in its approach as the masses/users feel cheated somewhere either on the administrative or the political grounds and the benefits are taken by the private sector or the situation is exploited by the private companies in their own favor. Looking into the reality, it is found that the task of fixing the tariff is the sole responsibility of the independent body but due to political considerations, the task is overtaken by the department concerned or by the government and irrational overlapping is found in the jurisdiction of the institutions but it is clear that in fixing the tariff, the intervention of the Department/government is unethical as well as immoral if such interventions are made to provide some benefits to some sectors, areas, companies and the immediate voters. It is immoral act of the government and agencies to provide benefits to some sections of the users on the cost of others. The private sector companies involved in the production, transmission and distribution are sometimes, to join hands with such government moves, actions and decisions when these Companies find it suitable to their interests. In India, privatization is not as such as was designed in the West but is different in terms of cultural and social setting. Such private companies have some socio-cultural responsibilities and accountability in fixing the tariff. Since the socio-cultural milieu is to dominate in the governance system, private sector cannot go against the

system due to its moral duty and responsibility and accountability but the enjoyment of benefits on the cost of poor masses and common users is considered unethical and immoral. There are numerous examples in several states where private sector has enjoyed the fruits and shown irresponsibility to the society. It was also realized at several times when the private sector was not able to get benefits of the situation due to social pressures and mass movements, it exit and left the power sector. The examples of the Orissa, and Maharashtra where the private sector companies left the power sector in the middle of the power sector reform package. It is also to be mentioned that the efforts and results of privatization in the power sector has not been impressive and useful more particularly in the tariff as the capacity of the government to provide subsidy and the capacity of the users to pay the cost of privatization has reached to the point of saturation. On the one hand, the resources of the government are limited and economic depression has not lifted the earning capacity of the masses on the other. In such situation, the cost of privatization has become a burden on both the government and the public. Taking a neutral account of the situation, it is very much clear that privatization is a necessity of the present day due to the incapacity of the government to develop its machinery for the prevention of wastage, misuse, power politics and so on so forth. However, the question remains how to bring ethical and moral side of business in the power sector reforms more particularly in the era of privatization ?

INSTITUTIONAL ARRANGEMENTS FOR POWER SECTOR : -

Since the promulgation of the Constitution of India(1950),the power sector was controlled mainly by the State governments although the Union government is empowered to make laws, rules and regulations in the power sector as the electricity is the subject of concurrent list of the Indian polity in which the laws of the Union government would prevail over the state governments' laws if any contradiction is there. Under the Electricity Supply Act,1948,each state was required to establish its own State Electricity Board (SEB)as the state government (public) enterprise with full capital base, technological knowhow and manpower. These boards were governed by the state governments through the Indian Administrative Services (IAS) personnel who are generalists and mainly concerned with the policy fields. These boards were consisted of by these IAS persons both at the policy making and implementation level. The boards were responsible for the overall task of the electricity (including production, transmission and distribution). The state governments were authorized to intervene in the board's decision under the Act. These boards were facing huge losses, underproduction, wastages, overstaffing, old technology etc. The reasons may be attributed to the mismanagement of electricity affairs, unruly nature of the boards, incapacity of the boards to improve the situation, over political interferences, high level corruption etc. The situation was more or less similar in all the states and each and every state was considering these boards as a burden on their shoulders. The Coelhno committee in its 60 pages report on the SEBs had recommended to dismantle them with immediate effect and be replaced by State Electricity Authority (SEA)or the Regulatory Commission (SRC).The Committee further suggested that if such dismantling or replacing is not feasible in the prevailing conditions, these boards could be divided into manageable and

