

Developments in Power Sector in Andhra Pradesh

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Introduction

Andhra Pradesh State Electricity Board (APSEB), precursor of the present day unbundled entities – AP Power Generation Corporation (APGENCO), AP Transmission Corporation (APTRANSCO) and four distribution companies (DISCOMs), was formed in the year 1959. Before it there were small power generation and distribution agencies meeting the needs of the urban population. APSEB had a monopoly in the power sector under the overall guidance of the State government. It was responsible for all the three functions of the power sector, namely, generation, transmission and distribution of power. Later nine rural electricity cooperatives were formed to serve the backward pockets in all the three regions of the state. Besides generating power from its own power plants APSEB procures power from central sector generating stations, other states, joint venture power plants and more recently from the private sector. Apart from its own generation capacity of 5612 MW, APSEB was drawing 885 MW capacity from the Central sector generating stations and around 940 MW of IPP & other private sector plants.

Power Position in AP (1985-99)

<i>Item</i>	<i>1959</i>	<i>1999</i>
Generation Capacity	200 MW	7330 MW
Peak Demand	146 MW	6480 MW
Service Connections	2.7 lakhs	1.1 crore
Agriculture Connections	18,000	18.85 lakhs
Power supplied	686 MU	40,574 MU
Annual Revenue	Rs.6.6 crore	Rs. 4932 crore

Source: Power Development in AP – 1998-99.

Since its formation and up to its unbundling in to corporatised entities in the year 1999 APSEB contributed greatly to the economic development of the state. During this period total generation capacity increased by more than 35 times, number of service connections multiplied by forty times, and total power supplied increased by more than 50 times. Even more important is its contribution to agriculture. While total number of pumpsets energised during this period increased by 100 times, well irrigation contributed to nearly 40% of the irrigated land in the state. Even more noteworthy is that much of this expansion was in the dry land areas of the state. This helped to fortify food security in the state, both in terms of increased food production, enhanced employment availability and reduced uncertainty in agriculture production.

On many technical aspects, APSEB enjoyed a good reputation amongst the other utilities in India – some of the features continue even now. For example, the Plant Load Factor (PLF) of State owned generating stations in AP was 83.2% in 2000, much higher than the national average of 67% or the NTPC figure of 80.4%. Vijayawada Thermal Power

Station (VTPS), one of the thermal stations, received the productivity award for the 17th time in 2000 (PLF of 86.9%) and Rayalaseema Thermal Power Plant (RTPP) received the latest incentive award. Other aspects of good performance include fast erection of power stations, and low employee/consumer ratio. Though APSEB's performance on generation side was far better compared to other SEBs, performance on distribution and financial aspects proved to be very poor.

Despite the significant growth witnessed in power generation in Andhra Pradesh, the gap between demand and supply was increasing due to substantial increase in agricultural and domestic consumption in the state. Over the past few years the growth in installed capacity (which has increased from 5626 MW in 1992 to 7355 MW in 1997) has not kept pace with the increasing demand. In Andhra Pradesh, agriculture is the primary occupation of about 70% of the population, with only 36% of the land is covered through surface irrigation. Political processes enabled the expansion of electricity service for irrigation, which has made the farmers more dependent on the technologies. APSEB thus had a vital role in creating such dependency. Currently, an estimated 75-lakh acres during Kharif and 35 lakh acres during Rabi season are under pump irrigation.

However, despite the significant physical growth, APSEB was finding it increasingly difficult to meet the demand of the State for adequate and reliable supply of electricity. Losses incurred by APSEB are shown as one of the main reasons for restructuring the power sector in Andhra Pradesh. Reasons for such losses of such magnitude are still debated. These losses were, however, reported even when the revenues of the Board were increasing. APSEB has been paying more for loans and interest payments. Fuel purchase, payments towards electricity purchased from other electricity boards and interest payments are important components of the costs incurred by the APSEB. One third of the Board's income was going to meet interest payments - increasing burden of interest payments.

High transmission & distribution losses, increasing inefficiency in metering & collection, very low tariff to agricultural consumers and high cost of power from private generators are some of the factors that have contributed to the deterioration of financial health. One of the major impacts of this worsening financial situation was APSEB's inability to raise finances for the required investments in generation and T&D. Increasing financial problems of APSEB was as one of the reasons beckoning to restructuring the power sector in the state on the lines prescribed by the World Bank as it came forward to inject funds in to the sector on its terms and conditions.

