

## **POWER POLICY - 2003**

Sl. No.	Content	Page No.
1.	BACKGROUND	2-5
2.	POWER POLICY 2003 OBJECTIVES	6-7
3.	GENERATION	8-15
4.	COGENERATION AND CAPTIVE POWER POLICY	16
5.	TRANSMISSION AND TRADING	17-18
6.	DISTRIBUTION	19-21
7.	RURAL ELECTRIFICATION	22-23
8.	ENERGY CONSERVATION AND DEMAND SIDE MANAGEMENT	24
9.	GENERATION THROUGH RENEWABLE ENERGY SOURCES	25
10.	SPECIAL EMPHASIS ON ANTI THEFT MEASURES	26
11.	EMPLOYEE INTERESTS	27
12.	ENERGY TASK FORCE	28

## BACKGROUND

Uttar Pradesh is India's most populous state with a population of over 166 million. If Uttar Pradesh were to be a country it would be the 7th largest country in the world. In some social and income indicators, parts of UP have made significant progress in the last decade. The State is one of the largest software exporting states in the country and has led India's BPO boom in the last two years. The growth rate in software exports of UP is the highest among all States. Mobile phones in UP has grown from 0.2 million in 2000 to over 1 million today, a compounded annual growth rate of 71% and are growing by the day.

In the supposedly "backward" regions of Eastern UP, some social indicators are better than the national average. The female literacy ratio has doubled in this region from only 21% in 1991 to 42% over the decade. The female population percentage in this region is 48.7% that is 2% higher than the national average.

Promoting opportunity is at the center of the strategy for development of the state. In societies with high inequality, greater equity is particularly important for rapid progress in stimulating growth. This requires concentrated action to support the build up of infrastructure assets so as to have equitable access. There are powerful complementarities between actions in different areas. Because of close linkages between human and physical assets, for example, improving poor people's access to energy or transport increases their access to education. Complementarities between electricity and roads, community center, employment, post office, water, telephone and all infrastructure are high.

Power to all therefore is not only integral but the primary component of the developmental program of the State. Uttar Pradesh has been severely constrained in its economic development and quality of life by the appalling power situation in the State. Villages get only 14 hours of power supply and even then the quality is often poor. The situation is similar even in small towns. Barely 1/5th of the rural households in the State have access to this basic need.

Lack of access to infrastructure exacerbates inequity. Poor quality electricity and a flat rate tariff not linked to consumption drive poor farmers to more expensive and polluting sources like diesel pump sets. In Uttar Pradesh, there are about 2.7 million diesel pump sets as opposed to only 0.7 million electric pumps. Poor people often pay enormous amounts for infrastructure services and this is best illustrated by the energy consumption pattern in the State.

Load factor of large industrial consumers is only 25% and only 11% for small industries. The Captive power capacity of the industries is higher than that connected to the grid. A dilapidated Distribution network, poor maintenance and power shortages forces industries to migrate to captive power that is more expensive and polluting but far more reliable. The multipliers of reliable industrial supply are considerable.

## **1.1 POWER REFORM IN UP**

To address this key developmental challenge Government of Uttar Pradesh formulated a Power Policy in 1994 and a Power Reform Policy in 1998 with the following objectives.

- Provide cost efficient good quality electricity to all categories of consumers for economic development and social uplift of the state.
- Make the energy sector commercially viable so that it ceases to be burden on the state budget; and
- Protect the interest of the consumers
- With the above objectives in perspective, the Government of Uttar Pradesh agreed on the following key aspects of the power sector Reform programme.
- Restructuring of Uttar Pradesh State Electricity Board (UPSEB) into autonomous and separately accountable entities.
- Creation of an independent Regulatory Body to protect consumers as well as long-term financial health of the power sector.
- Ultimate transfers of ownership of assets to public corporate entities over a phased time scale.
- Rationalization of tariff.

## **1.2 FORMATION OF DISTRIBUTION COMPANIES**

In the first phase of the programme, the autonomous companies were to be formed and corporatised due to the increasing requirement of specialization in the field of Generation, Transmission and Distribution. Subsequently as a further step towards making the entities more responsive to the customers and to provide better service, the process of involving private entrepreneurs in the Distribution of Electricity was to be initiated and accelerated. Subsequently in the next phase the generation companies were to be privatized through competitive bidding.

As envisaged in the policy, GOUP restructured UPSEB first into a Transmission & Distribution company, a Hydel generation company and a Thermal generation company. Subsequently the Transmission & Distribution Company was restructured into a Transmission and four Distribution companies.

## **1.3 FINANCIAL RESTRUCTURING**

GOUP approved a Financial Restructuring Plan (FRP) prior to the formation of the Distribution companies. The FRP involved considerable restructuring and write offs by the stakeholders in addition to financial workouts with various lenders and creditors. In addition, GOUP committed over Rs 17,000 cr to provide support to the power sector over a 7-year time frame towards operational deficits, past burden and investment support. The reschedulement, restructuring and write offs by GOUP are as follows.

