CHAPTER 5

POWER DISTRIBUTION REFORMS IN DELHI – A HISTORICAL PERSPECTIVE

5.1 INTRODUCTION

This chapter attempts to provide a spectrum of Power sector distribution reforms objectives, need and process in Delhi. It attempts to review Power distribution situation before restructuring and the regulatory support to reforms, analyze the restructuring process of Delhi Vidyut Board and lessons learnt from the privatization of distribution in particular. The efforts made by Central Government to build consensus and to bring about necessary legislative changes from time to time forcing the hands of State Governments isl also be discussed.

5.2 BACKGROUND

Delhi is spread over an area 1,483 sq km and has a population of nearly 14 million with the population of New Delhi alone only exploding to 11,680,000. According to Census 2001, the population of New Delhi together with Delhi as a whole has ascended to 46.3% in 1991-2001. The population of New Delhi is expected to rise 40% by 2021. Delhi is considered to be the second largest metropolitan city next to Mumbai with approximately 1,38,50,507 people dwelling in New Delhi according to Census 2001.From 1981 to 2001, as per the Census, the population growth rate of Delhi was around 4.5% (which was the highest population growth rate amongst all the cities in India).

The history of meeting its power requirements started with DVB which traces its origins back to 1905, when M/s John Fleming Company was given the licence to produce and distribute power in Delhi under the Indian Electricity Act, 1903. It was replaced by the Delhi Tramway and Lighting Co., later renamed the Delhi Electricity Supply & Transaction Company. On July 1, 1939, Delhi Central Electric Power Authority was formed to engage in the business of generation and supply of electricity including supply in bulk to consumers in Delhi.

In March, 1951 the Management of the Delhi Central Electric Power Authority was taken over by the Delhi State Electricity Board (DSEB) constituted under the Indian Electricity (Supply) Act, 1948. On the formation of the Municipal Corporation of Delhi on 7th April, 1958, the electricity supply business was transferred to the Delhi Electric Supply Undertaking (DESU) and DSEB ceased to exist. The new body was governed by the provisions of the Delhi Municipal Corporation Act, 1957. Since the areas under the New Delhi Municipal Committee (later, Council) and the Delhi Cantonment Board were outside the jurisdiction of the new Municipal Corporation, the Act provided for bulk supply to them; they looked after their own local distribution, as they continue to do so.

DVB was constituted under section 5 of the Electricity Supply Act, 1948 by a notification dated 24th February, 1997 on the dissolution of DESU pursuant to an amendment of the Delhi Municipal Corporation Act in 1993. After the formation of DVB the electricity generation, transmission and distribution business of DESU was taken over by DVB. DVB distributed electricity in the major part of Delhi (in 1397.29 sq. kms out of the total Delhi area of 1483 sq. kms). Two other distribution licensees namely New Delhi Municipal Council (NDMC) and Military Engineering Services (MES) also distribute electricity in a limited area of Delhi.

The DVB, just as any other State Electricity Board (SEB) functioned under the provisions of the Electricity (Supply) Act, 1948. The structure and functions of the SEBs under this act were designed in such a fashion that it was a service provider as well as a regulator in certain respect. The Governments had a large say in matters of day to day functions of the Board such as appointment of its key functionaries, budget, restriction on unbudgeted expenditure, borrowings by the board, extent of profits to be earned, manner of preparation of accounts, its tariff structure etc. Structure wise these Boards were completely different from companies or co-operative societies.

5.2.1 The Situation before Restructuring

The transformation from a municipal undertaking to a full fledged Electricity Board in 1997 did not change the culture of the organization nor did it bring

about any change in the operational efficiency of the organization. It only brought about a change in the legal status. The power supply position in Delhi before restructuring was characterized by, the following:

(a) Poor financial condition – over the last years (FY 1992-93 to FY 2001-2002) the losses of DVB had risen from Rs. 250 crores to Rs. 1092 crores.

(b) Demand supply imbalance – Between 1994-95 and 2000-01 peak demand of Delhi increased from 1898 MW to 2670 MW, an increase of over 40%. While demand was increasing rapidly the capacity addition remained relatively stagnant. Generating stations in Delhi had an installed capacity of 694 MW but availability was lower at 300-350 MW.

(c) The number of registered consumers increased from 19.3 lacs to 24.5 lacs in the period 1994-95 to 2000-01.

(d) Only 57.3% of the energy supplied was billed and only 88% of the billed amount was collected during 1998-99. Relevant figures for 2001-02 were 54% and 91% respectively.

(e) T&D losses were in the range of around 48.6% in the year 1997-98 and 46.32% in 2001-02.

(f) High amount of technical losses were mainly due to poor maintenance of existing infrastructure and very little augmentation.

(g) High commercial losses were mainly attributable to the following:
- Metered consumers using faulty meters and showing low consumption
- Illegal connections by people living in unauthorized colonies
- Industries in designated urbanized villages stealing due to prevalent conditions of supply.
- Misclassification of load with regard to domestic and commercial consumption.

(h) High amount of receivables for DVB. As on 2000-01 total receivables of DVB amounted to Rs 3439 Crores, bulks of which were more than three years old.

Keeping in view the above mentioned problems the need was to establish commercially viable restructured companies in place of DVB which would not be dependent on state funding; to improve revenue recovery; to reduce T&D losses; to keep tariffs at reasonable level; to improve the quality of service to the consumers; to promote private sector investment in generation, transmission and distribution and to ensure employees security of their services.