Evolution of Reform Process in AP

Present power sector reforms are being taken up in the background of the liberalisation process that started in 1991 at the national level (when Congress party was in power) as a precondition to the IMF/WB bail out of India from the balance of payments (BOP) problem.

According to the government, financial problems of APSEB/APTRANSCO surfaced as early as 1990-91 when subsidy from State Government was required. Between 1990-91 and 94-95, the Board could achieve the 3% rate of return, as required under the Electricity (Supply) Act 1948, through a variety of adjustments. It was only from 95-96 onwards that the government has actually provided relief to APSEB by writing off loans

etc. It can be seen that the annual deficits of APTRANSCO have been rising during the last few years. The main reasons for this are explained below:

1. Changing Hydro -Thermal Energy Mix over time. Hydel power is cheaper than thermal power. Until recently installed capacity of hydel power is more than thermal power. In 1960-61 while hydel power accounted for 58.2% thermal power accounted for 41.8%. In 1990-91 installed capacity of hydel power was 50.1% and that of thermal power is 48%. In 1997-98 hydel power capacity stood at 36.5% and thermal power capacity stood at 42.9%. Remaining power capacity is in gas projects. As the proportion of cheaper hydel power declines and the proportion of costly thermal power increases average unit cost of power increases.
2. Change in Load Mix: With steadily increasing demand from the agricultural sector disparity between agricultural and industrial tariff was steeply increasing over the years and was causing pressure on the industrial sector, leading to stagnation in industrial consumption as industry moved towards cheaper captive generation.
3. No reliable data for energy audit and estimation of losses: The major portion of the agricultural consumption is not metered. The technical losses are on account of power consumed by the system in Transmission and Distribution of electricity. The non-technical losses are due to theft of power. Theft of energy has become rampant and assumed alarming proportions threatening the very viability of Power Sector. In order to initiate effective steps to reduce the losses, it is important that realistic levels of losses are determined.
4. Unauthorized connections: A large number of consumers resort to unauthorised withdrawal of power.

In the background of the deteriorating situation on the power front, the then state government of Andhra Pradesh contemplated to restructure the power sector. As a first step it constituted a high level committee under the chairmanship of Hiten Bhaya, a former chairman of Central Electricity Authority, to suggest reforms to be introduced in the power sector. This committee was constituted in January 1995 and submitted its report in June 1995. The important proposals made by the Hiten Bhaya committee include:

- Fixing of tariff structure to cover production costs,
- Separate generation, transmission and distribution activities and keep them in the hands of different companies,
- Keep these companies as subsidiaries of APSEB,
- Run them on commercial lines,
- Privatised power distribution companies gradually,
- Retain the Board only as a holding company in charge of long-term sector planning, supervision and co-ordination of the subsidiaries,
- Monitoring of reform implementation and provision of policy advice to be with the government,

- Setting up a regulatory commission to fix tariff structure, keeping licensing powers with the state government.

However, World Bank wanted Government of Andhra Pradesh (GoAP) to go beyond the Hiten Bhaya committee recommendations as in its opinion they are not in the right direction, not comprehensive and need to be further developed. World Bank wanted implementation of all encompassing reforms (World Bank. 1997 p.35). Accordingly, the state government of AP came up with a policy statement in 1997 for unbundling of the sector, privatisation of these entities and rationalisation of tariff under regulatory supervision.

World Bank released a report, "India: Power Supply to Agriculture" in October 2001. This report (dated June 2001) looks into the aspects of power supply to agriculture in two reforming states, namely Haryana and Andhra Pradesh. It criticises the poor quality of power supply, which adds to the indirect costs of the farmers and says the subsidies have missed their targets. Report suggests power reforms to solve problems: "Improving the quality of electricity services to agriculture, and therefore, improving farmers' income and agriculture growth, requires the in-depth power sector reforms that few Indian states have embarked upon. Farmers, notably the small and marginal farmers, will substantially benefit from these reforms."

