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Electricity is one of the most vital infrastructure inputs for economic development of a country. The demand of electricity in India is enormous and is growing steadily. The vast Indian electricity market, today offers one of the highest growth opportunities for private developers. Since independence, the Indian electricity sector has grown many fold in size and capacity. The generating capacity under utilities has increased from a meager 1362 MW in 1947 to 112058 MW as on 31.3.2004. Electricity generation, which was only 4.1 billion KWh in 1947 has risen to a level of over 558.134 billion KWh in 2003-2004.

In its quest for increasing availability of electricity, the country has adopted a blend of thermal, hydel and nuclear sources. Out of these, coal based thermal power plants and in some regions, hydro power plants have been the mainstay of electricity generation. Oil, natural gas and nuclear power accounts for a smaller proportion. Thermal plants at present account for 70 percent of the total power generation, hydro electricity plants contribute 26 per cent and the nuclear plants account for the rest. Of late, emphasis is also being laid on development of non-conventional energy sources i.e. solar, wind and biomass.

POWER SHORTAGE

The power sector has been characterized by shortage of supply vis-à-vis demand. The peak shortage has been hovering between 11 to 13% (approx.) and energy shortage between 6 to 8.5% (approx.).
Electricity is one of the most vital infrastructure inputs for economic development of a country. The demand of electricity in India is enormous and is growing steadily. The vast Indian electricity market, today offers one of the highest growth opportunities for private developers.

Since independence, the Indian electricity sector has grown many fold in size and capacity. The generating capacity under utilities has increased from a meager 1362 MW in 1947 to 112058 MW as on 31.3.2004. Electricity generation, which was only 4.1 billion KWh in 1947 has risen to a level of over 558.134 billion KWh in 2003-2004. In its quest for increasing availability of electricity, the country has adopted a blend of thermal, hydel and nuclear sources. Out of these, coal based thermal power plants and in some regions, hydro power plants have been the mainstay of electricity generation. Oil, natural gas and nuclear power accounts for a smaller proportion. Thermal plants at present account for 70 percent of the total power generation, hydro electricity plants contribute 26 per cent and the nuclear plants account for the rest. Of late, emphasis is also being laid on development of non-conventional energy sources i.e. solar, wind and biomass.

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POWER SECTOR SCENARIO

Reliable and affordable electricity is the backbone of a nation's economy and its availability has to be ensured on a sustainable basis. The present power scenario is as under:-

- The installed capacity which was 1713 MW in 1950's has grown up to 112058 MW as on 31.03.04 (chart-1).
- The gross electricity generation as on 31.12.1950 was 5106 GWH which was increased to 558134 GWH in March'04 (chart-2).
- The Transmission & Distribution network has registered a growth of 707752 Ckt.Kms as on 31.03.04 from 29271 Ckt. Kms. in 1950's (chart-3).
- The per capita consumption of electricity has increased to 506.69 KWh. as on 31.03.03 from 15.6 KWh. as on 31.12.50 (chart-4).
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- The per capita consumption of electricity has increased to 506.69 KWh as on 31.03.03 from 15.6 KWh as on 31.12.50 (chart-4).
Transmission network in India, during the past five decades, has been developed simultaneously with growth in installed capacity. The growth in transmission system is characterized by the physical growth in transmission network (Ckt. km and Transmission Capacity) as well introduction of higher transmission voltages and new technologies for bulk power transmission. For several decades the power systems in the country have been operated on regional basis. Introduction of 220 kV in 1960, 400 kV in 1977, HVDC back to back link in 1989, HVDC Bipole line in 1990 and 765 kV transmission line (initially charged at 400kV) in 2000, and increase in total length of high tension transmission lines at 132 kV and above in the country from 2708 ckt. kms in 1950 to more than 2,70,000 ckt. kms of transmission lines of HVDC (Back to Back and Bipole) 400 kV, 220 kV and 132 kV by 2003 are some of the indicators of the progress.

Table and bar chart showing the development of transmission system in the country is given below.

