3.1 INTRODUCTION:

The Indian power sector witnessed significant reforms during the last couple of decades. In the tryst of ensuring self sufficiency and achieving efficiency, the power sector has been undergoing a sea change both in terms of organisational and structural system. The two important aspects viz. power production or generation and distribution has undergone a wholesome reform. It is in the background that even after 60 years of independence, there still exists a huge demand-supply gap in our country. If we consider, sector-wise consumption of power, both industry and agriculture together consume about 64% of total electricity produced in the country, the domestic sector consumes less than 20%, commercial sector consumes around 5%, Indian Railways consume around 2% while all others consume the rest of the electricity (i.e., about 9%) produced in our country (Mehta, 2007). Power generation in India has shown a huge increase from 1947 to the present time. The total installed generating capacity which was only 2300 MW in 1950 increases to 1,43,311.01 MW by April, 2008 (Sharma, 2009). According to the Capsule Report on Infrastructure Sector Performance for the period April, 2004 to February, 2005 released by the Ministry of Statistics and Programme Implementation, the power shortage during April, 2003 to February, 2004 was 7% of total demand. The peak hour shortage during April, 2004 to February, 2005 was 12.1%. The overall power shortage in the Northern, Western, Southern, Eastern and North-Eastern region...
was 9.4%, 11%, 1.6%, 2.2% and 6.1% respectively. During this period, generation capacity of 3643.92 MW was added against the target of 4990.72 MW, which lagged behind the target by 27%.

Realizing the prolonged demand–supply gap, the Government of India has initiated significant reform measures in the power sector since 1991. The reform models are based on the models adopted by other developed countries. The reform propose to have a more radical restructuring of power sector and provides a legal support for moving away from a single buyer model to a wholesale power market with the participation of many private players. Power sector reform, which entitles independent regulatory commision, unbundling of State Electricity Boards (SEBs) and eventual privatization especially of distribution has been the dominant theme in the Indian power policy discourse towards the later part of 1990s. Encouraged by the Government of India under the Economic Policy of 1991, assisted by the World Bank and with financial grants from the Government of United Kingdom, Orissa showed the initiative and became the first Indian state to reform its electricity sector in 1995. (Chandra Sekhar, 2004). The objectives included making power supply more efficient in Orissa, meeting the needs of a growing economy and developing an economically viable power industry which will enable Orissa in attracting domestic and foreign investments while safeguarding the interest of the consumers of the state. Several other states like Andhra Pradesh, Maharashtra, Uttar Pradesh, Assam, West Bengal have enacted similar legislations and some other states are also in the process of doing so. Today, there is a complete reversal of our decades old national policy of not allowing private participation in our power sector. The Ministry of Power, Government of India has introduced necessary modifications in the financial, administrative and legal environments in order to encourage private investments in our power sector. The chapter attempts to study the present power scenario in the State of Assam with
particular reference to its installed capacity, generation of power, energy shortage, peak power demand, outside power purchase, consumption pattern, per capita energy availability status, rural electrification status etc. in the initial post-reform period. The organisational and operational aspects of restructured Assam State Electricity Board (ASEB) and its successor companies are also discussed in this chapter.

3.2 PROFILE OF POWER INFRASTRUCTURE IN ASSAM:

Power is the basic infrastructure for the development of industries as well as the overall economy of Assam. It finds innumerable uses in home, industry, agriculture and even in transport. The facts that electricity can be transported practically instantaneously, is almost pollution free at the consumer level and that its use can be controlled very easily, make it very suitable and attractive as compared to other forms of energy. The per capita consumption of electricity in any state is an important index of the standard of living of the people in that state. Despite Assam possessing huge potentiality of power generation ranging from hydel to natural gas including oil and coal resources, the progress in these field in our state is not very satisfactory. As a result, there still exists a huge shortfall between supply and demand of power in the state. Brahmaputra being the major river in Assam as well as the other North-Eastern States have huge hydro power potentiality. Unfortunately, this option of easy and cheap power availability in Assam has remained largely unexploited even today. The Assam State Electricity Board (ASEB), which was constituted as early as 1958 under the Electricity (Supply) Act, 1948 has been taking prime responsibility of integrated power development in the state. In this respect, ASEB is also getting necessary direction and assistance from the Ministry of Power, Government of India and other power supplying Central Public Sector Units (CPSUs).
3.2.1. **Installed Capacity and Generation of Power in Assam**