On the basis of the state government's changed policy the World Bank came forward to finance power sector restructuring programme. The AP Power Sector Restructuring Programme (APPSRP) is being implemented parallel to the structural and fiscal reform programme: AP Economic Restructuring Project (APERP). Both the Bank and the GoAP consider the reform in the power sector as the single most important aspect of structural and fiscal reform in the state. This reform programme is to be implemented over a 10-year period, starting from February 1999. The Adaptable Program Loan (APL) scheme was planned in 5 stages, APL-1 to APL-5. The total loan amount is US\$ 4460 million with World Bank contributing 22% of the amount. Interestingly, World Bank's contribution is 36% in APL-1 and goes down to 13% in APL-5. The other international lending agencies include DFID and OECF. The Indian agencies include Government of Andhra Pradesh, Power Finance Corporation and Rural Electrification Corporation. This loan has several conditionalities as laid down by the World Bank. At each stage, some conditions have to be satisfied so that the utility becomes eligible for the next stage loan. These include privatisation of distribution & generation, average annual tariff hikes of 15-20%, implementing cost based tariff and reducing government subsidy to zero.

Salient features of the reform model

The ultimate objective of the reforms is for the government to withdraw from power sector as an operator and regulator of utilities and to have commercially operated, largely privately owned utilities functioning in a competitive and appropriately regulated power market. Under the new dispensation, unlike the pre-reform days, power generation, transmission and distribution will be separated. In each segment there will be multiple operators. This is meant to bring competition in to the sector.

Another important feature of the reform model is the regulatory mechanism. Establishment of a regulatory framework is meant to insulate the power sector from

external influences, to reduce the interference of the State government, and minimise the politicisation of key sector decisions (for example on tariffs). The new Reforms Act enjoins the Regulatory Commission “to promote competitiveness and progressively involve the participation of private sector”.

Under the new dispensation electricity is treated as a commodity. Tariff policy declares the need for power tariff that equals cost to serve. The new model looks down upon the subsidies as the main culprit in distorting the rational and efficient functioning of the sector. It expects the agriculture sector to pay for the electricity services at full cost of supply. As an initial step it intends to increase the tariff rate to agriculture to at least 50 paise/kWh. And these tariffs will continue to be adjusted to cover costs and eliminate cross subsidies and reduce subsidies.

According to this reform programme, no sector shall pay less than fifty per cent of cost of supply of electricity within three years of setting up of the Electricity Regulatory Commission, and it is the duty of this Commission to see that tariff is fixed in this manner. APTRANSCO shall adjust tariffs and take other measures so as to produce revenues from all sources sufficient to cover all expenses that include a return on equity. If the State government decides to deviate from this tariff, the financial implications of such deviation were to be explicitly provided by the State Government in the State budget.

Salient features of the regulatory mechanism

The Andhra Pradesh Electricity Reform Act which was enacted in 1998, along with unbundling of the APSEB, provided for the constitution of an Electricity Regulatory Commission, restructuring of a Electricity Industry, rationalization of the generation, transmission, distribution and supply of electricity, avenues for participation of private sector in the Electricity Industry, and generally, for taking measures conducive to the development and management of the Electricity Industry in an efficient, economic and competitive manner.

Enactment of the Andhra Pradesh Electricity Reforms Act of 1998 is an important event and instrument in the reforms in AP. This can be surmised from the speed at which this Act to restructure APSEB was passed in the AP Legislative Assembly, stunning many an observer. Government introduced the Bill on April 27, 1998, and the same sailed through all the motions in one day and it was passed on April 28, 1998. In order to facilitate smooth passage of the bill the entire opposition was suspended from the Assembly. Police were called to quell the protests by the Boards’ employees. In fact, this is the only time when the State Legislature came near enough to discuss the power reforms. The contents of the Bill also highlight the influence of the World Bank on AP government’s policy making. According to the World Bank advice licensing powers are to be vested with the Regulatory Commission and the sector was to be completely unbundled. This passage of the bill along with other measures taken by the AP government impressed the World Bank so much that sanctions in the wake of nuclear explosions conducted by India in May 1998 at Pokharan have not come in the way of sanctioning new loan worth Rs. 2200 crores to the AP government under Andhra Pradesh Economic Restructuring Project and \$1 billion (Rs.4400 crore) loan for the Andhra Pradesh Power Sector Restructuring Programme.