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A phenomenal growth is expected in domestic consumers and it is expected that by the end of 2006-07 the domestic consumer will grow to 12 crores from 7.5 crores in 1997-98. The agricultural consumer will grow from 11.5 crores to 14 crores. The metered supply to consumer will fetch substantial amount of revenue to distribution licensee/SEBs.

Transmission & Distribution losses in India are very high as compared to those in Developed Countries (6-11%).

The All India figures for the losses for the last three years were 32.86% (2000-01), 33.98% (2001-02) and 32.54% (2002-03). This is a matter of concern as well as potential for saving, which may reduce the demand supply gap. A reduction in T&D losses by 1% would result in a saving in capacity by about 800 MW.

Government of India has been funding the utilities under APDRDP scheme for improvement in Sub-transmission and distribution system. It is expected that implementation of this programme along with other measures will bring down the losses.
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CONSUMER GROWTH

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RENOVATION AND MODERNIZATION (R&M)

Of the installed capacity of 1,12,060 MW as on March 2004, 34,600 MW is covered under ongoing R & M programme. Of these 24,683 MW are thermal units and 9977 MW hydel units. The likely benefits in terms of extra peaking capacity and energy to be realized through R & M - Life extension (to be implemented during 10th plan) are estimated to be more than 5540 MW.
VISION FOR POWER DEVELOPMENT IN THE COUNTRY

The National Electricity Policy of the Government stipulates that "reliable and quality power at affordable price is to be made available to all by the year 2012, i.e. by the end of 11th Plan. In this regard, the projection of the demand of electricity is made by 16th Electricity Power Survey Committee. As per the forecast made by 16th Electric Power Survey, energy requirement at the end of 10th Plan, i.e. March'07 is 720 million units (MU). Accordingly, a target of addition of 41,110 MW of generation capacity, comprising of 14,373 MW hydro, 25,417 MW thermal and 1300 MW nuclear has been planned for the 10th Plan period (2002-07). However, based on the latest status of monitoring, it is expected that about 40,000 MW (comprising of 12,000 MW hydro, 25,500 MW thermal and 2500 MW nuclear) is likely to be added during the 10th Plan period.

In order to meet the target of making quality power available to all by the year 2012 (end of 11th Plan), a capacity addition of 67,439 MW comprising of 23,359 MW hydro, 36,163 MW thermal and 1953 MW nuclear has been planned for 11th Plan. However, the latest indications suggest that an addition of 61,000 MW comprising of 21,000 MW hydro, 35,000 MW thermal and 5000 MW nuclear could be feasible during 11th Plan period. Even with this level of capacity addition, the country could face a peaking shortage of about 12.7% and energy shortage of 5.6% by the end of 11th Plan.

FUTURE POWER SCENARIO

It may be seen that with the capacity addition of over 1,00,000 MW during 10th and 11th Plan, only the mission of providing power for all by 2012 is expected to be a reality. The strong power sector infrastructure thus will pave the way for overall economic growth and social development of the country.

Transmission Development during Tenth Plan (2002-07)

Keeping with the pace of growth during previous plans, an ambitious plan has been developed for the Tenth Plan (2002-07). Accordingly, it is envisaged that a total 14968 ckm of 220kV line, 34189 ckm of 400kV lines and 14,373 ckm of 800kV lines would be constructed during this period. Similarly, 13783 MVA transformation capacities would be added at 220kV level and 32595 MVA at 400kV level. Also, 2500 Ckm of HVDC lines alongwith 5000 MW of station capacity is also programmed for tenth plan.

Development of National Power Grid

A National Power Grid for India is also being visualized at this stage and is expected to materialise by 2007. This all India power grid is envisaged to be developed in a phased manner first by integrating a cluster of Regions and subsequently, progressive integration of all the Regions fully in a manner first by integrating a cluster of Regions and subsequently, progressive integration of all the Regions fully.

FOREIGN DIRECT INVESTMENT POLICY & INCENTIVES

FOREIGN DIRECT INVESTMENT POLICY

Foreign investments in power sector are under Automatic Route. Foreign investment in power sector can either be in the form of a joint venture with an Indian company or as a fully owned foreign company with 100% equity.