distribution zones and these zones be transferred to the private corporates on certain terms and conditions. The Committee has evolved a transparent mechanism by which the private corporates could be involved in the restructuring process in order to improve the financial position of the power sector. The Union government considered the report seriously and accepted its major recommendations in toto. Although the government's intentions are to make transparency in the assets evaluation and sale of assets in the open market in order to recover the debt situation of the concerned SEB, however, the procedure is not easy at the bureaucratic level. There are so many vested interests and commitments. Bureaucracy is seemed highly interested in the vested interests and its various commitments in the offerings of the SEBs. In most of the states, SEBs have been abolished and now the process of sale of assets is being started. The Union government has set a procedure and made it mandatory that all assets of states SEB would be offered through international bidding. The Ministry of Power would make all efforts to evaluate the deals of sale through the international bidding. The procedure is set that joint ventures would be preferred in the power sector in such bidding, however, if necessary sale would be made in the open market. In this process, outright sale may also be made, if the capital base of the new company after acquiring the assets becomes a profitable venture. Looking at the ethical side of the sale process, the examples of some of the states show that outright sale were made without broadening the capital base or where such sale were not possible, bureaucratic delayed procedures were adopted to avoid sale and the international bidders left at the time of bidding. In Maharashtra and Orissa, international companies exit from such bidding.

However, now the Ministry of Power is making exercise on restructuring the capital base as well as modifying the liabilities of SEBs before the sale or distribution. In these exercises, borrowings would be retained at the limits prescribed by the financial institutions while the foreign investors are insisting on a debt equity ratio of 1.5:1 on the pretext of the reasonable returns. Therefore, the Ministry of Power is locating the possibilities of setting the debt service coverage ratio at 1.5 to the foreign investors (FIs). It is interesting to note that the Electricity Act, 1948 is silent on the sale of SEBs assets to the private corporates. The section 7/8-A of the Act stipulates that it should be in accordance of the market value. However, the market value in terms of technology, quality and longevity of service is not attractive and purposeful. The Ministry of Power is, in consultation of financial institutions like ICICI, IFCI and Price Water House evaluating the assets and liabilities of SEBs. On the one hand, the Ministry is making evaluation while on the other hand, electricity is being supplied free of cost to farmers and scheduled castes and Scheduled tribes by some states like the Madhya Pradesh state which make a point of resentment among the possible bidders. The political interest behind such moves raise the question of ethics-If the inability and poverty is the criteria of supplying the electricity free of cost then why the other sections of society, who are in deep poverty and enable, are being deprived? The state government is unethical in judging the need of electricity in the different sections of the society. Can a state afford to ignore the real needy people? Power sector reforms can no longer be done on such considerations. Such political moves would not be approved by the voters or by the international bidders. In another state-Orissa, the State Electricity Board's (OSEB) assets were transferred (Transmission and distribution assets) with historical depreciated cost of about Rs.840 Crore (8400 million) to GRIDCO at the cost of Rs.1960 crore. In effect, the capital base

of the GRIDCO has appreciated by more than 100 percent according the Schedule of the Electricity Supply Act. This has further resulted into doubling of depreciation during the year 1999-2000 while the GRIDCO's returns were calculated on the basis of higher capital base. The valuation and modification of OSEB's liabilities included conversion of Rs.73 crore outstanding loan into capital, writing off Rs.400 crore towards bad debts another Rs.300 crore towards subsidy receivable on rural electrification. Further, Rs.400 crore and Rs. 150 crore worth partly convertible Bonds issued to the Orissa State government while undertaking the evaluation and modification of assets as well as liabilities. This was to keep debt at a modest level as specified by the financial institutions. In the process, other receivable worth Rs.39 crore were written off and stocks devalued by Rs.5 crore. Such kind of privatization was not considered good as the burden of all losses, loans and depreciation was carried out by the Orissa State government. In such privatization, no donor agency like the World Bank or the IMF provided loans or subsidy or donations. The case of OSEB has outlined the input model of restructuring the assets of the SEB either for sale or joint venture. In such kind of privatization, there is no way except that the state government should bear all financial burden. It was intended that the OSE institutions would not be in losses of money due to political decisions of providing free distribution of electricity to farmers or industries as it will be on full commercial basis. If farmers get electricity on low cost, the subsidy would be provided by the state government to the GRIDCO. The Disinvestment Commission headed by Mr. G. V. Ramakrishna in its report on infrastructure specially power sector had recommended to the Union government to make a time table of disinvestment in the power sector on the one hand and also to abolish subsidy in phases latest by 2005. As the disinvestment process is inconvenient to both the bureaucracy and also to the politicians because it diminishes the popularity of the government, the Commission's recommendations were in doldrums. Disinvestment was also a least preferred option for the government more particularly in the democratic and developing countries due to overriding compulsions and dilemmas. Due to several bottlenecks, the members and the Chairman of the Disinvestment Commission were disgusted with the situation and resigned. Whether disinvestment is an ethical or unethical economic strategy of development in a developing country like India, may be a topic of debate but it must be clear in the Indian setting that developmental strategies like globalization / privatization/disinvestment etc. have left no face to the government to claim for ethical governance.