## **Reschedulement**

- The power purchase payables to the CGS of about Rs 6,000 cr have been securitised as per the recommendations of the GOI Expert Group and GOUP deciding to service this liability directly without any corresponding burden on the sector.
- GOUP and the sectoral companies have rescheduled the loans to LIC (Rs 1780 cr) and REC (Rs 1400 cr) at IRR of about 8%.

## **Restructuring**

- GOUP has written off about Rs 1340 cr of accumulated GOUP loans and interest thereon to UPPCL against arrears of GOUP departments and agencies that had accumulated since the unbundling of UPSEB.

## **Retention of employee liabilities:**

- The Pension and Gratuity liabilities of Rs 6176 cr had been retained by GOUP when the First Transfer Scheme was finalised. GOUP has further retained the GPF liabilities of the employees amounting to Rs 1426 cr.

## **1.4 STATE OF THE POWER SECTOR**

The above measures have reduced the financial burden on the sector perceptibly. However the objectives of the Power Reform policy are far from being achieved even after the financial restructuring and assumption of liabilities by GOUP. The grim state of power sector in UP can be briefly summed up as follows.

- a) Household electrification levels in UP are 32% as against the national average of 56%. The situation is far worse in the case of Rural areas where the household electrification levels are 20%.
- b) Even these 1/5th of electrified rural households get less than 14 hours of supply.
- c) The rostering in the Urban areas also is aggressive with Tehsil towns barely receiving 14 hours supply.
- d) As a result of the poor access compounded by the poor quality of supply, the per capita consumption of UP is one of the lowest in the country at 188 kWh compared to the national average of 363 kWh.
- e) The financial position of the utility continues to be precarious with cash deficit of Rs 1359 cr in 2002-03 even after GOUP subsidy support of Rs 850 cr.
- f) Flat rate consumption affects the financial condition of the utility. Though tariff rationalisation based on actual consumption and targeted subsidies are key requirements, the same has not materialised.
- g) Even with the aggressive rostering schedule, the utility has been forced to borrow to pay current dues.
- h) Industries are not located in the Urban areas only. In UP, 58% of the industrial consumption is in the Rural areas that have the poorest power quality. The Captive power capacity in UP is higher than the industrial load contracted with the grid of

1400 MW as industries use captive sources in the absence of grid power or frequent outages. The utility loses commercially lucrative consumption, which worsens the financial position.

- i) Just to achieve the average per capita consumption of the country, the State would require over 4000 MW of new capacity with an investment requirement of Rs 16,000 cr.
- j) The utility's financial condition is likely to further worsen with the advent of competition in the Electricity Act 2003 as in the present context, the utility is not equipped to face competition.

The Electricity Act 2003 which was notified on 10th June 2003, has three key objects: a) promoting competition b) protecting interest of consumers and c) supply of electricity to all areas i.e., Universal access. The Act seeks to achieve competition primarily by changes in Industry structure, tariff rationalization and removal of cross subsidy. Protection of interests of consumers is sought to be achieved by strengthening the regulatory institutions. The objective of universal access is sought to be achieved by delicensing and encouraging private and multiple forms of local governance.

In light of the sub-optimal state of affairs in the power sector in the state and particularly recognizing the changed legislative environment pursuant to the enactment of the Electricity Act 2003, there is an urgent need to set out a progressive and clear-cut policy for the state power sector.

## **Power Policy 2003 Objectives**

UP Power policy 2003 is structured with consumers as the focal point & aims at fulfillment of the overall need for universal access and for providing reliable, quality & affordable power. The following are the principle objectives in this direction:

- To provide reliable, quality and cost efficient power for social upliftment and economic development of the people of the State
- To increase the availability of power by (a) encouraging augmentation of environment friendly generating capacity in the state particularly based on natural gas and renewable sources of energy and b) sourcing competitive and reliable bulk power from sources both within and outside the state.
- Optimum utilisation of existing generation capacity through appropriate Renovation & Modernisation programmes
- To augment the transmission and distribution capacity and refurbish the existing capacity with a view to improving efficiencies, reliability & quality of supply and reducing losses
- To encourage efficient usage of electricity & facilitate energy conservation measures including demand side management.
- To aim at building up a sophisticated and skilled trading entity with a view to utilizing the significant opportunities offered by the new Act.
- To facilitate consumers benefiting from competition & towards this end encourage private sector participation in all areas viz. generation, transmission, distribution, trading and R&M.
- To strive towards expeditious electrification and supply of electricity to all villages and households in the state and to encourage distributed generation.
- To reduce the financing burden on the State over a period of time while recognizing the fact that during the initial transition period, state support would be a key determinant for the success of the entire exercise.
- To support the UP Electricity Regulatory Commission with all policy measures with a view to ushering in a rationalized tariff framework with efficient distribution of subsidies.
- UP is the first state to recognize and act on this changed context and issue a Power policy.

## 1.1 **PERIOD OF VALIDITY**

The Power policy would come into immediate effect and would be valid till 31st March 2009.