The AP Electricity Regulatory Commission was formed in March 1999. It has one Chairman and two members selected by the State government from the persons selected by the Selection Committee. The APERC is a quasi-judicial body, with the powers of a Civil Court. This Commission issues licenses to the companies involved in transmission and distribution of power, stipulates the standards of performance for these companies, addresses the disputes between different stakeholders in the sector including consumers, and more importantly decides the bulk and retail tariff for power supply. It is the responsibility of the APERC to protect the interests of different stakeholders. The Act stipulates that it has to consult the stakeholders who are going to be affected by its decision. It is also its responsibility to see that the sector works in transparent, economic and efficient manner.

Apart from 'distancing' political leadership from the decision-making on power sector, power tariff is seen as an area of decision-making wherein 'rationality' needs to be brought in on urgent basis. In its 3-year work, particularly with the tariff formulation, APERC is still grappling to understand the entire process, though it has been deciding on tariff orders. Its decisions on tariffs, wheeling charges and third party sales have come under attack (Sankar 2002, p.4148) Due to several structural deficiencies, APERC just parrots the government's analysis, drawing criticism to itself about its autonomy. There appears to be no effort on its part to address these issues independently. Response of the Commission was to claim that as stipulated by the new Electricity Reforms Act, it is duty bound to promote privatisation and competitiveness. The Regulatory Commission sees its role as creating favourable conditions for private sector investments and assisting the state government in implementing the reform agenda. (APERC, February 2002, p.3).

Implementation of Reforms

Enacting the Reform Act was the first step in the process of reforms in AP. Subsequently, APSEB was unbundled into APGENCO and APTRANSCO in Feb 1999. In April 2000, APTRANSCO was further unbundled to APTRANSCO, managing the transmission system, and four Distribution Companies (DISCOMs) managing distribution in four zones, Central, Eastern, Northern and Southern, of the State. In March 2001, State government has signed a MoU with the Ministry of Power, Government of India on reform and restructuring which has the road map for reform, plans for tariff rationalisation, metering and maintaining grid discipline.

As a step towards privatisation, these DISCOMs have been issued independent licences for distribution in April 2001. As per the reform project timetable, 30% of the distribution system is expected to have private sector participation by 2002 and 100% by 2007. According to the World Bank's Project Appraisal Document on Andhra Pradesh Power Sector Reforms Programme at least one Distribution Company need to be privatised by the end of 2002-03. An investment of US\$103 million is planned as part of the first phase of reform project in the Distribution area to strengthen the distribution system.

In generation, several IPPs have been able to establish power generation projects. However, APGENCO is still the major generating utility in the state, having 73% of the installed capacity and 62% of the annual energy generation. Shares of APGENCO are to be listed in the stock exchange by 2004 and APTRANSCO by 2006.

Private sector involvement in the power sector is right now limited to generation. Most IPP projects are in a fluid stage with many changes over the projected plans. The current installed capacity is 940 MW and there is a plan to add about 3000-4000 MW capacity in the next 5 years. Contribution to the energy production from private producers has been increasing in the past 5 years. Flow of investment is pretty slow, considering the expectations of the IPPs to be 'cradled' by the government. Clearly favouring IPPs, reform process enabled the power purchase cost from these plants has been higher than that from state or central plants.

Norms were relaxed to attract private investment and the process involved signing a Memorandum of understanding with the state government. MoUs to set up nearly 119 projects with a capacity of 7841 MW (about 1 - 1.5 times the installed generation capacity) were signed in a short time. This process was a non-transparent one and was rushed through - even preliminary power planning procedures were given a go by. For example, in February 1995, the government/APSEB signed over a dozen MoUs for IPPs in just one night. But this initial enthusiasm did not last and many projects did not take off. Competitive bidding procedure was adopted for many subsequent projects. One of the first IPP to come on stream in India was the GVK combined cycle plant at Jeegurupadu in Andhra Pradesh commissioned in July 1996. Today, there are 3 major gas based IPPs with a total installed capacity of 779 MW and many wind, small hydro & non-conventional energy plants in the private sector which add up to a capacity of 161 MW.

Andhra Pradesh was the first state to sign an agreement with central government to clear its dues to central utilities. As per the agreement, part of the dues, comprising interest payments, would be waived and the Reserve Bank of India (RBI) would allow the state government to issue tax-free bonds to finance the settlement of dues. In return, state government will have to pay all fresh dues in time to central utilities and if it fails to do so, then centre has the right to block resources earmarked for transfer to the states as central devolutions.