REGULATION :-

Globalization has reduced the role of government as a market player as well as final decision maker if it wants to develop its undeveloped sectors more particularly in the developing countries like India. Private sector and foreign investors are generally not to trust the government and also its bureaucracy due to overriding reasons. To generate trust as well as competition in the market, it was considered to introduce independent regulatory system particularly in those sectors which are being opened 100% for the private sector and the investors. In 1997, the Union government constituted the Central Electricity Regulatory Commission (CERC) by presidential ordinance. The CERC is empowered with all the functions assigned to the Central

Electricity Authority (CEA) except the planning, consultancy and advisory role. CERC is made responsible for tariff fixation, techno-economic appraisals of power projects, grid operations etc. The CERC is to consist of one Chairman and four other members from the areas of engineering, economics, finance, accounting and administration. The members are appointed by an independent selection committee chaired by the Chairman of the CERC, Secretary of the Ministry of Power, and a representative of financial institution or the Director of an Indian Institute of Management, or Administrative Staff College of India(Hyderabad) or the Indian Institute of Science, Bangalore as a member. The Staff of the CERC is drawn from the CEA,SEBs and the State Electricity Departments in the states in order to avoid any extra burden on the CERC and a small recruitment is made at the middle management level on various technical positions. The CERC is independent from the treasury control(in other words government control) as its funding would be charged from the Consolidated Fund of India which is outside the purview of the Parliament and the Comptroller and Auditor General of India. The position of the Chairman and the members is guaranteed by the President of India as they are not removed by the government except the presidential order on the grounds of insolvency, moral turpitude, physical and mental inability after an enquiry by a sitting judge of the Supreme Court of India. The chairman and the members are not eligible for reappointment in the government or elsewhere either in any public sector undertaking, or private company at any time during a period of two years after they ceased to be members of the CERC. A Secretary is appointed in the CERC in consultation of the Union government. All decisions in the CERC are taken by simple majority and it is located in New Delhi.

The CERC will be under the Electricity Regulatory Act,1998. The Act is to suppress all relevant provisions of the Indian Electricity Act,1910 and the Indian Electricity (Supply) Act 1948. However, the CERC would not have jurisdiction or control over the atomic energy segment as it is separately governed by the Union government. The CERC would be responsible for the following matters:-

1. To regulate investment in generation, transmission and distribution both in PSUs or private sector companies and projects catering to more than one state ;
2. To issue licenses with regard to generation, transmission, distribution and supply of power to entities owned by PSUs or the private sector, and also to determine the levy of fees on licenses ;
3. To regulate the interstate transmission of electricity, issue licenses and determine the terms and conditions, quality of service, tariff and other charges payable by the consumer, state or entity;
4. To regulate the multi-state generating companies owned by PSUs and the private sector and to determine the power purchase, procurement process by units of central PSUs and licences and thereby to develop open market competition;
5. To set detailed guidelines for inviting competitive bids to bring about price competitiveness in the power sector ;
6. To regulate the national and grid operations including the load dispatch functions connected with the interstate transmission of electricity ;

7. To set safety standards for the power industries ;
8. To prepare an appropriate environment policy for the power sector in consultation of the Environment Regulatory Agency ;and
9. To make necessary rules and guidelines for national and international bidding for the State Electricity Regulatory Commissions(SERCs).