The installed capacity of generating plants in the state has remained the same at 574.40 MW since 2000–01 to 2005–06. However, the installed capacity even came down to 415.50 MW in 2006–07 and further to 401.50 MW in 2007–08. The table - 3.1 shows the installed capacity of various generating plants in Assam from 2000–01 to 2007–08 (Fig 3.1):

**Table 3.1**

**INSTALLED CAPACITY OF GENERATING PLANTS IN ASSAM**

*(From 2000 - 01 to 2007 - 08)*

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Thermal</td>
<td>300.00</td>
<td>300.00</td>
<td>300.00</td>
<td>300.00</td>
<td>300.00</td>
<td>300.00</td>
<td>60.00</td>
<td>60.00</td>
</tr>
<tr>
<td>2</td>
<td>Hydel</td>
<td>2.00</td>
<td>2.00</td>
<td>2.00</td>
<td>2.00</td>
<td>2.00</td>
<td>2.00</td>
<td>102.00</td>
<td>102.00</td>
</tr>
<tr>
<td>3</td>
<td>Gas</td>
<td>272.40</td>
<td>272.40</td>
<td>272.40</td>
<td>272.40</td>
<td>272.40</td>
<td>272.40</td>
<td>253.50</td>
<td>239.50</td>
</tr>
<tr>
<td>4</td>
<td>Total</td>
<td>574.40</td>
<td>574.40</td>
<td>574.40</td>
<td>574.40</td>
<td>574.40</td>
<td>574.40</td>
<td>415.50</td>
<td>401.50</td>
</tr>
</tbody>
</table>

Source: Assam Power Generation Corporation Ltd. AEB.
The installed capacity of generating plants in Assam came down to 401.50 MW during the year 2007–08 due to de-commissioning of Bongaigaon Thermal Power Station (BTPS) and de-rating of age–old units of Namrup Thermal Power Station (NTPS). From table-3.1, it is evident that the installed capacity in Assam remained the same or even reduced during the last eight (8) years in spite of increasing demand for supply of power in our State.

The power generation in the State has also gradually declined from 1996–97 and this downward trend continued upto 2003–04. However, the power generation in Assam experienced a rising trend since 2004-05. During the year 2007-08, power
generation in the State substantially increased to 1541.317 M.U. from 867.539 MU in 2006–07 due to the functioning of Hydel Power Projects since 2006–07. It may be mentioned here that Karbi Langpi Hydro Electric Project (KLHEP) had been operationalized in Assam since 2006–07. The generation of power in the state during the last eight (8) years are shown in Table - 3.2:

Table : 3.2

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Thermal</td>
<td>74.80</td>
<td>46.24</td>
<td>NIL</td>
<td>NIL</td>
<td>NIL</td>
<td>NIL</td>
<td>NIL</td>
<td>NIL</td>
</tr>
<tr>
<td>2</td>
<td>Hydel</td>
<td>NIL</td>
<td>NIL</td>
<td>NIL</td>
<td>NIL</td>
<td>NIL</td>
<td>15.438</td>
<td>510.181</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Gas</td>
<td>860.18</td>
<td>794.17</td>
<td>746.09</td>
<td>710.67</td>
<td>756.435</td>
<td>808.047</td>
<td>852.101</td>
<td>1031.136</td>
</tr>
<tr>
<td>4</td>
<td>Total</td>
<td>934.98</td>
<td>840.41</td>
<td>746.09</td>
<td>710.67</td>
<td>756.435</td>
<td>808.047</td>
<td>867.539</td>
<td>1541.317</td>
</tr>
</tbody>
</table>

Source: Assam Power Generation Corporation Ltd. AEB.