Since its inception, APERC has released several regulations and documents such as Business rules, Standards of performance Practice guidelines and Consumer's right to information. APERC has issued licences to APTRANSCO for bulk supply, DISCOMs and the Rural Electricity Supply Co-operatives (RESCOs) for retail supply.

APERC has issued three tariff orders so far starting with the financial year 2000-01. Work on tariff started with a tariff philosophy working paper prepared in 1999 as one of the first acts of APERC. Since the initiation of reforms tariff was hiked by 20%. APERC has issued orders on regulation of third party sale of power by power plants and on incentives for non-conventional energy project developers. Recently it cleared PPAs of three power plants: BPL's coal based power plant at Ramagundam, BSES's gas based power plant in East Godavary district and APGENCO's Rayalaseema thermal Power Plants' stage II.

In September 2002, the current Chief Minister completed 7 years in office. He has reiterated his resolve to go ahead with the power sector reforms as an integral part of the on-going reform program in the major sectors in the state. He has asserted that but for

power reforms, the tariffs would have been higher and the quality of power supply much poorer.

Crucial Issues in AP Power Sector

Power Consumption by farmers

Whenever the issue of losses crop up the government and APSEB officials point their accusing finger at the agriculture sector. They argue that because of the subsidies given to the agriculture sector the Board has landed in losses. While the agriculture sector is consuming more power than any other sector, it provides least proportion of revenues. In 1985 -86 while agriculture sector consumed 28.8 per cent of power distributed, industrial sector consumed 54.8 per cent. In 1994-95 while power consumed by the agriculture sector increased to 47.8 per cent, that of the industrial sector declined to 29.1 per cent. Subsidies to the agriculture sector cost Rs. 162.3 crores in 1985 -86. This increased to Rs. 1626.8 crores in 1995 - 96. But the question is how far these figures are reliable.

Power supplied to the agriculture sector is not metered. In the absence of meters to measure power consumption, the quantum of power consumed in the agriculture sector is arrived at by deducting the power consumed by industrial and household sectors from the total power supplied in the state. But this includes losses in transmission and distribution, and also power theft. If these losses are taken into account then the proportion of power consumed by the agriculture sector is expected to be low, lower than 47.8 per cent. Dr. M. Hariprasad Rao, a retired power official, estimated that the government overestimated the number of pump sets by 25 per cent, working hours (1620 hours) in an year by 33 per cent and power consumption by one 5HP motor (4.55 units) by 20 per cent. Because of all these power consumed by the agriculture sector was shown to be two times more than its actual consumption (The Hindu, September, 5, 1997).

This overestimation of the agricultural consumption continues to be a convenient tool for reform process to bring in changes.

T&D losses: fudged figures

While subsidy to agriculture is treated as villain, the T&D losses are escaping the attention it should have received. In fact effective addressing of this problem will solve the problems of the power sector. A substantial proportion of T&D losses were shown as being consumed by the agriculture sector on the pretext that it being non-metered sector it is difficult to measure its consumption properly.

From 1982, while T&D losses steadily declined as if showing improved efficiency in T&D, agricultural consumption was shown to be increasing, symbolising unbridled consumption in the wake of heavily subsidised power supply. But truth was otherwise. There were technical limitations to such an increase in agriculture sector power consumption, which include limited hours of supply, poor quality of supply and declining water table. At the same time, commercial losses signifying theft of power was spreading alarmingly. But from 1996-97, the year in which power sector reforms in AP began to take a firm shape T&D losses were shown to be suddenly increasing, to 32 percent from 18.85 percent of the previous year. With the initiation of AP Power Sector Restructuring Programme extensive investments began to be made in transmission and distribution. Since the onset of reforms in 1995 more than Rs.2000 crore were spent on improving

transmission and distribution systems. Even then T&D losses instead of declining are increasing.

Status of IPPs

In the wake of the liberalisation process at the national level the state government of AP also attempted to attract private participation in power generation. It entered into MOU with many private companies for setting up 119 power projects in the private sector to generate an additional capacity of 7841 MW power. Besides this, the state government also has gone ahead in giving green signal to 8 short gestation power projects in the private sector and entered into Power Purchase Agreements (PPAs) with these private companies.

Besides these, 32 mini thermal power plants with the total capacity of 1019.35MW, 19 mini hydel stations with the capacity to generate 81,200KW of power, and 62 wind power stations with the generation capacity of 370.20 MW of power have been allotted to private companies.