5.3 RESTRUCTURING OF THE DVB

5.3.1 Objectives

The objectives behind the comprehensive reform programme were declared to be as follows:

- Improved Quality of Service to the consumers
- Make electricity available at competitive prices
- Improve operational efficiencies through reduction in losses
- Reduce government funding in the electricity sector

5.3.2 The Drivers

(a) Power Supply Position: Power supply position in Delhi deteriorated rapidly both in quantitative and qualitative terms. While the city of Delhi was experiencing a demand growth which was one of the highest in the world there was little or no capacity addition in and around Delhi in recent years. As a result Delhi was encountering rolling blackouts during peak summer causing serious inconvenience to its citizens. In fact by 1998-99 the crisis had assumed gigantic proportion. General dissatisfaction with the DVB led to demonstrations, riots and frequent criticism in media.

(b) Stagnating Investment in the Sector: With mounting commercial losses mainly on account of losses, primarily at the end of value chain (Distribution level) the sector was bankrupt with no capacity to finance investment needs by itself. Poor financial health of DVB discouraged private investment as investors were not willing to assume huge payment risk.

(c) Concerns of Image: Delhi being the capital of India, frequent power cuts attracted adverse attention of international media reflecting poor governance of public utilities. The impression that Government was incapable of improving power supply in the city of Delhi needed to be corrected.

5.3.3 The Process

(a) Strategy Paper: In February 1999 the National Capital Territory of Delhi constituted a committee on Power Sector Reforms and the committee brought out a Strategy Paper on the state of power supply in Delhi recommending inter alia,

- Generation and transmission should be separated from distribution and a separate company be formed to take of these functions.
- Private sector participation in generation should be encouraged through the BOT/BOOT route.
- New distribution companies should be set up to cover the six circles of DVB. These companies could be organized as joint ventures.
- Delhi Electricity Regulatory Commission (DERC) should be established.
- The interests of the employees of DVB must be protected as part of the restructuring. Staff matters were to be resolved through consultation with the unions and employees. More specifically, there was to be no retrenchment or change in service conditions of the staff.

(b) Creating the Legal Basis: In the absence of a Central Legislation, State Legislature of Delhi passed the Delhi Electricity Reform Act, 2000 (DERA) on November 23, 2000 which was assented by the President of India on March 6, 2001. The Act enabled State Government to undertake comprehensive reform of the power sector by unbundling Delhi Vidyut Board into separate companies. Delhi Electricity Regulatory Commission which was earlier constituted in 1999, under the provisions of the Electricity Regulatory Commission Act, 1998 (a central legislation) was converted as Electricity Regulatory Commission of Delhi under section 3 of the DERA.

5.3.4 Physical Restructuring

(a) The Delhi Electricity Reform (Transfer Schemes) Rules: To operationlise the GNCTD's decisions of restructuring the Delhi Power sector, a Transfer Scheme was formulated and issued. The Transfer Scheme became effective from July 1, 2002 as the effective date of transfer. On and from the date of transfer, all assets, liabilities and proceedings and personnel of Delhi Vidyut Board were transferred to and vested in the Government absolutely, and in consideration thereof the loans, subventions and obligations of the Board to the Government shall stand extinguished and cancelled, which shall be full and final settlement of all claims whatsoever of the Board.

(b) New Companies: As a result of restructuring 6 companies were created. The assets/liabilities vested with Government were transferred to successor companies as follows:

(i) Indraprastha Power Generation Company Ltd.

Existing generating assets of DVB viz, Indraprastha Thermal Power Station (One unit 36.6 MW, three units of 62.5 MW each and one unit of 60 MW), Rajghat Thermal Power Station (Two units of 67.5 MW each), and Gas Turbine Power Stations (six units of 30 MW each and three units 34 MW each) have been transferred to this company.

(ii) Delhi Transco Limited

Existing transmission assets of DVB were transferred. Transco will hold following assets:

- All the double/single circuit transmission lines of voltage 220 kV, 400 kV with grid stations of these voltage ratings till the 66 kV/33 kV line isolates.
- Switchyards at various generating stations feeding the NDMC, MES and other parts of Delhi
- Protective devices with power-line communication systems.
- Allied control rooms.

However, no part of land formed part of the assets transferred under this scheme. TRANSCO is entitled to use the land as a licensee only.

(iii) BSES Yamuna Power Ltd.

The distribution assets of Central and East circles of Delhi Vidyut Board were transferred.

(iv) BSES Rajdhani Ltd.

The distribution assets of South and West circles of Delhi Vidyut Board were transferred.

(v) North Delhi Power Ltd.

The distribution assets of North and North-west circles of Delhi Vidyut Board were transferred.

The distribution companies were mandated to have the following assets in their area of supply:

- All the 66 kV grid substations along with the associated transmission lines
- 11 kV and LT lines
- Step up/Step down Transformers
- Right of way
- Any other assets required for distribution and existing in its area of supply.

(vi) Delhi Power Company Ltd. (Holding company)

This company shall hold shares in GENCO, Transco and Discoms (i.e. companies from (1) to (v) above). All the liabilities of DVB were transferred to holding company. Out of these serviceable liabilities were transferred to successor entities and balance were retained by Holding company.

5.3.5 Financial Restructuring

While allocation of physical assets to the different successor entities was relatively simple exercise, it was the financial restructuring which was a complicated process. The purpose of financial restructuring of any entity is to

clean up the existing balance sheet by innovative methods of tackling unmanageable liabilities. The DVB was beset with huge uncovered losses and a significant debt overhang. The consultants appointed for the purpose namely the SBI caps studied various alternatives to suggest a financial reign which was viable over long run.