Automatic Route

Foreign direct investment up to 100% equity in the following areas of the power sector is allowed on automatic basis without any equity cap. No prior approval is required and only intimation to RBI Regional office should be given within 30 days of receiving inflows, in the following activities:

1. generation and transmission of electric energy produced in hydro electric power plants, in lignite/clean based thermal power plants, in oil based thermal power plants, and in gas based thermal power plants, and not for atomic reactor power plants.
2. distribution of electric energy to household, industrial, commercial and other users.

Application for automatic approval should be submitted to the RBI exchange Central Department, Shabheed Bhagat Singh Road, Mumbai-400 023.

ELECTRICITY ACT, 2003

The recently enacted Electricity Act, 2003 (June 2003) is a progressive legislation that provides for measures conducive for development of electricity industry, promoting competition, protecting interest of consumers and supply of electricity to all areas, rationalization of electricity tariff and ensuring transparent policies and promotion of efficiency etc.

The Act seeks to create liberal framework of development for the power sector by end of Government from regulation with the formation of Central Electricity Regulatory Commission and State Electricity Regulatory Commissions.

Major salient features of the Act are as follows:-

- Generation being delicensed and captive generation being freely permitted. Hydro projects would, however, need clearance from the CEA.
- Transmission utility at the central as well as state level to be a Govt. company with responsibility for planned and coordinated development of transmission network.
- Provision for private licensees in transmission and entry in distribution through an independent network.
- Provisions for safeguarding consumer interests.
- Provisions relating to theft of electricity made more stringent.
PERSPECTIVE PLAN

VISION FOR POWER DEVELOPMENT IN THE COUNTRY

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Keeping with the pace of growth during previous plans, an ambitious plan has been developed for the Tenth Plan (2002-07) also. Accordingly, it is envisaged that a total 14968 ckm of 220kV line, 34189 ckm of 400kV lines and 25916 ckm of 330kV lines would be constructed during this period. Similarly, 13783 MVA transformation capacities would be added at 220kV level and 32955 MVA at 400kV level. Also, 2500 Ckm of HVDC lines alongwith 5000 MW station capacity is also programmed for tenth plan.

Development of National Power Grid

A National Power Grid for India is also being visualized at this stage and is expected to materialize by 2007. This all India power grid is envisaged to be developed in a phased manner first by integrating a cluster of Regions and subsequently, progressive integration of all the Regions fully. Open access in distribution to be introduced in phases with surcharge for current level of cross subsidy to be gradually phased out along with cross subsidies and obligation to supply. 

The Act seeks to create liberal framework of development for the power sector by removing Government from regulation with the formation of Central Electricity Regulatory Commission and State Electricity Regulatory Commissions.

Major salient features of the Act are as follows:-

- Provisions for private licensees in transmission and entry in distribution through an independent network.
- Open access in transmission from the outset.
- Open access in distribution to be introduced in phases with surcharge for current level of cross subsidy to be gradually phased out along with cross subsidies and obligation to supply. 
- SERCs to frame regulations within one year regarding phasing of open access.
- Distribution licensees would be free to undertake generation and generating companies would be free to take up distribution business.
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- The SERC is a mandatory requirement.
- Provisions for payment of subsidy through budget.
- Provisions for safeguarding consumer interests. 
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- Ombudsmen scheme for consumers grievance redressal.

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FOREIGN DIRECT INVESTMENT POLICY & INCENTIVES

FOREIGN DIRECT INVESTMENT POLICY

Foreign investment in power sector can either be in the form of a joint venture with an Indian company or as a fully owned foreign company with 100% equity.

Applications for automatic approval should be submitted to the RBI exchange Central Department, Shakti Bhagat Singh Road, Mumbai-400 023.

FOREIGN DIRECT INVESTMENT

POLICY & INCENTIVES

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INCENTIVES/BENEFITS

Income Tax Benefits
100% (tax holiday) tax deductions for any 10 consecutive assessment years out of 15 years beginning from the year in which undertaking of generation, transmission and distribution of power starts functioning.

Incentives on Return on Investment (equity)
14% return on equity (ROE) in generation and transmission schemes.
Adequate incentive on ROE for increase in generation above normative PLF.