Basically, the CERC is a quasi-judicial body to adjudicate the disputes between the generating units, PSUs, consumers and licenses. The CERC is also empowered to refer the unsettled issues for arbitration. The CERC is hence confined to tariff related issues. The Ministry of Power (MoP) is responsible to decide major policy matters and decisions concerning to power sector. If there is any dispute between the CERC and the MoP, the ministry will have more powers than CERC. It has been established in matter of the Telecommunication Regulation Authority of India(TRAI) that the ministry will remain a major policy making body and the regulatory institutions would decide the matters within the broad policy framework and would not involve itself in the policy related options, choices or errors. Actually, there has been conflicts over the dominance of the generalists or specialists. The ministry is dominated by the Indian Administrative Services while the regulatory bodies are manned by the specialists which generate controversies over the policy matters. In the emerging economic scenario, the role of the specialists is increasing day by day in the policy matters and de-bureaucratization is being required for the sectorial development. Although government is making efforts to pave the way for specialists but policy area is still not touched at the large scale. On the whole, the regulatory system evolved in the power sector seemed satisfactory but the reality is different. So far as the role of the regulatory institutions in India has not emerged to the requirements of the market economy more particularly in the area of tariff fixing which is a very sensitive area from the point of view of vote bank for the political parties. And, no political party has given full autonomy in the matter of fixing tariff which is still being done by the ministry concerned which is clearly a matter of the jurisdiction of the CERC. The ethical norms of jurisdiction are clearly defined but ignored by the government for its own political interests or corruption. There is no such body to regulate the violation of ethical norms except the Supreme Court. It is very much clear that the Indian decision making system is over bureaucratized which result into corruption, politics and vested interests. The introduction of the CERC under the pressure of the donor agencies in the power sector has not been as successful as in the case of the developed world .The government is also under public pressures and political compulsions to decide sensitive matters which is capitalized by the Indian bureaucracy for its own supremacy and authority. The case study of the Rajasthan state is to further elaborate the ethical side of government business.

A Brief Case Study of the Rajasthan State :-

Rajasthan is the biggest state of the country but most backward in many sectors specially in the power sector(Electricity).Its present capacity of power generation is 1549 megawatt which is to fluctuate in many quarters of the years. The state is to borrow electricity from the Centre (1583mw), from joint sector generation plants(964mw) and 40mw from the captive power plants every year.

STATE'S PRESENT GENERATION

Kota TPS Stage I,II&III	850mw
Suratgarh TPS Stage-I	500mw
Ramgarh Gas TPP	35.5mw
Mahi Power House-I&II	140mw
Mini Hydel Schemes	40mw (approximated)

The state government has spent around INR 2000 crore in the last two years on the power sector reforms. However, the results of power sector reforms have not been very encouraging as the report of the Administrative Reforms Commission of the Rajasthan State (2001) itself shown dissatisfaction. The State government has allocated INR 5000 crore for the power sector and disinvestment in the power sector is also being done and money generated from the disinvestment or sale of power projects is being diverted to other power projects like wind energy, solar energy etc. The State government has unbundled the SEB into five companies and a regulatory body is also established in the state. The government has visualized the reform transition period is 4 to five years (1999-2004) as the transmission and distribution losses are very high and the institutional reforms both at the lower and middle level will take time. The five companies and the Electricity Regulatory Authority are chaired by the Indian Administrative Services. The collection efficiency is also to be increased. The real asset valuation of different power projects is being done. The government further claims that the power generation capacity would also be increased by establishing four 400Kilovolt grid sub stations. On the whole, INR 4000 crore would be spent in the next three years. The state government is committed to complete the reform package by 2005.

Looking at the above story, everything is seemed quite satisfactory and encouraging. But things are not as smooth as claimed. The whole reforms package is full of default and error-full. The strategy and rationale of the reform is not properly evolved to suit the Indian conditions. Most of the reforms are on the guidelines of the donor agencies. The reforms were carried out without increasing the capacity of the state economy. In most of the states, the privatization of the power sector has proved a failure and private companies are hesitant to join the power sector. Rajasthan state is also in the same water. Private sector involvement in power generation is only one percent (40mw out of 4000mw). Foreign investment in terms of technology, capital, manpower or institutional level is minus one percent. The reason is that power sector in India has been full of losses, frustration and mismanagement both at the governmental and the consumer level. There is no significant hope that foreign direct investment would increase in the power sector in any state. The example of Maharashtra and Orissa have put negative effect upon the FDI. Moreover, the capacity of the state to repay the loans to the donor agencies would be a big question mark in the coming future. The state governments including the Rajasthan state are in dilemma over the strict and tough conditions of repayment. In democracy, governments are not stable and the accountability is to shift from government to government and the state budget is to come in severe problems. The reforms with the financial help of the donor agencies may open several questions of strategy and rationale as the opposition parties are claiming bungling's and corruption in the utilization of funds. On the institutional side, the power sector companies are