(a) Principles

The only stream of revenue for the entire electricity chain viz. generation, transmission and distribution is the revenues from sale to retail consumers. Thus the electricity chain can be viable if and only if the distribution business is viable. It is also imperative that the business turns around within as short a time frame as possible within a span of 4-5 years. The framework for reforms in power sector in Delhi has been structured to achieve such as objective.

The key principles that were kept in mind while building the framework are as follows:

(i) Past liabilities and past losses of DVB are not to be passed on to the successor entities.
(ii) The restructured entities should start with clean opening balance sheets.
(iii) No retail tariff shocks to the consumers.
(iv) The Government to provide support for losses in the initial years i.e. till the time the electricity business become self-sustainable.
(v) Mitigation of uncertainty, regulatory or other-wise to the extent possible.
(vi) Consumers to get the maximum benefit from the privatisation exercise.
(vii) Incentives and profit sharing mechanism, related to performance, provided to Distribution Companies.

(b) Valuation of Assets

The Business Valuation Methodology was adopted for valuation of assets of a going concern which involves determination of the asset value based on the revenue earning potential of the business.

The methodology is also necessitated by the legal framework governing the electricity distribution business. In India, licensees have been primarily

regulated by the application of the cost plus (also known as rate of return) regulation prescribed by the Sixth Schedule of the Electricity (Supply) Act. It is noteworthy that one of the principal factors for determination of the revenue requirements (and the consequent consumer tariffs) continues to be the principles set out in the Sixth Schedule.

The Sixth Schedule stipulates that the consumer tariffs charged by the licensee should be adjusted in a manner such that after meeting all expenses (which include the interest on debt incurred for funding asset acquisition), the licensee earns the 'Required Rate of Return' (RROR) on 'Capital Base' which may broadly be defined as the amount of equity invested into fixed assets.

Hence, while valuing the assets, in case the value is fixed at a high level, in order to permit the licensee to earn the permissible return within the provisions of the Sixth Schedule (which allow for adjustment of consumer tariffs for earning RROR), any reform exercise may lead to immediate tariff shocks. Therefore, the valuation method becomes very important. Valuation of assets based on book value depreciated replacement cost may not be appropriate due to the non-availability of authentic data and because these methods do not ensure that the value of assets is fixed at a level which can be supported by reasonable tariffs. To overcome such difficulties it has been found advisable that rather than taking the asset value as an input (as taken in other valuation methods e.g. book value and depreciated replacement cost) and calculating the allowable retail tariffs, the future earning potential is taken as an input, and the asset value is derived such that the desirable return (a function of the asset value) is equal to the return that may be permissible by the ERC and the business can turn around in a given time frame.

Therefore, in the business valuation of the assets of a vertically integrated utility, the starting point is a forecast of the reasonable retail tariffs (including sustainable increases), which can be charged from consumers in future years. The value of distribution assets is derived at a level where such asset value results in the licensee earning the permissible return in a reasonable period of time.

The advantage of using business valuation is that it clearly identifies and factors in, the link between asset value and consumer tariffs and thus protects the interest of consumers. Business valuation also protects the interest of the utility since assets are valued at a level at which it earns a reasonable rate of return after considering future load increases, T&D loss reductions, capital expenditure for system up-gradation and tariff increases etc. This valuation method is consistent with the manner in which assets are valued by companies around the world viz. that assets normally command a value, which is based on the profits that can be generated from the use of such assets.

(c) Steps in Business Valuation Methodology

The estimation of the earning potential broadly involves projection of the revenues and expenses of the generation, transmission and distribution entities. Briefly, Business Valuation involves the following steps:

- Step 1: Determination of Revenues based on estimation of:
  - tariffs which can be reasonably charged from consumers
  - projected demand and available supply
  - existing AT&C Losses and loss reductions
- Step 2: Determination of Expenses based on estimation of:
  - cost of power purchase from outside sources and own generation
  - estimation of all expenses (including reasonable return) other than cost of power
- Step 3: Computation of Earnings of all three entities (generation, transmission and distribution)
- Step 4: Assumption of a debt equity ratio.
- Step 5: Derivation of the asset value, such that the electricity sector becomes viable (i.e. starts generating a surplus) in a reasonable period of time, say in the fourth year of operations.

It may be clarified that business valuation is not based on the details of individual assets deployed in the area of supply of a utility and hence any such comparison needs to be avoided.

(d) Treatment of Liabilities

- **Long Term Liabilities**

The long term liabilities, broadly the debt and equity of each successor entity of DVB that can be serviced through reasonable tariff increases and efficiency improvements have been determined and notified in the Transfer Scheme. The details are given in Table 5.1.

Table 5.1: Apportionment of long term liabilities among DISCOM (Rs. Crores)

	GENCO	TRANSCO	BYPL	BRPL	NDPL	Total
Share Capital	140	180	116	460	368	1264
Secured Loan payable to Holding Company	210	270	174	690	552	1896
Total	**350**	**450**	**290**	**1150**	**920**	**3160**

Source: Government of Delhi

The long term and power purchase liabilities of DVB as on March 31, 2000 have been estimated as Rs.22,250 crores. As can be seen from the table above long term liabilities totaling Rs.3,160 crores only were transferred to five companies, balance retained with the holding co. Out of Rs.3160 crores a sum of Rs.1896 crores has been categorised as secured loan from the holding company. Successor entities are required to repay the loan to holding company in a period of 13 years with a moratorium of first 4 years. However, out of total liabilities of around Rs.22,250 crores, liabilities of around Rs.12,953 crores relate to DESU period which is likely to be taken over by the Central Government. The process made the Holding Company the owner of the five successor companies, which had clean balance sheets.