Other incentives.
Advance against depreciation (up to 1/10th of loan amount) to facilitate loan repayment in generation, transmission and distribution schemes.
Foreign exchange variation a pass through item in tariff.

Related incentives
The related incentives and investment approved in this regard are as under:
- Tariff for sale of electricity from a thermal/hydro power generation stations shall comprise of two parts viz. recovery of annual capacity (fixed) charges and energy (variable) charges of thermal plants/recovery of annual capacity charges and primary energy charges of hydro plants.
- The GOI notification on tariff stipulated that the return on equity computed on paid up and subscribed capital relatable to the generating unit shall be 16% of such capital. However, CERC regulations on tariff provide a 14% return on equity.
- In addition to allowable deprecations, advance against depreciation limited to 1/10th loan repayment is allowed to service the debt.
- CERC guidelines provide for payment of incentive at prescribed rates in case the actual generation achieved is more than the prescribed target plant load factor for thermal generating stations/target capacity index for hydro power stations.

INVESTMENT OPPORTUNITIES

INVESTMENT OPPORTUNITIES IN THERMAL POWER DEVELOPMENT
- 70% of the country’s total installed capacity and more than 80% of the total electricity generation is contributed by thermal power.
- Coal continues to be the main source for thermal generation.
- The major thrust in thermal generation could be fructified through significant jump in unit size and steam parameters resulting in higher efficiencies and better economics. The largest unit size in the country at present is 500 MW and 600 MW super critical units are in the pipeline. The projected future unit size is 800-1000 MW with still higher super critical parameters which will have low cost of generation, higher efficiency and are environment friendly.
- With the identification of new gas sources and availability in international market, there is renewed thrust in gas based combined cycle plants. Such CCIGT plants are increasingly becoming techno-economical viable with advancements in efficient gas turbine technologies and their environmental benefits.
- The post Electricity Act 2003 scenario provides for the opportunity for any generating company to establish, operate and maintain a thermal generating station without the need of a license, thus providing a free hand in setting up of a thermal generating plant.
- Strong supportive factors conducive to investment opportunity such a vibrant strong and stable economy, low cost indigenous fuel, availability of skilled manpower, indigenous power plant manufacturing capability, presence of independent power producers and power sector reforms initiatives as confidence building measures for prospective investors.
- Thrust to R&M / life extension activities with large investment potential for improving the performance of old thermal power stations. The 10th Plan (2002-07) is targeted towards 57 units (14270 MW) for R&M works and 106 units (10413 MW) with anticipated total cost of more than Rs.10000 crores.

INVESTMENT OPPORTUNITIES IN HYDRO POWER DEVELOPMENT
- The 10th Plan program envisages capacity addition of 14393 MW from hydel projects in the total capacity addition of 41110.
- The Govt. has initiated advance action for taking up new hydro projects. A 50,000 hydro initiative has been launched and pre feasibility reports for 162 projects prepared. In the second phase of this programme, DPRs for about 30,000 MW are under preparation for eventual implementation through both public & private sector agencies.
- Govt. would take up for execution all the CEA cleared projects and take steps to up date and obtain clearance for pending DPRs.
- Survey and investigations for new green field sites.
- Restart and activate the pending hydro projects for want of funds/inter state issues.
- Promoting small and mini hydel projects by simple design of turbines, generators and the civil works and in a shorter period.
INCENTIVES/BENEFITS

- Income Tax Benefits
  100% (tax holiday) tax deductions for any 10 consecutive assessment years out of 15 years beginning from the year in which undertaking of generation, transmission and distribution of power starts functioning.

- Incentives on Return on Investment (equity)
  14% return on equity (ROE) in generation and transmission schemes.

- Adequate incentive on ROE for increase in generation above normative PLF.

- Other incentives.
  Advance against depreciation (up to 1/10th of loan amount) to facilitate loan repayment in generation, transmission and distribution schemes.

- Foreign exchange variation a pass through item in tariff.