the blue prints of SEB except their names. Hence, no significant achievement could be expected at the management side which already over-bureaucratic and mismanaged like overstaffing, untrained personnel, old technical methods and poor responsiveness. The new companies have not evolved business or commercial practices due to the pressure of government or the political pressures, consequently, the power sector reforms have become a futile exercise both for the government and the public. These companies could not emerge as government owned companies or government department or government corporation. In these companies, nothing existed like company except their names. Further, the problem of coordination would emerge very soon as these companies would come under conflicts with each other on the question of jurisdiction, profit and losses and personnel matters. Presently, the State government has taken responsibility of employees, and profit and losses but as and when the State government would leave the responsibility, the companies would be in great trouble. For the government, power sector is a means of earning vote bank to remain in power while the aims and nature of reforms are to require exclusion of power sector from the politics for which no political party is ready including the party in government.

Further, inability of the companies to provide power to industry and agriculture at the same time is generating deep dissatisfaction both among the industrial sector and the farmers. In the period of economic recession, industries are in the dire need of electricity on the one hand while the farmers are also in dire need of electricity to irrigate the crop. Since industrial sector can afford to install generators, the farmers are not able to install generators and getting losses in production of crop. The result is the violent movements, agitation and anti-government spirit prevail. The government is in dilemma of providing electricity. The experiences of the last two general elections in the state show that electricity would be a major point of winning or losing the political power in Rajasthan. The power sector reforms would be a crucial issue in the coming general elections. Basically, the power sector reforms were made in hurry and without any deep study and honesty and transparency is, in public eye, absent. The scandals, bungling's and heavy corruption in the purchasing of electronic meters, equipment and goods have generated deep dissatisfaction, agitation and violence in the public. Moreover, the cheating tactics of the companies like default meters, over billing, corruption at lower level further ignited the situation and the power sector reforms have become a burden on the public and the government. The inability of the companies as well as of government to provide a hassle free system of power supply is a question of governance, management and social concerns. Consumers in the power sector require a more reliable, efficient and good management which is absent till today. What is worrying the masses is that the government is becoming unethical in its approach and methods and providing covers and protection to the corrupt officials. Moreover, the public is also being cheated by these companies, and no action against the cheating methods was taken by the State government. Actually, the power sector reforms have been carried out without a thoughtful strategy. The imbalances and the gaps between the reforms and the capacity of the government are very wide and beyond the understanding of the governance system. The distribution companies in the power sector are not redesigned. These distribution companies are like the old wine in the new bottle. The Electricity Regulatory Authority in the Rajasthan State is poor in its effective role and act very slowly. No significant action or decision from the Authority was seen

in last couple of months. In such state of affairs , the power sector reforms would be able to yield better results, will remain a question of time and truth.

CONCLUSION

The basic problem of developing countries like India is the ignorance of the infrastructure since last several years due to overriding reasons . In a socialistic, centrally planned and democratic economy, the infrastructure was very lately reviewed particularly the power sector while it was the base of the industry and agriculture. India's electricity problem would remain for several years (at least until 2020) due to lack of capital, imbalances between industrial and agriculture , over population and the highly centralized and bureaucratic administrative system. In the new economic policy of 1991, the major emphasis was laid on the FDI in infrastructure development. In a simple way, FDI is the most comfortable and easy way but in practical terms it is precarious and is to depend upon the international relations and politics as well as the political and diplomatic dynamics of the country concerned. After the event of 11th September, 2001 and the 13th December,2001, the pace of FDI has become slow more particularly in the power sector .Further, the examples of the East Asian economies clearly demonstrated that the heavy reliance upon the FDI may result into the failure of the national economy. However, on the other side of the economy ,domestic private investments have not been very encouraging due to political instability, changing policies of the government, over bureaucratic interferences and lack of modern technology .Due to globalization and liberal policies of the government, massive industrialization and urbanization is taking place and the efforts to fill-up the gap between the demand and supply are now centered around investments, regulation and restructuring of the power sector (conversion of SEBs into companies)through new acts, laws and rules which are considered vital for the power sector development but politico-administrative dimensions of the power sector reforms like free power supply to farmers and scheduled castes and tribes, Interstate disputes on water and power supply, party politics with the consumers, and unethical ways and means to cheat the users have adversely affected the reform process and measures and a negative message has gone in the masses against the power sector reforms specially in the Rajasthan state. The over bureaucratization of the power sector reforms have also diluted the results of the governmental efforts.