## **Generation**

Capacity requirement for providing power to all by 2012 is substantial. Even with the present electrification levels, the additional capacity requirement for supplying continuous power is 1,300 MW. For universal access the capacity requirements would be over 11,250 MW that would shoot up to over 14,200 MW if UP were to attain the national per capita consumption. Compared to this requirement the availability in FY09 would be just 8,650 MW as per present estimates if all planned projects fructify.

The situation has been further exacerbated due to State Reorganization in 2000. Prior to the State Reorganization, UP's Hydel capacity was 1497 MW and the thermal capacity 3909 MW. Subsequent to reorganization, UP retained only 516 MW of low cost Hydel power while the balance hydel capacity has been allocated to Uttaranchal. The cost due to the unavailability of the cheap Hydel power which has since gone to Uttaranchal is Rs. 400 cr.

UP's ability to supply power to its consumers is limited by the utility's financial capacity to purchase power especially after the Securitisation of Power purchase under the Expert Group recommendations that mandates regular payment of current dues. There is a vicious cycle of poor recovery, leading to the inability of the utility to purchase power and attract investments, leading to poor quality supply even to the remunerative consumers resulting in remunerative consumers moving away from the grid resulting in a further deepening of the financial crisis and its concomitant result of poorer quality of supply.

### **1.1 POLICY DETAIL**

#### **1.1.1 NEW CAPACITY ADDITION**

The objective of GOUP is to break this vicious cycle several levels. The sector needs significant investments to meet the requirements in all the three areas of generation, transmission and distribution. Considering the state of finances of GOUP and the various state owned power utilities, though the GOUP will endeavour to create additional capacity through state owned utilities, it is evident that substantial investment has to be brought in by the private sector as well.

With a view to attracting fresh investments into the sector, GOUP would extended the following benefits in all projects in Generation (new capacity and R&M), Transmission and Distribution where the aggregate capital investment within the policy period i.e., up to March 31, 2009 is Rs.1000 cr or more. The targeted investment can be either made by a single company or its group or associate companies. The investments can be either through equity capital, debt or a hybrid of any of these two or a mix of all of them.

#### **1.1.2 COST OF LAND AND ITS ACQUISITION**

- A. State Government land is presently leased at the market price plus a premium equal to the market price. In addition there is a lease rental equal to 1% of the market rate. Land would be made available on lease for 99 years at lease

rental of Rs.100 per acre without payment of any stamp duty and registration fees.

- B. GOUP would acquire the required land for the project and transfer the same to the project. Land for the project would include land required for setting up the power plant and other associated facilities. GOU would subsidise the cost of land and the cost of resettlement of project affected families as follows.

Capital cost between Rs.1000-2500 cr : 20% of the cost of land and 20% of the cost of resettlement of project affected families would be borne by GOUP. For coal thermal plants where land requirements are higher 10% of the cost of land and 10% of the cost of resettlement of project affected families would be borne by GOUP.

Capital cost between Rs.2500-5000 cr : 40% of the cost of land and 40% of the cost of resettlement of project affected families would be borne by GOUP. For coal thermal plants where land requirements are higher 20% of the cost of land and 20% of the cost of resettlement of project affected families would be borne by GOUP.

Capital cost greater than Rs.5000 cr : 60% of the cost of land and 60% of the cost of resettlement of project affected families would be borne by GOUP. For coal thermal plants where land requirements are higher 30% of the cost of land and 30% of the cost of resettlement of project affected families would be borne by GOUP.

The cost of land for the above computation will include acquisition price, administrative cost of acquisition, stamp duty and registration expenses.

Cost of resettlement of project affected families will include resettlement and rehabilitation expenses incurred as provided in GOUP guidelines.

Efforts would be made to obtain the entire land on negotiated basis to facilitate early and litigation free possession of land.

The company will be required to submit a reasonable plan for commissioning of the above project. In case the project is not initiated in a reasonable time the concessions on land and concessions for resettlement of project affected families will be recovered with interest.

None of the above provisions will pertain to forest land and the company will acquire forest land at its own cost. GOUP will provide the necessary administrative support.

### **1.1.3 INFRASTRUCTURE FACILITATION**

When the sale of power is only to the State utility, necessary transmission lines and substations would be created by the State utility or the generating company would be allowed to create the same and necessary administrative support for it would be extended by GOUP.

GOUP would maintain law and order and set up the entire connected infrastructure like roads, bridges and water resources for the project. In case lining of canals is required for water availability for any project, cost of living would be borne by GOUP. Similarly, if any canals or distributaries coming within the Project site are required to be diverted/terminated, the GOUP would undertake and complete such diversion/termination at its cost.

GOUP would encourage and facilitate private sector investment in setting up new small hydro projects. GOUP would also purchase power generated from small hydro projects at an agreed and approved tariff.

In addition to building up new generation capacity, GOUP would also source power from competitive cost suppliers from both within and outside the state.

### **1.1.4 ENTRY TAX**

The State of UP would provide exemption/remission as the case may be, from payment of tax by whatever name called, on entry into the local area from any place outside that local area, of all capital goods, plant, machinery and parts for the purposes of the Project during construction, operations and maintenance of the Project.