- Related incentives
  The related incentives and investment approved in this regard are as under:
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- CERC guidelines provide for payment of incentive at prescribed rates in case the actual generation achieved is more than the prescribed target plant load factor for thermal generating stations/target capacity index for hydro power stations.
Greater private investment through IPPs and joint ventures would be encouraged and conducive atmosphere created for attracting private sector funds.

R&D in Power Sector

Government of India has set up a Standing Committee on Research in the Power Sector under the Chairmanship of Chairman, CEA and DG, CPRI as the Member Secretary. Members are drawn from various concerned organizations in the Power Sector, CSIR, CFI, TIFAC, NPC & others. The Committee has already identified the research projects to be taken up on short, medium & long term basis. Action is being taken to initiate research in each of these areas on prioritized basis.

INVESTMENT OPPORTUNITIES IN TRANSMISSION SCHEMES

Financial Requirements

The high capacity inter-regional transmission links, forming the back bone of the National Power Grid would require an investment of the order of Rs. 40,000 crores of which about 50% would be needed during the Tenth Plan period and the balance during the Eleventh Plan period. Simultaneously, strengthening of the regional system for meeting the increased transmission needs on account of increased inter-regional transactions as well as for evacuation, transmission and dispersal of power from generation resources within the regions would have to be continued and the transmission and distribution system in the State sector would also need to be strengthened. The requirement of funds for transmission and distribution system in the country corresponding to the programme of 1,00,000 MW of generation addition in the next ten years has been estimated to be of the order of Rs. 3,00,000 Crores as per the following break-up:

Table: 4

<table>
<thead>
<tr>
<th>National System including Inter-regional and Regional</th>
<th>X Plan</th>
<th>XI Plan</th>
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<tbody>
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<td>Transmission System</td>
<td>40,000</td>
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<td>90,000</td>
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<td>20,000</td>
<td>20,000</td>
<td>40,000</td>
</tr>
<tr>
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<td>1,70,000</td>
</tr>
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<td>1,40,000</td>
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Opportunities for Private Sector Participation in transmission

- The Government made enabling provision for private sector participation in transmission sector way back in 1998 by amending the then existing Electricity Act of 1948. Generation of electricity was opened for private sector in 1991.
- In the newly enacted Electricity Act 2003, any private player can seek license from the Appropriate Commission to carry out business in transmission of electricity.

- Government of India envisages two routes for private sector participation in transmission ventures. IPTC route – provides 100% fund mobilization by private entrepreneurs as Independent Private Transmission Company. And JVC route–provides formulation of a Joint Venture Company (JVC) with CTU/STU by selecting a private investor as joint venture partner.
- To start with, Central Electricity Regulatory Commission granted transmission license on 13-11-2003 to M/s Powerlinks Transmission Limited, a joint venture company of the Power Grid Corporation of India Limited and Tata Power. This Joint Venture (JV) project is first of its kind in India and is being promoted by Government of India as a pilot project under its policy of encouraging private sector participation in transmission of Electricity.
- As a first project to be undertaken under the IPTC route, the Government has already identified the Bina-Nagda-Delgham 400kV Double Circuit transmission line of about 700 KM route length to be taken up for private sector participation.
- Opportunity of massive investment in Transmission exists and it is envisaged that up to Rs 9,000 crores can be invested by the private sector by the end of Xth Five Year Plan.

INVESTMENT OPPORTUNITIES IN DISTRIBUTION SCHEMES

Distribution Reforms and Performance Improvement

- Accelerated Power Development Reform Programme

The Distribution Sector could not grow with the required pace due to paucity of funds and therefore, Distribution Reforms were initiated by the Government. MoUs and MoAs were signed with the States for linking the support of Government of India through APDRP which is ambitious plan for upgradation and strengthening of sub-transmission and distribution system with the objective of reducing the AT & C losses to around 15%.