- **Current Liabilities**

As per the Annual Statement of Accounts for 1999-2000 of DVB, the current liabilities were around Rs.1077 crores as on March 2000. However, in the Transfer Scheme, effectively, liabilities of only Rs.42 crores which are payable to the Holding Company have been transferred to the DISCOM. This is so because against the amount payable to TRANSCO, receivables of an equivalent amount have been transferred to each of the DISCOMS. The details of the liabilities transferred to the DISCOM are as under (Table 5.2).

Table 5.2: Apportionment of current liabilities among Discom (Rs. Crores)

	BYPL	BRPL	NDPL	Total
Payable to Holding Company	15	15	12	42
Payable to TRANSCO	68	122	88	278
Consumer Security Deposit	8	11	10	29
Total	**91**	**148**	**110**	**349**

Source: Government of Delhi

The Transfer Scheme stipulates that the entities shall undertake to repay the current liability payable to Holding Company mentioned in the table above within one year in twelve equal monthly installments.

Besides, the Transfer Scheme also stipulates that the entities shall undertake to repay the current liability payable to TRANSCO mentioned above within the first two months from the date of transfer.

- **Contingent Liabilities**

Contingent liabilities in case of distribution businesses primarily relate to items such as consumer claims, refund of security deposit, claims for damages for losses caused to consumers and third parties etc. Usually it is very difficult to identify and quantify the contingent liabilities that may devolve on a particular company. In order to mitigate the uncertainty for the investors all the contingent liabilities, whether pending on the date of transfer or initiated after the date of transfer, for any liability which may have arisen before the date of transfer, have been transferred to the Holding Company.

- **Terminal Benefit Liabilities**

Regarding pension liability. like many SEBs the pension was paid out of current revenues. Terminal Benefit Liabilities of the DVB employees as on 31st March 2001 were Rs. 1329 crores. Out of the said liability, funds to the tune of Rs.443 crores were already available with DVB.As per the terms of the tripartite agreements signed between the Government, DVB and the a) Joint Action Committee and b) DVB Junior Engineers Association the Government has arranged to fund the Trust through a lump sum payment so as to fund entirely the unfunded portion of terminal benefit liabilities till the date of the transfer of DVB employees to the successor entities.

(e) Treatment of Past Receivables

The outstanding receivables of DVB from sale of power to consumers as on October 2000 were around Rs.3439 crores. However, only receivables equivalent to around one month of billing were passed on to the DISCOM. The balance receivables will be to the account of the Holding Company. The DISCOMS are entitled to collect the receivables owned by the Holding Company from consumers in its area of supply. For collecting such receivables they shall be entitled to retain 20% of the amount so collected as service charge. The relevant extract of the Transfer Scheme, is reproduced below for the same of convenience.

(f) Treatment of Land

As per the terms of the Transfer Scheme, land has been given on license to the GENCO, TRANSCO and the DISCOM. The transferee shall be entitled to use such land as a licensee of the GNCTD on payment of a consolidated amount of Re.1 only per month during the period and the transferee has the sanction or license or authorization to undertake the distribution business. As and when such license or sanction or authorization is revoked or cancelled or not renewed or the area of supply where the land is situated is withdrawn from the transferee, the license to the transferee in respect of such land shall stand cancelled.

(g) Support from Government of National Capital Territory of Delhi

GNCTD privatized distribution at a time when AT&C loss levels were still very high (above 50%). For any private company it would have been impossible to manage distribution without a steep tariff hike across the board to bridge the gap between expenditure and revenues. Any tariff shocks immediately after privatization would have questioned the efficacy of privatization itself. Government therefore decided to provide a transition support of Rs.3450 crores during the period 2001-02 to 2006-07 as a loan to Distribution Companies. It was finally decided that this transition support would be provided to TRANSCO, who in turn will reduce the Bulk Supply Tariff (the tariff at which Distribution Companies purchase power from TRANSCO). The reasons for providing this support to TRANSCO instead of DISCOM were stated as follows:

(i) Providing loan to DISCOMs would affect their gearing ratio affecting their ability to borrow from market.

(ii) Risk of timely disbursal of support from Government to DISCOM will be eliminated.

Besides the stated reasons above, GNCTD was wary of providing funds to private Distribution Companies, which would have generated adverse comments from media. It would have been argued by the group opposing privatization that if Government was to continue to provide support from public exchequer then what was a need to private distribution. By providing transition support through TRANSCO which is wholly owned by Government, it was able to avert a lot of possible criticism.

Opening Balance Sheets of the Companies

As a result of the financial restructuring, opening balance sheets of restructured companies were as follows:

Table 5.3: Opening Balance Sheet of Indraprastha Power Generation Company Ltd.

Opening Balance Sheet of GENCO

(in Rs. Crore)

Liabilities		**Assets**	
Long Term Liabilities		**Fixed Assets**	
Authorized, issued, subscribed, and paid up 140,000,000 shares of Rs. 10 each in favour of holding company	140	Gross Fixed Assets	510
Secured loan payable to holding company	210	Less : Accumulated depreciation	160
Total	350	Net fixed Assets	350
Current Liability		Current Assets	
Payable to holding company	49	Receivable due from TRANSCO	42
Other current liabilities	42	Cash and Bank balance	9
Total	91	Fuel Stock	26
		Spares and Stores	12
		Loan to personnel	2
		Total	91
Total Liabilities	441	Total Assets	441

Source: Part II of Delhi Electricity Reform (Transfer Scheme) Rules 2001 (As mentioned in the Gazette of India)

Table 5.4 Opening Balance Sheet of Delhi Transco Ltd.