The State of UP would ensure that for projects with capital outlay between Rs.1000 Crore and Rs.2500 Crore, an amount equivalent to tax by whatever name called, on entry into the local area from any place outside that local area, due and payable on entry of all goods other than capital goods, plant, machinery and spare parts referred to above, from the start of construction of the Project upto a period of 7 years from the date of commencement of commercial production/generation of each phase of the Project would be deemed to have been deferred and stand converted into an interest free loan. The said interest free loan would be repayable over a period of 7 years with a moratorium of 7 years from the date of commencement of commercial production/generation of each phase of the Project.

The State of UP would ensure that for projects with capital outlay between Rs.2500 crore and Rs.5000 crore, an amount equivalent to tax by whatever name called, on entry into the local area from any place outside that local area, due and payable on entry of all goods other than capital goods, plant, machinery and spare parts referred to above, from the start of construction of the Project upto a period

of 9 years from the date of commencement of commercial production/generation of each phase of the Project would be deemed to have been deferred and stand converted into repayable over a period of 9 years with a moratorium of 9 years from the date of commencement of commercial production/generation of each phase of the Project.

The State of UP would ensure that for projects with capital outlay above Rs.5000 crore, an amount equivalent to tax by whatever name called, on entry into the local area from any place outside that local area, due and payable on entry of all goods other than capital goods, plant, machinery and spare parts referred to above, from the start of construction of the Project upto a period of 12 years from the date of commencement of commercial production/generation of each phase of the Project would be deemed to have been deferred and stand converted into an interest free loan. The said interest free loan would be repayable over a period of 12 years with a moratorium of 12 years from the date of commencement of commercial production/generation of each phase of the Project.

For the purposes of land in line with the above paras, during the relevant period, the entry of goods without payment of tax for the Project, can be made by the eligible unit implementing the Project or any person authorized by the eligible unit, against a declaration form in the prescribed format to be issued by the eligible unit implementing the Project.

The tax on entry as referred above, due and payable shall be deemed to have been paid when converted into an interest free loan provided by the State Government under the current policy of deferment.

Within 180 days from the date of notification of this policy, the State of UP would come out with a defeasement policy providing for an option of prepayment of the said loan.

From the start of the construction of the Project upto a period of 25 years but not later than 20 years from the date of commercial generation/production of each phase of the Project, the State of UP would provide remission to the extent necessary to ensure that effective rates of tax on entry of goods for the Project during construction, operation and maintenance of the Project, do not exceed the respective rates applicable as on the date of notification of this policy.

#### **1.1.5 STATE TRADE TAXES**

The State of UP would ensure that for projects with capital outlay between Rs.1000 crore and Rs.2500 crore, an amount equivalent to the State trade taxes and similar taxes due and payable on all purchases and sales under the UP Trade Tax Act, 1948 as may be amended or modified or substituted or replaced from time to time, for the project from the start of construction of the project upto a period of 7 years from the date of commencement of commercial

generation/production of each phase of the project, would be deemed to have been deferred and stand converted into an interest free loan. The said interest free loan would be repayable over a period of 7 years with a moratorium of 7 years from the date of commencement of commercial generation/production of each phase of the Project.

The State of UP would ensure that for projects with capital outlay between Rs.2500 crore and Rs.5000 crore, an amount equivalent to the State trade taxes and similar taxes due and payable on all purchases and sales under the UP Trade Tax Act, 1948 as may be amended or modified or substituted or replaced from time to time, for the project from the start of construction of the Project and upto a period of 9 years from the date of commencement of commercial generation/production of each phase of the Project, would be deemed to have deferred and stand converted into an interest free loan. The said interest free laon would be repayable over a period of 9 years with a moratorium of 9 years from the date of commencement of commercial generation/production of each phase of the Project.

The State of UP would ensure that for projects with capital outlay above Rs.5000 crore, an amount equivalent to the State trade tax and similar taxes due and payable on all purchases and sales under the UP Trade Tax Act, 1948 as may be amended or modified or substituted or replaced from the time to time, for the project from the start of construction of the Project and upto a period of 12 years from the date of commencement of commercial generation/production of each phase of the Project, would be deemed to have been deferred and stand converted into an interest free loan. The said interest free loan would be repayable over a period of 12 years with a moratorium of 12 years from the date of commencement of commercial generation/production of each phase of the Project.

For the purposes of and in line with the above paras, during the relevant period, the purchases of goods without payment of tax for the Project, can be made by the eligible unit implementing the Project or any person authorized by the eligible unit, against a declaration form in the prescribed format to be issued by the eligible unit implementing the Project.

From the start of the construction of the Project upto a period of 25 years but not later than 20 years from the date of commercial generation/production of each phase of the Project, the State of UP would provide remission to the extent necessary to ensure that the effective rates of trade tax on all purchases for and sales by the Project during construction, operation and maintenance of the Project, do not exceed the respective rates applicable as on the date of notification of this Policy.

The State Trade Tax due and payable, shall be deemed to have been paid when converted into an interest free loan provided by the State Government under the current policy of deferment.

Within 180 days from the date of notification of this Policy, the State of UP would come out with a defeasement policy providing for an option of prepayment of the said loan.