Apparently, FDI and privatization of generation, transmission and distribution of electricity would develop the power sector latest by 2005 in order to narrow down the gap between the demand and supply .However, the strategy and rationale of the FDI and privatization was not properly conceived and implemented .The contracts and agreements with the international agencies for power sector development were not transparent and clear and were implemented under different pressures. For example in the Rajasthan state, the BJP government in 1997-98 has refused to sign the agreements with the World Bank and the Asian Development Bank(ADB)as the rate of interest and strict conditionality's were not suitable for the state economy. However, the succeeding Congress party government signed the agreements and contracts and implemented them in the state which was also not supported by the ARC of Rajasthan. The Chairman of the ARC has cautioned the government that these power sector

reforms may become a headache both for the government and the public as the experiences of Haryana, Orissa and Maharashtra states have not been sweet both politically and economically. Further, the peoples are against the privatization of electricity particularly the distribution area as the mass movements, agitation and violent actions in the rural areas against the electricity distribution are indicating the faults of the power sector reforms. The major aspect of dissatisfaction in regard to distribution of electricity is the ignorance of agriculture sector. Moreover, the heavy hike in the tariff has caused great dissatisfaction in rural areas as the paying capacity of the farmers is low in comparison to the industrial sector. Further the overbilling, corruption, misuse and political consideration have distorted the situation. The unethical ways and means of private sector with the consumers have questioned the privatization strategy of the government. The irresponsible acts of the government owned companies in the power sector have generated several suspicions about the private sector. It could be presumed that as and when these companies will be converted into private share companies, these would exploit more the consumers. In the restructuring process, it has not been noticed that no precautions were taken to save the consumers from the exploitation. Instead of this, these companies are evolving new ways of cheating and exploiting the public. Those methods which could be applicable in the developed world, are being applied in the developing country which may result into several social and economic repercussions.

The regulatory mechanism (CERC / SERCs) may be considered a good step in the power sector and could be hoped that it would work effectively in the coming time but not now. These regulatory bodies are being made for the retired or politically committed bureaucrats which would distort its image as well as its sanctity and also its very purposes. It is also unethical if such type of bureaucrats are appointed just to enjoy the benefits of the government services in the retired life and to serve the party or person in the government. Government should ensure the effectiveness of the SERC and should also limit itself in the day-to-day operations of the SERC. These regulatory institutions should have sufficient funds, manpower, technology and authority to regulate the public-private mix experiment in the power sector. It should be noted here that the regulatory system is being developed against the wishes of the all India services (mainly IAS) and there are greater chances that the regulation system may be forced to be a unsuccessful experiment in the Indian administration. These regulatory institutions must be made free from all pressures and politics as well as of retired peoples 'shelter'. The state governments should also make it sure that the law may not become a hurdle or obstacle in the power sector reforms. The new economic system is to depend upon the free play of market economy as well as of government responsibility and accountability. Privatization and liberalization in India requires new ways and means in view of several socio-economic factors. Western ways and means of privatization and liberalization would not work in India as these western methods generate new ways of corruption, inefficiency and poor performance.

On the whole, we can see a radical change in the power sector in spite of the fact that lot of hue and cry against it is emerging. The government is committed for the power sector reforms but the success of the government efforts would depend upon how much innovation and modern methods are to be adopted by the new institutions. The basic problem of the country is the

colonial bureaucracy which still has in its possession top policy-making positions and prevents the new institutions to develop. Governments are required to control the top bureaucracy otherwise all such reforms would be futile and the whole Indian economy would be in doldrums. Let us hope for the best.

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Note :- This is the first draft of the paper. No part of the paper is to be quoted or referred in any publication.