(in Rs. Crore)

Liabilities		**Assets**	
Long Term Liabilities		**Fixed Assets**	
Authorized, issued, subscribed, and paid up 180,000,000 shares of Rs. 10 each in favour of holding company	180	Gross Fixed Assets	650
Secured loan payable to holding company	270	Less : Accumulated depreciation	200
Total	450	Net fixed Assets	450
Current Liability		**Current Assets**	
Power purchase liability payable to GENCO	42	Receivable due from DISCOMS	278
Other power porches liabilities	236	Cash and Bank balance	7
Payable to holding company	14	Stores and spares	5
Total	292	Loan to personnel	2
		Total Current Assets	292
Total Liabilities	742	Total Assets	742

Source: Part II of Delhi Electricity Reform (Transfer Scheme) Rules 2001 (As mentioned in the Gazette of India)

Table 5.5 Opening Balance Sheet of BSES-Yamuna Power Ltd.

(in Rs. Crore)

Liabilities		**Assets**	
Long Term Liabilities		**Fixed Assets**	
Authorized, issued, subscribed, and paid up 116,000,000 shares of Rs. 10 each in favour of holding company	116	Gross Fixed Assets	360
Secured loan payable to hold company	174	Less : Accumulated depreciation	70
Total	290	Net fixed Assets	290
Current Liability		Current Assets	
Payable to holding company	15	Receivable due from consumers	68
Payable to TRANSCO	68	Cash and Bank balance	12
Consumer Security Deposit	8	Stores and spares	5
Total	91	Loan to personnel	6
		Total Current Assets	91
Total Liabilities	381	Total Assets	381

Source: Part II of Delhi Electricity Reform (Transfer Scheme) Rules 2001 (As mentioned in the Gazette of India)

Table 5.6: Opening Balance Sheet of BSES-Rajdhani Power Ltd.

(in Rs. Crore)

Liabilities		**Assets**	
Long Term Liabilities		**Fixed Assets**	
Authorized, issued, subscribed, and paid up 460,000,000 shares of Rs. 10 each in favour of holding company	460	Gross Fixed Assets	1533
Secured loan payable to hold company	690	Less : Accumulated depreciation	383
Total	1150	Net fixed Assets	1150
Current Liability		**Current Assets**	
Payable to holding company	15	Receivable due from consumers	122
Payable to TRANSCO	122	Cash and Bank balance	15
Consumer Security Deposit	11	Stores and spares	5
Total	148	Loan to personnel	6
		Total Current Assets	148
Total Liabilities	1298	Total Assets	1298

Source: Part II of Delhi Electricity Reform (Transfer Scheme) Rules 2001 (As mentioned in the Gazette of India)

Table 5.7: Opening Balance Sheet of North Delhi Power Ltd.

(in Rs. Crore)

Liabilities		**Assets**	
Long Term Liabilities		**Fixed Assets**	
Authorized, issued, subscribed, and paid up 368,000,000 shares of Rs. 10 each in favour of holding company	368	Gross Fixed Assets	1210
Secured loan payable to hold company	552	Less : Accumulated depreciation	290
Total	920	Net fixed Assets	920
Current Liability		**Current Assets**	
Payable to holding company	12	Receivable due from consumers	88
Payable to TRANSCO	88	Cash and Bank balance	11
Consumer Security Deposit	10	Stores and spares	5
Total	110	Loan to personnel	6
		Total Current Assets	110
Total Liabilities	1030	Total Assets	1030

Source: Part II of Delhi Electricity Reform (Transfer Scheme) Rules 2001 (As mentioned in the Gazette of India)

5.3.6 Getting the Employees along

One of the important issues in the restructuring of DVB was to take employees into confidence so as to avoid misunderstanding and allay the fear of unknown. On restructuring the existing personnel were transferred to successor entities on the principle of "as is where is" basis. Transfer scheme provides that the terms and conditions of services applicable to transferred employees shall not in anyway be less favorable or inferior to those applicable to them immediately before the transfer. A total of 23573 employees were allocated to five successor entities.

In order to ensure smooth implementation of the policy of reorganization and restructuring of DVB, the employees of DVB, management of DVB and the Government of NCT of Delhi entered into the following agreements:

(i) Tripartite agreement between the Government of NCT of Delhi, Delhi Vidyut Board and the Joint Action Committee of Workers, Supervisors, Engineers and Officers of DVB
(ii) Tripartite agreement between the Government of NCT of Delhi, Delhi Vidyut Board and DVB Junior Engineers Association

The salient features of these agreements are as under:

(i) There will be no retrenchment of present employees and their status/service conditions will not change.
(ii) The terms and conditions of service upon transfer to the corporate entities, such as promotions, transfers, leave and other allowances, etc. regulated by existing regulations/service rules e.g. FR/SR will be guaranteed to continue the same.
(iii) The Government shall create a Pension Fund in the form of a trust and the pensionary benefits of the absorbed employees shall be paid out of such pension fund.
(iv) The period of the service of the employees under the Board and under the corporate entity shall be treated as continuous service for the purpose of all service benefits payable to the personnel.