3.2.2 Power Supply Position in Assam:

The overall power supply position in Assam is not at all satisfactory since the past several years. The energy requirement in the state has worked out to be 5280.00 Million Unit during the year 2007–08 as against 4585.00 Million Unit in 2006–07. However, the availability of energy during the same period was 4015.00 Million Unit and 3826.546 Million Unit (MU) respectively. The table - 3.3 shows the shortage in energy requirement and energy availability in Assam from 2000–01 to 2007–08 (Fig 3.2):
Table - 3.3 depicts a poor power supply position in the State. The percentage of shortage of power in Assam is always increasing since 2001–02. During the year 2001–02, Assam experienced a energy shortage of 3.33% only. However, during the year 2007–08, the energy shortage has risen to as high as 23.96%.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy Requirement</td>
<td>3323.16</td>
<td>3415.38</td>
<td>3500.00</td>
<td>3657.00</td>
<td>3788.00</td>
<td>4218.00</td>
<td>4585.00</td>
<td>5280.00</td>
</tr>
<tr>
<td>Energy Availability</td>
<td>2984.97</td>
<td>3301.59</td>
<td>3304.74</td>
<td>3240.28</td>
<td>3376.30</td>
<td>3602.82</td>
<td>3826.54</td>
<td>4015.00</td>
</tr>
<tr>
<td>Energy Shortage</td>
<td>338.19</td>
<td>113.79</td>
<td>195.26</td>
<td>416.72</td>
<td>411.70</td>
<td>615.18</td>
<td>758.45</td>
<td>1265.00</td>
</tr>
<tr>
<td>Energy Shortage (In Percentage)</td>
<td>10.18%</td>
<td>3.33%</td>
<td>5.58%</td>
<td>11.40%</td>
<td>10.87%</td>
<td>14.58%</td>
<td>16.54%</td>
<td>23.96%</td>
</tr>
</tbody>
</table>

Source: CGM, Assam State Load Despatch Centre, Kahilipara, Guwahati - 19.
Fig. 3.2
Showing Requirement and Shortage of Energy in Assam:
(From 2000 - 01 to 2007 - 08)
Peak demand is the demand of electricity during peak hours i.e. between 5.30 pm to 10.30 pm. In peak demand also the percentage of shortage of electricity in Assam has been fluctuating every year. During 2000–01, there was no shortage of power during the peak hours. During 2001–02, the percentage of shortage of power in peak hours was 10.20%. Peak deficit was as high as 24.59% during the year 2003–04. However, it came down to 14.62% during the year 2007–08. It may be mentioned here that hydel power production started in Assam during 2006–07. In 2007–08, 510.181 MU of hydel power was generated in Assam and as a result peak deficit came down to 127.00 M.U. in that particular year (Table 3.4) (Fig.3.3):

Table: 3.4  
Demand and Supply of Power during Peak Hours in Assam:  
(From 2000–01 to 2007–08)  
(In M.W.)

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Peak Demand</td>
<td>552.50</td>
<td>578.30</td>
<td>614.00</td>
<td>618.20</td>
<td>641.30</td>
<td>716.00</td>
<td>797.10</td>
<td>866.90</td>
</tr>
<tr>
<td>Peak Supply</td>
<td>552.50</td>
<td>519.30</td>
<td>468.00</td>
<td>466.20</td>
<td>529.30</td>
<td>576.00</td>
<td>626.00</td>
<td>741.90</td>
</tr>
<tr>
<td>Peak Deficit</td>
<td>0.00</td>
<td>59.00</td>
<td>146.00</td>
<td>152.00</td>
<td>112.00</td>
<td>140.00</td>
<td>171.10</td>
<td>127.00</td>
</tr>
<tr>
<td>Shortage (In percentage)</td>
<td>0%</td>
<td>10.02%</td>
<td>23.78%</td>
<td>24.59%</td>
<td>17.46%</td>
<td>19.55%</td>
<td>21.47%</td>
<td>14.62%</td>
</tr>
</tbody>
</table>

Source: CGM, Assam State Load Despatch Centre, Kahilipara, Guwahati-19
In order to meet the domestic demand, ASEB continued to purchase power from various sources in the neighbourhood. These included the central sector units like North Eastern Electric Power Corporation (NEEPCO), National Hydroelectric Power Corporation (NHPC), National Thermal Power Corporation (NTPC) etc. ASEB also purchase power from various State Electricity Boards (SEBs) like West Bengal State Electricity Board (WBSEB), Meghalaya State Electricity Board (MeSEB), Haryana State Electricity Board (HSEB) etc. Other important sources from which ASEB borrows power include D. L. F., N.V.V.N.L. and some other small...
parties. Moreover, the amount of power purchased from outside sources has been increasing every year mainly due to the growing demand of electricity in our State. It may be mentioned here that NEEPCO is the chief lender of electricity to our State. In 2004–05, ASEB received 2463.45 Million kwh power from NEEPCO. In the year 2007–08, ASEB purchased 2718.64 Million kwh power from NEEPCO thereby registering an increase of 10.36%. In 2004–05, the total amount of power purchased by ASEB from outside sources was 2888.13 Mkwh. Again, in 2005–06 and 2006–07, the power purchased by ASEB from outside sources was respectively 2995.70 Mkwh and 3071.81 Mkwh respectively. In 2007–08, the ASEB purchased 3375.10 Mkwh from outside agencies registering an increase of 9.87% over the previous year. The purchase of power by ASEB from various outside sources from 2004–05 to 2007–08 is shown in table - 3.5:

**Table : 3.5**

**PURCHASE OF POWER BY ASEB FROM OUTSIDE SOURCES :**

(From 2004–05 to 2007–08)

(In Million KWH)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>NEEPCO</td>
<td>2463.45</td>
<td>2465.36</td>
<td>2318.82</td>
<td>2718.64</td>
</tr>
<tr>
<td>2</td>
<td>NHPC</td>
<td>161.60</td>
<td>154.42</td>
<td>147.59</td>
<td>177.61</td>
</tr>
<tr>
<td>3</td>
<td>NTPC</td>
<td>-</td>
<td>52.51</td>
<td>513.57</td>
<td>385.49</td>
</tr>
<tr>
<td>4</td>
<td>WBSEB</td>
<td>120.46</td>
<td>34.72</td>
<td>6.90</td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>Me. S.E.B</td>
<td>7.40</td>
<td>8.76</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>6</td>
<td>D.L.F</td>
<td>135.22</td>
<td>119.88</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>7</td>
<td>N.V.V.N.L</td>
<td>-</td>
<td>9.29</td>
<td>4.05</td>
<td>-</td>
</tr>
<tr>
<td>8</td>
<td>Other Traders</td>
<td>-</td>
<td>150.76</td>
<td>80.88</td>
<td>93.36</td>
</tr>
<tr>
<td>9</td>
<td>TOTAL</td>
<td>2888.13</td>
<td>2995.70</td>
<td>3071.81</td>
<td>3375.10</td>
</tr>
</tbody>
</table>

Source : Annual Statement of Accounts, ASEB.
Thus, it is clear from the above that State’s own generating system is totally unable to meet the continuously increasing demand of power in the state. The shortage of electricity supply has in fact, lowered down our industrial production, agricultural output and has inevitably slowed down the economic growth of Assam. This calls for an urgent attention on the part of the concerned authorities of ASEB to improve the generation, transmission and distribution systems. The ASEB should formulate a long term, correct futuristic strategy for promoting the power sector of the state. Total assurance of uninterrupted power supply would certainly encourage industrial development and ultimately stimulate the overall economic scenario of Assam.

3.2.3 Transmission and Commercial Losses in Assam (Distribution Efficiency):

Distribution network in the state requires massive modernization work to provide reliable and quality power to the various consumer groups. In view of very insignificant works being undertaken in the distribution sector in the past due to paucity of fund, the existing network is not capable of handling the required quantum of electricity in the state. As a result, the commercial as well as the transmission and distribution (T & D) losses are very high in Assam. The quality of power received at consumers’ doorstep is also far from being satisfactory. For efficient and dependable transmission and distribution of power, the transmission network must have adequate capacity and should be maintained in a very good condition. In this backdrop, Assam State Electricity Board (ASEB) and its five successor companies have laid special emphasis on improvement of the distribution efficiency in a phased manner under the Accelerated Power Development and Reform Programme (APDRP) in the state. With this objective in mind, a number of specific schemes for upgradation, modernization and strengthening of the sub-transmission and distribution system of our power sector have been prepared and implemented. In this connection,
projects worth Rs. 408.54 Crores have also been sanctioned by the Ministry of Power, Government of India under the APDRP scheme (ASEB, 2004–05). As a result of all these efforts, there is a marginal reduction in the Aggregate Transmission and Commercial (AT and C) losses in our State. The data regarding loss reduction is, however, encouraging to some extent. As per the information available for the last six (6) years (2002–03 to 2007–08), it is observed that the Aggregate Transmission and Commercial (AT and C) losses have been diminishing and showing a positive tendency of being decreasing since the inception of the APDRP scheme in Assam in 2004–05 (Table 3.6):

**Table: 3.6**

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>UAEDCL</td>
<td>40</td>
<td>41</td>
<td>41</td>
<td>38</td>
<td>37</td>
<td>33</td>
</tr>
<tr>
<td>CAEDCL</td>
<td>39</td>
<td>42</td>
<td>45</td>
<td>42</td>
<td>39</td>
<td>37</td>
</tr>
<tr>
<td>LAEDCL</td>
<td>39</td>
<td>35</td>
<td>37</td>
<td>30</td>
<td>32</td>
<td>25</td>
</tr>
<tr>
<td>ASEB</td>
<td>39</td>
<td>39</td>
<td>40</td>
<td>36</td>
<td>35</td>
<td>31</td>
</tr>
</tbody>
</table>

Source: ASEB.