#### 1.1.6 TAX ON GENERATION AND SALE OF ELECTRICAL OUTPUT

From the start of construction of the Project upto a period of 25 years but not later than 20 years from the date of commercial generation/production of each phase of the Project, the State of U.P. shall provide remission to the project from any taxes or cess of whatsoever nature, imposed or levied from time to time by GOUP on the generation and sale of the electrical output from the Project.

#### 1.1.7 STAMP DUTY

The State would grant remission of stamp duty payable by the Project companies as follows:

Stamp duty for the eligible projects under the policy would be applicable as under:

A.	For merger, amalgamation, demerger or scheme of reconstruction, rearrangement or reorganization. - As per applicable rate subject to a maximum of Rs.10 Crores for both movable & immovable properties.
B.	On sale of asset - As per applicable rate subject to a maximum of Rs.2 Crores.
C.	On creation of encumbrance by way of
i.	Mortgage without possession whether registered or not
ii.	Mortgage with possession whether registered or not - As per applicable rate subject to a maximum of Rs.5 Lakh
iii.	Equitable mortgage with or without possession whether registered or otherwise - As per applicable rate subject to a maximum of Rs.1000
iv.	English mortgage (as defined in Transfer of Property Act, 1881) with or without possession. - As per applicable rate subject to a maximum of Rs.5 Lakh
v.	Lease of movable or immovable property for the purpose of the Project where eligible units implementing the Project is one of the parties either as a lessor or a lessee. - Where lease is for a period less than 30 years - As per applicable rate subject to a maximum of Rs.1 Lakh.

	-	Where lease is for a period more than 30 years
	-	As per applicable rate subject to a maximum of Rs.2.50 Lakh.
vi.	Trust	- As per applicable rate subject to a maximum of Rs.2000
vii.	Settlement	- As per applicable rate subject to a maximum of Rs.2000
viii.	Agreement to sell for the purpose of Project where eligible units implementing the Project is one of the parties.	
	-	With possession
	-	As per applicable rate subject to a maximum of Rs.2000
	-	Without possession
	-	As per applicable rate subject to a maximum of Rs.1000

#### 1.1.8 REGISTRATION FEE

The registration fee payable on registration of deeds, instrument and assurances relating to Project shall be as per applicable law subject to a ceiling of Rs.5000 per registration.

#### 1.1.9 ELIGIBILITY

However, the above exemptions and concessions will be made available only to those Transmission, Sub-Transmission and Distribution including renovation and modernization Projects and Generation Projects or R&M or generating stations which commit at least 40 percent of the capacity of the project to the State of UP at tariffs fixed through (a) the competitive bidding process or (b) any other provision in line with Electricity Act 2003 and rules, regulations, policies and guidelines made thereunder.

### 1.2 RENOVATION AND MODERNISATION

#### 1.2.1 CONTEXT

The paucity of investments has impacted the upkeep of plants in the State sector. The PLF of the thermal power plants in the State sector. The PLF of the thermal power plants in the State sector is only 60%. The variances between the plants are stark with Anpara B having PLF of over 85% and Harduaganj with PLF of below 25%. In addition to the unavailability of capacity, the efficiency of the capacity utilized is low with Station Heat rates of Harduaganj at 3500 kcal/kg, which is over 40% above the efficient levels. Consequently, the per unit tariff of Harduaganj at Rs.3.15 is costlier than any State or Central Generating Station that the utility purchases power from. R&M offers cheaper alternative to add capacity. Private sector participation has opened up an important avenue for funding R&M.

### 1.2.2 POLICY DETAILS

GOUP would frame guidelines consistent with the GOI policy for Renovation and Modernisation of existing plants.

- a. GOUP would encourage Joint Ventures with the private sector at the plant level for Renovation and Modernisation schemes with suitable bidding criteria.
- b. Further GOUP would allow Lease-Rehabilitative-Operate-Transfer contracts with private investors so as to share investments and utilize the O&M expertise of the partner. The ownership of the plant would be with the Government owned utility. The PSP would invest and carry out the R&M of the power station and its operation and maintenance till the duration of the lease period.
- c. GOUP would encourage 'Management Contract' for existing plants to bring in management skills and improve plant efficiency.
- d. GOUP would consider outright sale of plants with efficiencies below benchmark levels that requires substantial investments in R&M through a competitive bidding process to ensure tariff and generation efficiency from these plants.

The R&M would not in any case be restricted to the models stated above.

## **COGENERATION AND CAPTIVE POWER POLICY**

### **1.1 CONTEXT**

The Electricity Act 2003 mandates that GOI after consultation with the State Government prepare and notify a national policy for stand alone system for rural areas based on renewable and non conventional sources of energy.

UP's rural population is 79.9% of the total population. 20% of the cropped area is under sugarcane cultivation and UP with sugarcane production of 140 million MT is the largest producer of sugarcane in the country. Bagasse based generation would improve the marketability of the "waste product" from sugarcane while supplying power to the local areas either in a stand alone mode or with grid connectivity.

UP also has a sizeable captive power capacity of about 2000 MW, most of which is under-utilized and therefore lying idle leading to significantly higher costs for the captive plant owners.