(v) An adhoc payment of Rs.500/- per month will be paid to each of the employees on transfer to the new corporate entities which will be adjusted against any future pay revision.

5.4 PRIVATISATION OF DISTRIBUTION

Delhi Government's strategy paper on Power Sector Restructuring had recommended setting up new Distribution Companies to take over distribution circles which could be organized as Joint Ventures. The issue of timing of privatization also came up for discussion. The alternative was to privatize after improving the performance in the State Sector. The Government however decided to privatize distribution at the beginning itself with a view to achieve the objective of improving the power supply at a faster pace. This was achieved as under:

(i) The functions of distribution and supply were vested in three distribution companies.
(ii) 51% equity shares in three Distribution Companies were offered to private investors through a competitive bidding route.

5.4.1 Bidding Criteria

The bidding criterion adopted by GNCTD was different from the criteria adopted while privatizing distribution in Orissa in 1999. In Orissa the bidding criteria was sale of 51% equity in Discoms to the highest bidder. The process adopted in Delhi had following important features:-

(a) In the Power Sector in India reduction of losses is the first priority. Therefore while privatizing distribution the reduction of losses needs to be incentivised. Sale of assets to the highest bidder may fetch one time revenue but the consumers will have to pay high tariffs for high high asset value and high level of losses. Therefore the bidding criterion adopted was commitment to reduce AT&C losses.
(b) Over-achievement in reduction of losses will be shared equally by the Discom and the consumers.

5.4.2 Building Certainty

Distribution business is considered to be more risky as compared to generation and transmission. Government felt that in order to attract investors to Delhi's distribution business certainty would need to be provided to investors to mitigate some of these risks. Providing a Multi-Year Tariffs framework was considered initially. However DERC was not in favour of fixing the multi-year tariffs because of unreliability of information that was available. Following steps were thereafter taken to build certainty:

(a) Setting up of AT&C Loss Levels

A joint petition was filed by the TRANSCO and the three DISCOMs before DERC for the determination of Bulk Supply Tariff for the period till March 31, 2002 and opening level of AT&C Losses for the DISCOMs. The Commission, after detailed analysis of the petition and supporting information submitted by the petitioners and after due consideration of the responses received from the various stakeholders and policy directions, issued an order on Bulk Supply Tariff and opening level of AT&C losses for the three DISCOMs. The opening level of AT&C losses and Bulk Supply Tariff as approved by the Commission for the three DISCOM were as follows (Table 5.8).

Table 5.8: DERC decision on opening AT&C loss level and BST

DISCOM	Opening Level of AT&C Loss	Bulk Supply Tariff (Paise/kWh)
BYPL	57.2%	132.9
NDPL	48.1%	152.49
BRPL	48.1%	151.96

Source: DERC ,2002

(b) Delhi Government's Policy Direction to DERC

Another way to bring certainty to investors the Government decided to issue a policy directive to DERC in November 2001, which inter alia provided for:

- AT&C losses to be used to measure the efficiency of DISCOMs.
- AT&C loss reduction targets for the five year transition period to be set on the basis of bidding.

- Opening loss levels to be set by DERC.
- In case a DISCOM was able to reduce the AT&C losses below the target level, the additional revenue generated was to be shared 50%-50% between consumers (through lower tariffs) and the DISCOMs.
- Retail tariffs were to be set so that the DISCOMs earned at least 16% on their equity invested in the company, provided they met the AT&C loss reduction targets.
- The retail tariffs for all three DISCOMs were to be uniform until the end of the transition period.
- From the date of issuance of these policy directions till the end of 2006-07, tariffs to be determined by the Commission such that the distribution licensees earn at least 16% return on the issued and paid up capital and free reserves (excluding consumer contribution and revaluation reserves but including share premium and retained profits outstanding at the end of any particular year) provided that such share capital and free reserves have been invested into fixed or any other assets, which have been put into beneficial use for the purpose of electricity distribution and retail supply.
- The GNCTD would make available to the Transmission Company an amount of the order of approximately, Rs. 2600 crore (which was later revised to Rs. 3450 crore as per the amendment to the policy directions issued by the GNCTD on May 31, 2002) during the period 2002-03 to 2006-07 as loan to be repaid by the Transmission Company. The Transmission Company will use the loan to bridge the gap between its revenue requirements and the bulk supply price, which it may receive from the distribution licensees.
- The Commission would decide on performance standards and other obligations of the distribution licensee and determine the tariff subject to the requirements of consistency with these policy directions.

5.4.3 Bidding Process and Selection of Investors

The GNCTD along with DVB and PFC organized an investor's conference in January 2001 to communicate the efforts carried out by the GNCTD and the expectations it had from the prospective partners. More than 100 probable investors attended the conference and included major national and

international companies, financial institutions, foreign diplomatic representatives and industry associations.

Request for Qualification (RfQ) document was issued on February 15, 2001; the document was purchased by 31 parties. The document invited Statement of Qualification (SOQ) form the prospective bidders to be submitted by April 10, 2001. The main eligibility criterion was that the bidder should be a company with a net worth of Rs.5000 crore. Of the 31 parties purchasing the RfQ document only 7 prospective bidders submitted their SOQ. A Committee was constituted to evaluate the SOQs received. The Committee included representatives of the Ministry of Power, CEA, officers from the GNCTD and a senior independent expert. The Committee pre-qualified six prospective bidders, viz. AES, BSES, China Light & Power, CESCON, Reliance, and TATA Power.