Thus, from the above table we see that the Aggregate Transmission and Commercial (AT and C) losses in case of the Upper Assam Electricity Distribution
Company Ltd. (UAEDCL) in the year 2002–03 was 40%. As a result of works performed under the APDRP scheme, the same has come down to 33% in the year 2007–08. In case of the Central Assam Electricity Distribution Company Ltd. (CAEDCL), AT and C losses have been reduced to 37% in the year 2007–08 from 39% in the year 2002–03. In case of the Lower Assam Electricity Distribution Company Ltd. (LAEDCL), the performance is much better than the other two distribution companies, namely, UAEDCL and CAEDCL. In case of LAEDCL, the AT and C losses have come down to 25% only in 2007–08 as compared to 39%, the 2002–03. Thus, in an average, the aggregate transmission and commercial losses in the state has come down to 31% in 2007–08 from 39% in 2002–03.

Thus, under the reform process the distribution efficiency of our power sector has been showing a positive trend. There is some marginal improvement. However, there is still an urgent necessity of large amount of investment for continuous improvement and augmentation of our distribution system in the state. Today, ASEB is serving around 25 lakh consumers under various categories in our state with a peak demand of about 1000 M.W. It may be mentioned here that, at the time of inception in the year 1958, ASEB had served only 13,000 consumers. As a result of ever increasing number of consumers and continuous addition of connected load to the system, the distribution sector calls for massive modernization and renovation work. These works need to be implemented with State plan fund.

3.2.4 Consumption of Power in Assam:

As a result of slight improvement in power generation, the Assam Power Generation Corporation Ltd. (APGCL) could sale more power to the consumer in the state during the recent years. The sale of power during the year 2007–08 has increased to 2,525.52 M.U. as compared to 2243.99 M.U. during 2006–07 (Table 3.7). Thus, there is more than 12% increase in the sale of electricity during
2007–08 as compared to the previous year. The statistics of the pattern of consumption of electricity in Assam during the last eight (8) years shows that the Domestic Sector has been consuming highest amount of power followed by the Industrial Sector. During the year 2007–08, Domestic Sector accounted for 38.99% of total consumption of electricity followed by the Industrial Sector (18.57%). After Domestic and Industrial Sectors, Commercial Sector and Tea Gardens are the important Consumers of electricity in our state. During 2007–08, the consumption of electricity by the commercial Sector and Tea Gardens accounted for 12.98% and 11.71% respectively of the total power sold in the State.

From table 3.8, it is evident that for irrigation purpose, only a very negligible amount of electricity is being used in Assam. From 2003–04 to 2007–08, the percentage of electricity being utilized for irrigation is always less than even 1%. This is, of course, a matter of great concern. For a sustainable development of our agriculture sector, availability of assured irrigation facility is undoubtedly the most important prerequisite. The modernization of agricultural practices vis-a-vis increase in productivity of crops cannot be realized in the absence of proper irrigation facilities. The importance of irrigation development bears special significance in the context of economic development of our state. The percentage of consumption of electricity by different consumer groups in Assam during 2007–08 is shown in Fig. 3.4:
### Table: 3.7

**CONSUMPTION OF ELECTRICITY BY DIFFERENT TYPES OF CONSUMERS IN ASSAM:**

(From 2000-01 to 2007-08)

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Types of Consumption</th>
<th>Sale of Electricity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Domestic</td>
<td>540.80</td>
</tr>
<tr>
<td>2</td>
<td>Commercial</td>
<td>155.84</td>
</tr>
<tr>
<td>3</td>
<td>Industrial</td>
<td>306.73</td>
</tr>
<tr>
<td>4</td>
<td>Public Lighting</td>
<td>4.39</td>
</tr>
<tr>
<td>5</td>
<td>General Purpose</td>
<td>26.89</td>
</tr>
<tr>
<td>6</td>
<td>Irrigation</td>
<td>9.01</td>
</tr>
<tr>
<td>7</td>
<td>Public Water Works</td>
<td>27.98</td>
</tr>
<tr>
<td>8</td>
<td>Tea Garden</td>
<td>279.94</td>
</tr>
<tr>
<td>9</td>
<td>Bulk supply in the state</td>
<td>251.29</td>
</tr>
<tr>
<td>10</td>
<td>Bulk supply outside the state</td>
<td>N.A</td>
</tr>
<tr>
<td>11</td>
<td>Oil and coal</td>
<td>N.A</td>
</tr>
<tr>
<td>12</td>
<td>Miscellaneous</td>
<td>N.A</td>
</tr>
<tr>
<td>13</td>
<td>Total unit sold to ultimate consumers</td>
<td>1602.87</td>
</tr>
</tbody>
</table>