### **1.2 POLICY DETAILS**

The UP Electricity Regulatory Commission had issued a policy for Renewable Energy Sources based IIPs in September 2001 and a Captive Power policy in July 2000. Pursuant to the enactment of the Electricity Act 2003, GOUP would have a relook at all these policies and suitably take up the matter with the Commission with a view to aligning the various policies with the new legislative environment.

Underutilized captive capacity would be supported by way of purchase of power at appropriate tariff with the approval of the Commission. GOUP would encourage a policy that allows the banking and absorption of surplus capacity.

## **TRANSMISSION AND TRADING**

### **1. CONTEXT**

The Electricity Act 2003 requires separation of the Transmission and Trading functions. Transmission is to provide open access. Transmission is a licensed business and a Transmission licensee is barred from Trading.

State/Central Transmission Utility shall be deemed to be Transmission Licensee. There is provision for private Transmission Licensee. STU/CTU or Transmission licensee is not to engage in the business of Trading.

A Government Company or any Authority or Corporation to be notified by State Government shall operate SLDC. SLDC may be operated by STU till the Government notifies a Government company or any authority or corporation. SLDC is not to engage in the business of trading in electricity.

In addition to the industry structure implications of the above regulations, there are network congestion issues. Additional generation investments due to the liberal policies of GOUP are expected to increase and that would require concomitant investments in transmission.

In addition to the above, GOUP would examine all possible options to enhance the value addition of the existing transmission assets in the state.

### **1.2 POLICY DETAILS**

GOUP will encourage an Industry structure that ensures Commercial discipline on the entities to perform efficiently. However the Discoms would have the freedom to purchase from any generator as mandated in the Act.

GOUP would encourage private participation in Transmission so as to attract the necessary investments for strengthening and expansion of the Transmission system. However the SLDC and the STU would remain Government companies.

Considering the constraints imposed by the Act and also the significant opportunities offered by Trading, GOUP would form a trading company for intra State and inter State trading of power. Trading being a highly knowledge and skill intensive activity, the trading company would require considerable professional skills and for this purpose GOUP would encourage private sector participation in the trading company in view of the specialized skills required for the trading business.

With the advent of Open Access, the investments and competence required in the SLDC for scheduling and imbalance settlement, and the Transmission system to avoid congestion would be substantial. GOUP shall encourage training and

development of personnel in the State owned utility for acquiring the necessary skills to manage the SLDC and the STU efficiently.

Additional generation capacity due to the liberal policies would increase the congestion in the transmission systems. GOUP would encourage transmission licensees in the private sector and grant right of way on conditions similar to being granted for state owned Transmission company.

UP would adopt ABT for all State Generating Stations so as to reduce the risk of all market operations. The PPAs with UPPCL/Disoms would be modified to suit the new arrangement. There shall be adequate training and development of SGS personnel for scheduling, despatch and billing with the new settlement mechanism.

Considering the significant advantages of Availability Based Tariff (ABT) regime, one of the key priority areas for GoUP would be to ensure that ABT is implemented on an intra-state basis at the earliest. For this purpose, GoUP would render all possible support including expediting the matter with the Commission.

Intra-state implementation of ABT would have significant advantages viz. improvement in grid discipline, significant opportunities for trading & optimum utilisation of resources. Particularly, the existing surplus idle capacity of the captive power plants would become available at competitive prices and almost immediately which would significantly improve the demand-supply position of power in the state.

## **DISTRIBUTION**

### **1. CONTEXT**

**Poor Efficiency Levels:** The key to power sector reforms is improvements in the viability of the distribution business. The distribution business in the state suffers from low efficiency levels the T&D losses are inordinately high with the loss levels at 33%.

**Metering:** The problem is exacerbated by the extremely low levels of metering in urban areas barely 61% of the bills are served on the basis of actual meter readings and in rural areas almost the entire consumer base is unmetered. Furthermore, even of the bills served to consumers, barely 80% of the revenue billed is actually collected.

**Tariff Rationalisation:** Another significant issue affecting the viability of the distribution business is the poor cost coverage from tariffs and the high levels of cross subsidy that exist with the industrial and commercial consumers significantly subsidising the domestic and agriculture consumers. GOUP recognizes that cross subsidy elimination has to be a gradual process.

**Rural Electrification and Access to Power:** At present, about 40,000 villages in the state remain to be electrified. Moreover, only about 80% of the urban and 20% of the rural households in the state have access to electricity. The per capita energy consumption in the state is also extremely low at about 188 kWh as against the national average of about 363 kWh. Even in the electrified villages, the quality of supply and the supply hours need to improve significantly to help the consumers, existing and potential, to benefit from the multipliers that electricity access affords. This necessitates specific and sustained actions for expanding access to electricity.

**GOUP Financial Support:** GOUP has continued to provide significant support to the sector in terms of assumption of a large part of past liabilities which have led to substantial reduction in the operating costs of the sector. GOUP is committed to provide transitional support for the next few years but expects the sector to become self sustaining and cease to be a burden on the state's finances.