RFP Bids were invited from the short listed bidders. The GNCTD specified minimum AT&C loss reduction level to be achieved by the successful bidders. The bids were submitted in the month of April, 2002, however, the loss level trajectory as submitted by the bidders was not in the acceptable range of the GNCTD and the bidders were called for negotiations. After a number of discussions, the bidders and the GNCTD came to an agreement on the accepted year-wise AT&C loss reduction trajectory over the five year period. The revised bids were submitted in the month of May 2002 and the successful bidders were selected. The successful bidders were BSES (for two circles- Central & East and South & West) and TATA Power (North & North-West).

The opening loss level as well as the loss reduction trajectory accepted by the investors for each DISCOM and the minimum AT&C loss reduction level as indicated in the accepted bids is as follows:

Table 5.9: Targeted loss reduction trajectory for BYPL (in %)

		2002-03	2003-04	2004-05	2005-06	2006-07
Opening	57.2					
Accepted Bid		0.75	1.75	4.00	5.65	5.10
Minimum		1.50	5.00	5.00	5.00	4.25

Source: DERC,2002

Table 5.10: Targeted loss reduction trajectory for BRPL (in %)

		2002-03	2003-04	2004-05	2005-06	2006-07
Opening	48.1					
Accepted Bid		0.55	1.55	3.30	6.00	5.60
Minimum		1.25	5.00	4.50	4.50	4.00

Source: DERC,2002

Table 5.11: Targeted loss reduction trajectory for NDPL (in %)

		2002-03	2003-04	2004-05	2005-06	2006-07
Opening	48.1					
Accepted Bid		0.5	2.25	4.50	5.50	4.25
Minimum		1.50	5.00	4.50	4.25	4.00

Source: DERC,2002

The process for the selection of the private investor was initiated with the issue of this RFQ. The other steps undertaken for the selection of the private investor, along with the time frame thereof, are as follows:

Exhibit No. 5.1: The process for the selection of the private investor and issue RFQ

Task	Completion Date (in 2001)
Issue of RFQ	February 15
Issue of Draft Documents for Privatisation (bulk supply agreement, shareholders agreement, share acquisition agreement)	March 02
Receipt of Queries on RFQ and Draft Documents for Privatisation	March 20
Anticipated date of issue of Tariff Order for 2001-02	April 02
Issue of Clarifications, if necessary, on queries on RFQ and Draft Documents	April 09
Receipt of RFQ Bids	Upto April 16
Pre-Qualification of Bidders	April 30
Issue of RFP* to pre-qualified bidders	May 15
Receipt of queries on RFP	June 05
Meetings with Bidders	June 25-27
Issue of Clarifications, if necessary, on queries of bidders	July 16
Receipt of REP Bids	August 30

Source: DERC, 2002

The historical financial position of DVB had not been satisfactory and had been making losses (both on energy as well as financial).In the proposed unbundling and privatization an effort had been made to ensure that the proposed successor entities are not burdened with the poor performance of the past. To ensure this objective, the following specific principles were envisaged to be followed for the DVB unbundling and privatization.

Past Accumulated Liabilities of DVB

The past losses incurred by DVB were not carried forward to the successor companies of DVB. To ensure the above, the Opening Balance Sheet showed 'nil' accumulated losses for such companies.

Past Accumulated Liabilities of DVB

The past accumulated liabilities were restructured (It may be mentioned that till the date of unbundling the DVB has contracted debt from only GNCTD and GOI. No term debt had been taken from any financial institution or bank. Only serviceable liabilities were passed through to the proposed successor entities of DVB. All the other liabilities which were considered unserviceable were parked in the proposed holding company.

The above methodology ensured that the liabilities assigned to the successor entities were limited to those which could be serviced through reasonable tariffs. This reduced the risk of any unexpected future tariff shocks for both consumers as well the as the investors.

5.4.4 Proposed Documents Required for Privatisation

For effecting privatization, certain contractual agreements would need to be entered into between the seller of shares and the buyers, the buyer and seller of electricity etc. Drafts of these agreements (such as bulk supply agreements, share acquisition agreement, shareholders agreement, loan agreement etc.) were made available to the bidders before the date of submission of the SOQ's pursuant to the RFQ.Finally; the Private DISCOMs became functional in July, 2002. While the regulatory role has been played by DERC in the interregnum, the GNCTD policy directions have remained in force till March, 2007.

5.5 EXPERIENCES LEARNT FROM DELHI MODEL

The Delhi power sector reforms model achieves a fine balance between the interests of all the stakeholders – Consumers, Investors, Lenders, Employees, GNCTD and Regulator. Several positive lessons can be drawn from the experience of reforms in Delhi. These are as follows:

- Political will and commitment to reforms is the foundation for the reforms. The GNCTD was fully committed to reforms and privatization since it had concluded that the status quo was untenable.
- The Delhi model makes it clear that privatization will not be successful unless Governments give continued support post-privatization in the committed manner and ensure that Government departments and entities pay their electricity bills. The GNCTD committed to provide transition support to the sector in terms of financial support to TRANSCO to the tune of Rs. 3452 Crore. It is noteworthy that the Government has honoured its commitment and paid the support promised by it as part of the restructuring and privatization process.
- The Delhi model ensures that utilities created during the reform process are not weighed down by huge financial liabilities. Imposing undue financial burden on the utilities would defeat the entire purpose of reforms - of ensuring a commercially viable power sector as the newly created companies may not be financially viable from the very first day.