Source: Commercial Wing, ASEB
### Table 3.8
PERCENTAGE OF CONSUMPTION OF ELECTRICITY BY DIFFERENT CONSUMER GROUPS IN ASSAM:
(From 2003-04 to 2007-08)

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Type of Consumers</th>
<th>Percentage of Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Domestic</td>
<td>35.90</td>
</tr>
<tr>
<td>2</td>
<td>Commercial</td>
<td>10.74</td>
</tr>
<tr>
<td>3</td>
<td>Industrial</td>
<td>16.02</td>
</tr>
<tr>
<td>4</td>
<td>Public Lighting</td>
<td>0.28</td>
</tr>
<tr>
<td>5</td>
<td>General Purpose</td>
<td>2.37</td>
</tr>
<tr>
<td>6</td>
<td>Irrigation</td>
<td>0.82</td>
</tr>
<tr>
<td>7</td>
<td>Public Water Works</td>
<td>1.73</td>
</tr>
<tr>
<td>8</td>
<td>Tea Garden</td>
<td>13.39</td>
</tr>
<tr>
<td>9</td>
<td>Bulk Supply in the State</td>
<td>12.45</td>
</tr>
<tr>
<td>10</td>
<td>Oil and Coal</td>
<td>2.20</td>
</tr>
<tr>
<td>11</td>
<td>Miscellaneous</td>
<td>4.10</td>
</tr>
<tr>
<td>12</td>
<td>Total</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Source: Commercial Wing, ASEB

**Fig. 3.4**
SHOWING PERCENTAGE OF CONSUMPTION OF ELECTRICITY IN ASSAM BY DIFFERENT CONSUMER GROUPS DURING 2007-08
3.2.5 **Per Capita Availability of Electricity in Assam**:

The overall power supply position in Assam has not been satisfactory during the past several years. However, during the year 2007-08, there is some improvement in the power supply position in the state as compared to the past years. As a result, the per capita availability of power has increased to 137.077 Kwh in 2007-08 from 115.760 Kwh during the year 2006-07. During 2005-06, the per capita availability of power in the state was only 114.638 kwh against the all India average of 631.41 kwh. (INR News, New Delhi, August, 2007). Thus, it is clear that Assam is far lagging behind the all India average in per capita electricity consumption level also. This exhibits the gloomy power scenario in the state. Therefore, immediate steps should be taken by both the Central and State Governments to remove this existing infrastructure inadequacies particularly in the power sector in Assam. The per capita availability of electricity for the last 4 (four) years in Assam is shown in Table (3.9) Fig (3.5):

### Table : 3.9

**PER CAPITA ELECTRICITY AVAILABILITY STATUS IN ASSAM :**

(From 2004-05 to 2007-08)

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Year</th>
<th>Gross Electrical Energy Availability (M.U.)</th>
<th>Per Capita Availability Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2004-05</td>
<td>3147.57</td>
<td>112.00</td>
</tr>
<tr>
<td>2</td>
<td>2005-06</td>
<td>3267.87</td>
<td>114.638</td>
</tr>
<tr>
<td>3</td>
<td>2006-07</td>
<td>3344.30</td>
<td>115.760</td>
</tr>
<tr>
<td>4</td>
<td>2007-08</td>
<td>4013.62</td>
<td>137.077</td>
</tr>
</tbody>
</table>

Source : Commercial Wing, ASEB
3.2.6 Rural Electrification in Assam:

In the process of rural electrification in Assam, the performance of ASEB is found to be fairly satisfactory. In Assam, 57.78% of total villages have been electrified till March, 2007. Out of the 25, 124 numbers of inhabited villages as many as 14,516 numbers of villages have been electrified till the end of March, 2007. The
highest number of villages have been electrified in the Sivasagar district (87.88%) while Karbi Anglong is far behind with only 16.52% village electrification. The percentage of rural electrification coverage in Assam up to 31st March, 2007 is shown in Table (3.10):