Apart from these the state government has entered into PPAs with GVK Industries Limited for gas based power project of 216 MW capacity at a cost of Rs 816 crore at Jeegurupadu, Spectrum Power Generation Ltd for gas based power project of 208 MW at a cost of 748.43 crore at Kakinada, Hinduja National Power Corporation Ltd for coal based power project of 1000 MW at a cost of Rs 4297 crore at Visakhapatnam, NTPC for 1000 MW coal based power project at a cost of Rs 3645 crore at Visakhapatnam. Among all these only GVK's Jeegurupadu project, Spectrum's Kakinada project, Lanco's Kondapally and BSES's Vemagiri plants became operational.

The average price at which the AP Transco is to purchase power from private generating companies for the year 2000-01 was Rs.3.05 per kWh, whereas the average price it paid to all other suppliers put together was Rs.1.73 only. To APGENCO's thermal stations it paid Rs.1.93, to the central generating stations (Thermal and Nuclear) it paid Rs.1.64, to other State Electricity Boards it paid Rs. 2.05.

Without addressing the issue of power purchase costs, it is very difficult to visualise that reform process leads to efficiency and increased supply. The IPPs armed with PPAs are holding the State to ransom with cost plus principle. According to this principle the investors will automatically get 16% rate of return on their investments. This guaranteed investment encourages them to escalate the capital costs of the projects to claim more returns. The application of similar principle to transmission and distribution shows that apprehensions about impending burden of increased tariffs are very much real.

Comments on the Practice of Reforms

At present a particular set of reforms proposed by the World Bank are being carried out in AP with out proper analysis of other alternatives available to redress the situation in the power sector. More over the same set of reforms are imposed on several other states. In other words, a uniform system is being imposed on all states. There is no attempt to examine specific experiences of different states and tailor the changes needed according to the requirements of the particular states. The problems faced by the electricity establishment in Andhra Pradesh are not the same as that of Orissa. One can see that not only the Electricity

Reforms Act passed in AP is a carbon copy of the Orissa Act, even the regulations formulated by the APERC are only a copy of the OERC.

In AP no other alternatives are explored to solve the problems facing APSEB. Even the recommendations made by the Hiten Bhaya Committee were brushed aside to impose the World Bank recommendations. While taking up these reforms stakeholders were not consulted. Until the recent tariff hike, people were not aware of the changes taking place in the power sector. There is no public participation, transparency, and accountability in the whole reform process despite the claims of the state government to the contrary. Even the proceedings before the Regulatory Commission are not transparent and participatory to the extent desired. In the tariff hearings for the year 2000-01 general public were not allowed in to the venue on the pretext of lack of space. The Commission issued an order on power demand forecasting without consulting the public.

The reform process is supposed to engender competition and improve efficiency leading to cheaper power supply. But the way the reforms are being carried out in AP make these happen impossible. A major hindrance has been the PPAs entered into with several IPPs by the State government and APSEB/APTRANSCO, which stipulates the power purchase costs. These PPAs constrain the freedom of transmission and distribution companies. Further, the contents of these agreements also impose exorbitantly high power purchase costs.

In the case of distribution also scope for competition is very limited. For each distribution zone there will be only one distribution company. The consumers of that zone will have no choice but to buy power from that company only. In the absence of bench marking the performance, consumers cannot be assured of efficient and cheaper supply of power.

The pace and content of reforms seem to be moving towards replacement of public sector monopoly by private sector monopoly.

While the aim is to decrease political/government interference in the working of the sector, State government is not only interfering in the day-to-day work of the Companies, but also influencing the decisions of the APERC. For example, members of the Commission Advisory Committee, an important body in the regulatory process, are being appointed with the consent of the state government only. BSES power plant in AP was inaugurated in the presence of the Chief Minister of the state and central cabinet minister for power even without the consent of the Commission to the PPA of this plant.

Government of Andhra Pradesh has taken several policy and implementation initiatives to accomplish the reform process. The required legislative and regulatory framework has been put in place with the passing of the reform bill and the establishment of APERC. The required institutional changes in the power sector are to take place in the coming months, especially privatisation.

Given the prevailing conditions in the State, it is very difficult to believe that power sector is in for better conditions. Private investors are interested more in making a fast buck rather than follow the rules of the game. And they are ready and capable of bending the rules of the game in their favour.