The reform model adopted in Delhi also has certain drawbacks. The mechanism for delivering support is to give the DISCOMs a discount on the price that they should have paid for power purchased from TRANSCO. There are certain drawbacks in this support delivery mechanism. Since the price paid by the DISCOMs for power purchase from the TRANSCO is contingent upon the DISCOMs paying capacity, it implies that the amount of support received by an individual DISCOM - indirectly will depend to a large extent on its internal operating efficiency. The more efficient DISCOM will get a lower support, as its paying capacity will be high. On the other hand, the less

efficient DISCOM will receive a larger support in the form of a lower Bulk Supply Tariff to be paid by it.

Further the model does not give clarity on what will happen if the fixed amount of support committed by the GNCTD turns out to be insufficient during the five-year transition period. Moreover, there is no plan relating to how TRANSCO will repay the transitional support given by the GNCTD after the transition period.

5.5.1 Positive Aspects of Reforms in Delhi

- Political will and commitment to reforms is the foundation for the success of reforms.
- State Governments should give continued support post-privatization in a committed manner during the transition phase and ensure that Government departments and entities pay their electricity bills.
- State Governments need to ensure support to the reform process by way of assistance to the utilities in achieving the objectives of reforms, support for collections, enforcement of anti-theft provisions and other such means.
- Further, if the Government decides to provide support, it should clearly indicate the total amount of support and the duration or time period for which it will be available.
- In Delhi, there was an urgent need to provide reliable and quality supply at reasonable cost. There was also a need to reduce the assistance that the Government was providing to the power sector. Tackling the existing high level of technical and commercial losses provided a solution to both these problems. The focus of the Delhi Government on reduction in AT&C loss as the bid parameter therefore, addressed the problem correctly. The lesson learnt is that it is important to identify the key problems being faced in the power sector in a particular state and the reasons for the same. Once the problem is identified, the State should attempt to solve that problem. Another important lesson is that the bidding parameter must be transparent so that performance of investors against those parameters post reforms is easily measurable and is also easily understood by all stakeholders.

- There is a need to incentivize utilities to perform better. A sharing mechanism of some type is better as it ensures that both the Utilities and the consumers share the benefits of the efficiency improvements made by the Utilities. It is important that the mechanism for sharing of benefits, if any, the degree of sharing, and the bands of efficiency improvement within which benefits would be shared, etc. are clearly outlined at the start of the reforms process.
- The concerns of employees should be tackled carefully. The interests of personnel to be transferred to the utilities created as a result of reforms, particularly in case of privatization, must be protected in order to ensure a smooth transition. Further, it is not just important to protect the interest of employees, it is also important to communicate the same to them. At the same time, it is necessary that the investors and the newly created Utilities, particularly privatized utilities are unduly burdened with unfavourable terms and conditions.

5.5.2 Negative Aspects of Power Sector Reforms in Delhi

- In case of Delhi, DVB was unbundled into corporate entities and the unbundled distribution companies were privatized simultaneously. The option of allowing the unbundled corporate entities to stabilize in the Government set up may be explored before privatizing them.
- The mechanism for delivering support is to give the DISCOMs a discount on the price that they should have paid for power purchased from TRANSCO. There are certain drawbacks in this support delivery mechanism. Since the price paid by the DISCOMs for power purchase from the TRANSCO is contingent upon the DISCOMs paying capacity, it implies that the amount of support received by an individual DISCOM - indirectly -will depend to a large extent on its internal operating efficiency. The more efficient DISCOM will get a lower support, as its paying capacity will be high. On the other hand, the less efficient DISCOM will receive a greater support in the form of a lower Bulk Supply Tariff to be paid by it. However, it is felt that providing transition support is necessary to ensure a smooth transition and avoid tariff shock to the consumers.

Transition support is also necessary to attract potential investors to areas where there are high AT &C losses and has to be provided by the government.

- There is no clarity on what will happen if the fixed amount of support committed by the GNCTD turns out to be insufficient during the five-year transition period.
- There is no plan relating to how TRANSCO will repay the transitional support given by the GNCTD after the transition period. What will happen if the TRANSCO is unable to repay the loan needs to be addressed and also the terms & conditions of the loan/support provided by the government should be clearly defined before restructuring is done.
- After unbundling, no manpower was provided for the Holding Company and the Pension Trust. Since the Holding Company has an important role to play while taking care of disputes/unserviceable liabilities transferred to it after unbundling, requisite number of employees should have been provided to the Holding Company. Similarly, the Pension Trust has to service the pensioners and it is expected that the life of the Pension Trust would be around 50 to 60 years. To that extent, the organisational structure and manpower of the Holding company and Pension Trust assumes importance and should have been provided at the time of unbundling.
- The privatization of the distribution business involved entering into several legal contracts as well as interpretation of the statutory Transfer Scheme/Rules. Several ambiguities have been noted in some of these documents. Further, the interpretations of GNCTD and the private entities have varied on many counts resulting in legal battles on many counts.

5.5.3 Improvement in Performance Parameters

At the time of privatization, the Govt. of NCT of Delhi was spending about Rs.1200 Crore every year in the operation of the Delhi Vidyut Board. This has

since got substantially reduced and today, the Government of NCT of Delhi is only spending on the capital expenditure plans of the Generating Companies and the Delhi Transco Limited. This implies that additional funds are now available with the Government for other development schemes. The Government, however, has spent a nominal amount on providing subsidy to certain groups of consumers in accordance with Section 65 of the Electricity Act, 2003.