**Electricity Act 2003:** The Electricity Act 2003 represents a paradigm shift in the Indian power sector. Provisions related to introduction of competition in distribution business and open access to large consumers as well as the requirement of elimination of cross subsidies necessitate customized strategies to improve the viability of the distribution business in terms of efficiency improvements, tariff rationalisation, quality of supply, etc.

**Rural & Urban Issues:** Currently the technical & commercial losses are highest in urban areas in comparison to rural areas where as supply reliability is poor in both urban as well as rural areas. Rural areas would need continuous support from GOUP in terms of capital requirement for new electrification as well as subsidizing the tariff to needy consumers. GOUP would also provide extensive support to private sector (as detailed in a subsequent

Section) for setting up stand-alone systems of generation, transmission and distribution in rural areas as provided in Electricity Act, 2003.

## **2. POLICY DETAILS**

The State Government recognizes that the operational efficiencies (T&D loss and collection efficiency, quality & reliability of supply) need to improve significantly to address the various issues that plague the sector at present. The state government also recognizes that the operational efficiencies are inextricably linked to the governance of the sector. Industry structure and competition, which ensure commercial pressure on the utility, and private ownership sensitive to commercial pressures are the most powerful tools to improve efficiencies on a sustainable basis and ensure sector viability. In addition to reduction in system losses and improvement in profitability of the distribution business, the objective of the quality & reliable supply and also expansion of supply network especially in the rural areas has also to be achieved in an expeditious manner.

GOUP accordingly would pursue privatization of the distribution business in a priority basis. Private Sector Participation in the distribution business would be through a transparent and open process of competitive bidding.

While reduction of the burden on Government finances is one of the most important long-term objectives of the distribution privatization exercise, GoUP recognizes the need for continued support to the sector at least during the transition period till the distribution entities turn around and become financially viable & self sustaining. GoUP is prepared to commit the necessary transition period support to ensure a successful turnaround of the state power sector.

GOUP recognizes that the case for competition and private sector participation is as strong and relevant in the urban areas as in the rural for improving customer satisfaction and efficiency. GOUP would accordingly involve Private Sector participation for as large a consumer base as possible in the rural and urban areas. The actual earmarking of distribution areas for the purpose of distribution privatization would however depend on a number of factors including viability of the Discoms on a self-sustaining basis, achieving an optimum balance between the various Discoms, investor interest, etc. If need be, GOUP would consider reworking the configuration of the Distribution companies also.

The Electricity Act 2003 facilitates introduction of competition in the distribution sector through mechanisms such as open access and multiple licensees through creation of own distribution network. GOUP recognises that such mechanisms would introduce competitive pressure on various players in the sector to improve quality of supply and service at competitive prices as well as enhance consumer choice. GOUP is committed to facilitating the grant of open access on the existing state owned transmission network and would grant rights of way for creation of new distribution network by additional licensees.

In line with the Act, GOUP would also consider the possibility of appointing Franchisees for carrying out part or whole of its distribution activities in select areas in the state.

GOUP would in line with the Act aim for 100% metering in the next 1-1/2 years i.e., till June 10, 2005.

## **RURAL ELECTRIFICATION**

### **1. CONTEXT**

The issues in Rural electrification can be summed up as follows:

- a) Power is a basic necessity and a considerable multiplier in economic activity. The magnitude of the task of RE is considerable and cannot be taken up by the Energy department alone. Rural electrification has to be a State level initiative that requires interdepartmental coordination.
- b) At present, as per CEA definition about 16,000 villages and as per the guidelines of Ministry of Power, GOI about 40,000 villages in the state remain to be electrified. This constitutes about 40% of the unelectrified villages in the country. Only 20% of the rural households in the state have access to electricity. In the electrified villages, the power supply is for 14 hours only.
- c) Single point connectivity to all the unelectrified villages will require an investment of about Rs 3,000 cr over a period of 4 to 5 years. The beneficiaries are in no position to contribute, therefore entire investment has to come from Government by way of capital grant. So far all investments in the Rural electrification programme have been through grant and loans. Recovery of capital costs through tariffs is not possible at least in the short-medium term scenario.
- d) Rural supply including supply to the agriculture tubewells is unmetered and billed on a flat tariff irrespective of consumption
- e) The rural Domestic tariff is considerably below cost of supply. Still a radical increase of retail tariffs to align them with cost of supply is not possible in the short-term for various reasons.
- f) The logistics of rural and household electrification, looking at the spread and numbers, is a considerable challenge.
- g) Even though the State has encouraged Cooperatives movement and empowered Panchayati Raj institutions they have still not participated in the field of rural electrification and power supply to the rural areas.
- h) The Electricity Act has sought to substantially delicense rural supply but at the same time, considering the specific circumstances prevailing in each state, has left the choice of optimum model for rural supply to evolve over time and.

### **2. POLICY DETAILS**

GOUP is committed to providing 100% village electrification in the policy period. This would require an annual outlay of Rs 800 cr for village connectivity. Power is a fundamental need and GOUP declares 100% village electrification as one of the most important tenets of this State policy. The State Government declares village electrification as a State policy and that the instruments of the State would be focused on village electrification and electricity supply for a minimum of 14 hours of power to the rural areas. GOUP will arrange for necessary financing to fund the capital requirements and also seek GOI support as per the GOI policy in this regard.