Public are concerned about the unpredictability of the outcomes and the efforts of the government to provide cushioning to the private investors. It is the consumers,

unorganized and unaware, who end up suffering from uncertainties and unpredictable outcomes. Instead of grappling with this, APERC seems to be interested in doing away with subsidies and cross subsidies through Long-Term Tariff Principle and Cost-to-Serve approaches.

The emphasis on quality of supply should not be used as a pretext to make electricity inaccessible to nearly half of the population in the State. It is to be noted that quality of power supply could be improved within the existing conditions through several measures. Financial signals alone will not work. In a country where one third of the population is below the poverty line and who are not able access basic amenities to depend on financial or market signals will automatically deny them access to basic facilities like electricity. Welfare components need to be infused in to the policy framework.

Further, given the overall direction of the present reform programme in “rationalising” tariff in which industrial and commercial consumers are rewarded with declining tariff, other sectors, particularly domestic and agriculture sectors may have to face increasing burden. Given the present direction of reforms, negative impact of reforms is to be borne by the under privileged, domestic and agriculture consumers. In the logic of the programme, it is they who need to be given comforts!

Markets/tariff changes alone cannot work in addressing the crisis facing the sector. In the given circumstances application of cost based pricing is fraught with many dangers. At present the average tariff collected from the agriculture sector is Rs.0.30 while the cost of supply is calculated to be Rs.2.38 per unit. If the agriculture tariff is to be in accordance with cost of service then it has be increased by nearly eight times which is practically impossible. Also, at a time when the agriculture sector is in the midst of crisis burdening it with higher power tariff will only further worsen the situation with out in any way helping the power sector in terms of higher revenue collection. The mounting commercial losses, which are a major drain on the finances of the sector, cannot be dealt with financial measures but only by changing the overall atmosphere in the sector. There is vast scope to improve the revenues of the licensees through improving efficiency and reducing T&D losses without imposing higher tariff on the consumers.

The way subsidies and cross subsidies are treated gives rise to an impression that social issues related to the supply of power are being set aside. This will lead to deprivation of increasing number of people as in the present conditions only about half of the population has direct or indirect access to power. The prevailing situation calls for a societal response.

It can be concluded that the power reform process, as is being done, has only managed to empower the anti-people processes, individuals and institutions, who have been responsible for the present crisis situation through finances, new concepts and approaches. The decision-making process has not changed, essentially it is the same which brought in the present crisis situation – opaque, no local participation, fudged information and statistics, adhoc planning, etc. The decision-making setting or environment has not changed, only the actors have changed. A true review of the reform process should go into the question of *who is getting the free lunch*, supposed to have been provided to the poor people of Andhra Pradesh.

**Annexure
Chronology of Events**

June 1995	Hiten Bhaya Committee Report
September 1996	World Bank's Agenda for Economic Reforms in Andhra Pradesh
March 1997	AP State Government's Policy Statement on Power Sector Reforms
April 1998	Passing of AP Electricity Reforms Bill in the State Legislative Assembly
May 14, 1998	Chief Minister's letter to the World Bank's President reiterating the state government's reform policy
May 1998	World Bank's PAD on AP Economic Restructuring Project
January 1999	World Bank's PAD on AP Power Sector Reforms Programme (APPSRP)
February 1999	AP Electricity Reforms Act 1998 comes into force
February 1999	APSEB unbundled into APGENCO and APTRANSCO
February 1999	Agreement between the World Bank and GoAP on APERP signed
March 1999	Agreement between the World Bank and GoAP on APPSRP signed
April 1999	AP Electricity Regulatory Commission starts functioning
November 1999	First Public Hearing conducted by the APERC on Tariff Philosophy
March 2000	APTRANSCO further unbundled into APTRANSCO and four DISCOMs
May 27, 2000	First Tariff Order by APERC
May 28, 2000	People's Movement against tariff hike starts
August 28, 2000	Police firing on demonstrators in the centre of Hyderabad city
October 2000	High Court Judgement upholding the APERC order on tariff hike
March 24, 2001	Second Tariff Order by APERC
April 1, 2001	Regular licenses to DISCOMS
March 24, 2002	Third Tariff order by APERC
April 1, 2002	Financial autonomy to DISCOMS
August 17, 2002	Employee division (option process) among APGENCO, APTRANSCO and DISCOMS on permanent basis

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