- Six Level Intervention Strategy
- Anti-Theft Measures
- Consumer Care Centre:
  - To address consumer grievances various States have taken initiatives by setting up consumer care centres and these centers are effectively operating at Hyderabad, Vadodara, Bangalore, Faridabad, Delhi and almost all States
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**Investment Opportunities in Transmission Schemes**

**Financial Requirements**

The high capacity inter-regional transmission links, forming the back bone of the National Power Grid would require an investment of the order of Rs. 40,000 crores of which about 50% would be needed during the Tenth Plan period and the balance during the Eleventh Plan period. Simultaneously, strengthening of the regional system for meeting the increased transmission needs on account of increased inter-regional transactions as well as for evacuation, transmission and dispersal of power from generation resources within the regions would have to be continued and the transmission and distribution system in the State sector would also need to be strengthened. The requirement of funds for transmission and distribution system in the country corresponding to the programme of 1,00,000 MW of generation addition in the next ten years has been estimated to be of the order of Rs. 3,00,000 Crores as per the following break-up:

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**Investment Opportunities in Distribution Schemes**

**Distribution Reforms and Performance Improvement**

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The Distribution Sector could not grow with the required pace due to paucity of funds and therefore, Distribution Reforms were initiated by the Government. MoUs and MoAs were signed with the States for linking the support of Government of India through APDRP which is ambitious plan for upgrading and strengthening of sub-transmission and distribution system with the objective of reducing the AT&C losses to around 15%.

- Six Level Intervention Strategy:

  In order to achieve commercial viability Ministry of Power has formulated six level intervention strategy that encompasses initiatives at National level, State level, SEB Utility level, Distribution Circle level, Failer level and the consumer level.

- Anti-Theft Measures:

  Several States viz. Andhra Pradesh, Karnataka, Madhya Pradesh, Uttar Pradesh, West Bengal, Maharashtra, Kerala and Gujarat have taken number of initiative to curb the theft of power which have shown improvement in collection of revenue by the SEBs/Utilities.

  The Electricity Act, 2003 provides a legal framework for making theft of electricity a cognizable offence. Under Section 135 of the Electricity Act, 2003, whoever dishonestly taps lines or cables or service wires, tampers, damages or destroys meters etc. shall be punishable with imprisonment for a term which may extend to three years or with fine or with both.

- 100% Metering Programme:

  A programme of 100% metering has been taken up by States subsequent to Power Ministers/Chief Ministers conference held on 26.2.2000. As on 30th September, 2004, 95% and 87% metering have been achieved in respect of 11 kV feeders and consumer feeders respectively.

- Consumer Care Centre:

  To address consumer grievances various States have taken initiatives by setting up consumer care centres and these centers are effectively operating at Hyderabad, Vadodara, Bangalore, Faridabad, Delhi and almost all States
are taking steps for implementing the consumer care centres for large towns of the States.

**INFORMATION TECHNOLOGY (IT) INITIATIVES:**

(i) Supervisory Control and Data Acquisition (SCADA) System:
To improve reliability and quality of power, Supervisory Control and Data Acquisition (SCADA) System has been introduced in Accelerated Power Development Reforms (APDRP) schemes.

(ii) High Voltage Distribution System (HVDS):
HVDS has been introduced for arresting power pilferage and reduction of losses by Andhra Pradesh, Delhi, West Bengal, Noida Power Company Ltd., etc.

(iii) Electronic/Static Meters:
Almost all States are installing electronic/static meters on feeders and at consumer premises to introduce energy accounting and auditing. Andhra Pradesh, Uttar Pradesh, Orissa, etc., have successfully introduced Meter reading Instrument (MRI) for their towns, as also Delhi having facilities to do so.

**FUTURE INVESTMENT REQUIREMENT:**

Even after investment made by the Union Government through APDRP in ST&D system, the distribution sector needs further investment considering the growth rates of various segments of the distribution system. The projections by the end of 2006-07 are as follows:

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**AN INVESTMENT OF Rs. 86357 crores was assessed by the Working Group on Power at the beginning of the Tenth Plan. However, the same has gone to Rs. 1,00,000/- crores as on today for the entire 10 Plan period (2002-07).**

**Research And Development (R&D) And New Technologies:**

According to the National Perspective Plan on R&D in Indian Power Sector up to 2015, distribution sector was identified as the key area for taking up the Research and Development (R&D) in this sector. The identified areas are:

- High voltage distribution system (HVDS)
- Demand side management
- Custom power devices
- Compact transformation devices
- Distribution automation
- Metering

**Quality of Power Supply and Customer Satisfaction:**

With the enactment of the Electricity Act, 2003, the emphasis has been given on providing quality and interruption free supply to customers. Keeping this objective in view, the Central Electricity Authority (CEA) has started monitoring of reliability index, average tripping per month in respect of 11 kV feeders in respect of towns having population of more than 8 lakhs. This will facilitate in benchmarking various indices for the annual frequency and duration of tripping. Various State Electricity Regulatory Commissions (SERCs) are also in the process of making regulations for standard of performance in compliance to various provisions of the Electricity Act, 2003.

**Regulation on Installation and Operation of Meters:**

In compliance to provision of Section 55 of the Electricity Act, 2003, CEA is making regulation on installation and operation of meters. This will facilitate in uniformity of approach for location of meters, selecting type of meters and their specification, new investment opportunities.

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### Major Clearances Required for Power Projects

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<tbody>
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<td>CEA</td>
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<tr>
<td></td>
<td>2. CWC</td>
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<tr>
<td>ix) Civil Aviation Clearance for Chimney Height</td>
<td>NAA</td>
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<tr>
<td>x) Registration of Company</td>
<td>ROC</td>
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<tr>
<td>xi) Rehabilitation &amp; Resettlement of displaced families by land acquisition</td>
<td>1. M/o E&amp;F</td>
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<tr>
<td></td>
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<td>xii) Hydro projects (mini-micro)</td>
<td>M/o Water Resources</td>
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<td>xiii) Equipment procurement (imported)</td>
<td>DGFT</td>
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<td>xv) Fuel linkage</td>
<td>Dis Coal &amp; P&amp;NG</td>
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</tr>
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**USEFUL ADDRESSES**

**JOINT SECRETARY**
- Investment Promotion Cell, OM, Coordination and Press & Publicity, Ministry of Power
  - Tel: 91-11-2371 0199
  - Website: [http://www.powermin.nic.in](http://www.powermin.nic.in)

**JOINT SECRETARY**
- Distribution, Thermal, ARDRP, IT & REST mission
  - Ministry of Power
  - Telephone: 91-11-2371-4842
  - Website: [http://www.powermin.nic.in](http://www.powermin.nic.in)

**JOINT SECRETARY, SIA**
- Secretariat for Industrial Assistance (SIA), Department of Industrial Policy & Promotion
  - Ministry of Commerce & Industry
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  - Fax: 011-2301 1034
  - E-mail: dipp_sia@abnic.in

**DEPUTY SECRETARY**
- (Investment Promotion & Infrastructure Development Cell)
  - Ministry of Commerce & Industry
  - Tel: 011-2301 4218
  - E-mail: chanchal.kumar@nic.in

**UDYOG BHAWAN, NEW DELHI**
- Visit SIA website: [http://www.dipp.nic.in](http://www.dipp.nic.in)
- For updated and other related information
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<td>ix) Civil Aviation Clearance for Chimney Height</td>
<td>2. M/o E&amp;F</td>
</tr>
<tr>
<td>x) Registration of Company</td>
<td>ROC</td>
</tr>
<tr>
<td>xi) Rehabilitation &amp; Resettlement of displaced families by land acquisition</td>
<td>1. M/o E&amp;F</td>
</tr>
<tr>
<td>xii) Hydro projects (mini-micro)</td>
<td>2. State Govt.</td>
</tr>
<tr>
<td>xiii) Equipment procurement (imported)</td>
<td>DGFT</td>
</tr>
<tr>
<td>Non Statutory Clearances</td>
<td>Authority</td>
</tr>
<tr>
<td>iv) Land Availability</td>
<td>State Govt.</td>
</tr>
<tr>
<td>v) Fuel linkage</td>
<td>D/o Coal &amp; P&amp;NG</td>
</tr>
<tr>
<td>xvi) Financing</td>
<td>CEA/Dept. of Power/Dept. of E.A./Fin. Institutions</td>
</tr>
</tbody>
</table>

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