The funding for RE would be channeled through the utility and the utility would have to commit to the targets of Rural electrification so as to meet the overall objective of 100% village electrification by the end of the policy period and universal access by 2012.

All household electrification including agricultural tubewells in future would be on a 100% metered basis.

Some RE institutional models are being experimented with in India like the Rural Franchisee Concept, the Single Point Supply and Metering and the Cooperative Model. GOUP would explore various options for improving the quality of supply in the rural areas such as permitting stand alone systems and management of local distribution in rural areas through Panchayati Institutions, users' associations, co-operative societies, non-Governmental organisations or franchisees. GOUP recognizes the diversity and would encourage multiple forms of governance. GOUP would provide the necessary ingredients for the success of the rural initiatives that are a) capital and revenue subsidy b) stringent commercial orientation and efficiency parameters c) apolitical set up of the local body with appropriate performance incentives.

## **ENERGY CONSERVATION AND DEMAND SIDE MANAGEMENT**

Having addressed the supply side issues by way of installation of new generating capacity, R&M and improvement of delivery infrastructure, GOUP intends to complement these measures through appropriate initiatives in demand-side management also. GOUP realizes the importance of energy conservation as a major thrust of the power policy. There is a need to have a system that encourages energy conservation and provides disincentives for inefficient use of energy. GOUP would promote measures for economy and efficiency in energy consumption. The Regulatory Commission has already introduced Time of Day tariffs in UP.

- a) GOUP would in consultation with the Regulatory Commission formulate a comprehensive Demand Side Management policy covering the tariff measures,
- b) Energy audit will be made compulsory for all major industrial and large commercial establishments.
- c) GOUP would initiate measures to improve efficiency of agricultural pumpsets and all electrical installations.
- d) Through suitable directives and fiscal incentives/disincentives, GOUP will actively promote use of energy efficient equipments.
- e) A communication campaign would be launched for consumer guidance and education programme for spreading mass awareness about energy conservation measures..

## **GENERATION THROUGH RENEWABLE ENERGY SOURCES**

GOUP would encourage & support power generation through renewable energy sources such as solar, wind etc. GOUP will come up with special policy framework to support such projects.

## **SPECIAL EMPHASIS ON ANTI THEFT MEASURES**

Though the GOUP had earlier enacted a stringent Anti theft legislation, it has been largely ineffective so far and theft continues to be endemic. The Central Government has recently enacted the Electricity Act, 2003 ("Act") which also has a number of Anti theft provisions including the provision for constitution of special courts for speedy trial of electricity theft related offences. GOUP would undertake an extensive review of the implementation of the anti theft provisions of the Act and take necessary steps for their effective implementation including carrying out legislative changes by either taking up the matter with the Central Government or enacting a state level legislation on the subject.

GOUP would for the purpose of providing speedy trial of electricity theft related offences constitute Special Courts as specified in the Act. GOUP could also consider setting up of special police stations on the lines of West Bengal and Gujarat for effective implementation of the anti-theft provisions of the Act.

GOUP would also launch a mass communication campaign to improve awareness about the hazards of illegal tapping, the various anti-theft provisions in the Act, etc.

## **EMPLOYEE INTERESTS**

GOUP recognizes that a financial crisis and unviability of the power sector with its present operations is most detrimental to employee interests. GOUP recognizes the critical role of the employees to ensure success of the entire reform initiative. GOUP is fully committed to protecting the interest of the employees and in this regard, GOUP has already assumed Pension & Gratuity and GPF liabilities of the employees. The State Government is also committed to ensuring that the terms and conditions of service of employees will in no way be made inferior to the existing terms and conditions. GOUP is also alive to the needs of the new competitive environment where state-of-the-art skills and knowledge would be a key factor in ensuring the survival and success of any organization. GOUP would ensure that all employees are imparted necessary training and skill-development opportunities on a regular basis.

## **ENERGY TASK FORCE**

GOUP proposes to achieve the objectives of this policy in an expeditious and time-bound manner. To achieve this time schedule, a focused and dedicated team of senior Government officials supported by cross-functional experts would be necessitated. Accordingly, GOUP has decided to constitute an empowered Energy Task Force (“ETF”) headed by the Chief Secretary with a permanent office and dedicated personnel with technical, commercial, financial and legal specialization. Necessary Consultancy support would also be provided to the Energy Task Force to render professional expertise and guidance in the implementation of the various tasks associated with this Policy.

Implementation of the various measures envisaged in this policy in an expeditious and smooth manner would be the key function of the ETF. As part of its functions, the ETF would regularly monitor and review the progress and implementation of the policy. The ETF would be responsible to operationalise the guidelines and objectives of this Policy. The ETF would monitor and take necessary steps to implement the objects of the policy.

To expedite the successful implementation of various projects, the ETF shall act as a single window for the grant of all state level approvals & clearances within three months of application. As regards central level clearances & approvals, the ETF shall render all possible support to facilitate the same.