<table>
<thead>
<tr>
<th>District</th>
<th>No. of Inhabited Villages as per 2001 Census</th>
<th>No. of Villages Eletrified upto 31st March, 2007</th>
<th>Percentage of Village Electrification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dhubri</td>
<td>1261</td>
<td>782</td>
<td>62.01</td>
</tr>
<tr>
<td>Kokrajhar</td>
<td>951</td>
<td>480</td>
<td>50.47</td>
</tr>
<tr>
<td>Goalpara</td>
<td>761</td>
<td>361</td>
<td>47.44</td>
</tr>
<tr>
<td>Bongaigaon</td>
<td>881</td>
<td>501</td>
<td>58.87</td>
</tr>
<tr>
<td>Barpeta</td>
<td>1050</td>
<td>789</td>
<td>75.14</td>
</tr>
<tr>
<td>Nalbari</td>
<td>798</td>
<td>653</td>
<td>81.83</td>
</tr>
<tr>
<td>Kamrup</td>
<td>1342</td>
<td>927</td>
<td>69.08</td>
</tr>
<tr>
<td>Darrang</td>
<td>1319</td>
<td>1086</td>
<td>82.34</td>
</tr>
<tr>
<td>Sonitpur</td>
<td>1784</td>
<td>1096</td>
<td>61.43</td>
</tr>
<tr>
<td>Lakhimpur</td>
<td>1139</td>
<td>503</td>
<td>44.16</td>
</tr>
<tr>
<td>Dhemaji</td>
<td>1236</td>
<td>294</td>
<td>23.97</td>
</tr>
<tr>
<td>Morigaon</td>
<td>592</td>
<td>321</td>
<td>54.22</td>
</tr>
<tr>
<td>Nagaon</td>
<td>1375</td>
<td>1014</td>
<td>73.75</td>
</tr>
<tr>
<td>Golaghat</td>
<td>1066</td>
<td>509</td>
<td>47.75</td>
</tr>
<tr>
<td>Jorhat</td>
<td>787</td>
<td>472</td>
<td>59.97</td>
</tr>
<tr>
<td>Sivasagar</td>
<td>866</td>
<td>761</td>
<td>87.88</td>
</tr>
<tr>
<td>Dibrugarh</td>
<td>1309</td>
<td>1032</td>
<td>78.84</td>
</tr>
<tr>
<td>Tinsukia</td>
<td>1107</td>
<td>725</td>
<td>65.49</td>
</tr>
<tr>
<td>Karbi Anglong</td>
<td>2633</td>
<td>435</td>
<td>16.52</td>
</tr>
<tr>
<td>N.C Hills</td>
<td>605</td>
<td>124</td>
<td>20.50</td>
</tr>
<tr>
<td>Karinganj</td>
<td>915</td>
<td>660</td>
<td>72.13</td>
</tr>
<tr>
<td>Hailakandi</td>
<td>327</td>
<td>242</td>
<td>74.01</td>
</tr>
<tr>
<td>Cachar</td>
<td>1020</td>
<td>749</td>
<td>73.43</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>25,124</strong></td>
<td><strong>14,516</strong></td>
<td><strong>57.78</strong></td>
</tr>
</tbody>
</table>

Source: Chief General Manager (CGM) Rural Electrification, ASEB, Guwahati

(106)
However, lighting of home should not be the sole objective of rural electrification schemes in Assam. It should be oriented towards increasing our agricultural output. Rural electrification scheme should ensure irrigation facilities through energisation of our agricultural pump-sets and tube wells. It can, therefore, be urged that, the ASEB should take some effective policies towards agricultural development in our state. However, the rural electrification scenario in Assam is marked by some defects that statistics alone cannot reveal. Even though a considerable number of villages have been described and shown by ASEB as electrified are not electrified in real sense. In many of these villages, quality of power supply is very poor. In fact, rural people are not satisfied at all by the services, they are getting from ASEB. Many of the electrified villages go without power for long hours particularly during summer that undermines the claim of electrification by ASEB.

3.3 EARLY HISTORY OF DEVELOPMENT OF ELECTRICITY IN ASSAM:

At the time when India attained freedom in the year 1947, electricity was available only in a few towns of undivided Assam, which included the present States of Meghalaya, Mizoram and Nagaland. The present State of Arunachal Pradesh was not directly a part of our State, although its administration was run under the Governor of Assam. In the whole region thus, electricity was visible only in a few towns. The few towns in Assam that had electricity at that time were served by diesel generating sets operated by private parties. However, Shillong which was the Capital of united Assam was fed by a small hydroelectric plant, which was also operated by a private company. During those days, one could not even imagine having electricity in the villages. The following towns were electrified, all by private electricity companies:

- Shillong Hydroelectric power plant
- Guwahati Diesel generating set

(107)
However, thoughts for development of hydroelectric power in Assam go back as early as 1922. The Triennial Report of Hydroelectric Survey of India, by J. W. Mears published in 1922 described the possibility of developing hydropower from the rapids of the Umtru River, presently in Meghalaya. The survey works were done by A. B. Blenkinshop, Chief Engineer, Public Works Department, Government of Assam reportedly on horseback. He observed that, the two series of rapids could be developed on the Umtru River for the generation of hydroelectricity. He estimated that, the upper rapids had a potential of 548 K.W. and the lower rapids had a huge potential of 2914 K.W. These project formulations were also supported by Blenkinshop with necessary calculation and drawings in Volume II of his report on Hydroelectric Surveys of India in 1923. In fact, there is a flat granite slab near the Umtru powerhouse, which records the visit of A. B. Blenkinshop to the site. During those days, there was no demand for power in Assam. People were happy in managing their lighting needs with the help of kerosene lamps, hurricane lanterns etc.

It is in the year 1952–53, five years after Indian independence, the first step for generating electric power under the development plan was initiated by the Government of Assam. The Umtru River was finally adopted by the Government for developing a small hydroelectric power project in Assam. During those days, when the Umtru Project was considered, the per capita electricity consumption in Assam was only 0.74 Kwh whereas during 2007-08, the per capita electricity availability status in Assam has increased to 137.08 Kwh (Commercial Wing, ASEB). This depicts a huge increase in demand of electricity in the present day Assam. The Umtru
Hydroelectric Power Project proposed the diversion of about 200 Cusecs of water from the head of the rapids by constructing a 510 feet long and about 52 feet high masonry weir from the foundation level. The water was carried through two 9 feet and 9 inches diameter horse shoe shaped pressure tunnels, one 2730 feet long and another 828 feet long joined by a 9 feet 9 inches diameter steel pipeline which was 701 feet long. A 116 feet high and 32 feet diameter surge shaft was provided at the 2nd tunnel. From the 2nd tunnel outlet, an 8 feet diameter 347 feet long steel penstock pipe carried the water to feed the 3 units of vertical shaft Francis turbines, each connected to a 2800 K.W. Generator with a total installed capacity of 8400 K.W.. The power from the Umtru Hydroelectric project was used to be evacuated to the Ulubari sub-station, Guwahati by a 20 mile long 33 KV transmission line.

Thus, the Umtru Hydroelectric Power Project was an ambitious and prestigious project of the Government of Assam during those days and the Government took keen interest in the proper and timely implementation of the project. Since the project was located near the highway connecting the Capital, Shillong with Guwahati, the then Chief Minister, the Cabinet Ministers in the Ministries of Power, PWD and other Senior Officials of the various departments of Government of Assam used to visit and monitor the ongoing works of the project. In spite of difficult situations prevailing at the time, without any reliable link with the rest of India the project was completed on time. It may be mentioned here that during those days, all important construction materials like cement, steel, explosives etc. had to be brought to Assam from other states only. Moreover, the project was built under Canadian Government aid and the necessary power station equipments like turbines, generators, powerhouse switchgear, transformers etc. were supplied by Canada. The civil and electrical designs of the Power House were also done in Canada and air-freighted to Guwahati. The main civil works like the Weir, Intake, Tunnels, Penstocks and Surge-shaft were designed by the then Central Water and Power
Commission (CW and PC). The civil construction works were implemented through the P.W.D., Government of Assam. The necessary electrical works were executed under the supervision of the Electrical Adviser, Government of Assam. The installed capacity of the Umtru Hydroelectric Power Project was 7.2 M.W. only (Phukan, 2006).

It may be mentioned here that the Umtru Hydroelectric Power Project was commissioned on 2nd July, 1957. The project was officially inaugurated on 9th July, 1957. Thus, it has already completed its 50th anniversary in July, 2007. Its cost of approximately Rs. 2 Crores have been realized many times in the last 50 years.

3.4. PROFILE OF THE ASSAM STATE ELECTRICITY BOARD (ASEB):

The Assam State Electricity Board (the State's Power Sector) touches the lives of every people living in every nook and corner of our state. The Assam State Electricity Board (ASEB) was constituted in the year 1958 (Established on 1st June 1958) under Sec. 5 of the Electricity (Supply) Act, 1948. It has already offered 50 years of dedicated services to the People of Assam. B. C. Kapoor, IAS was the 1st Chairman of ASEB. He was also the Deputy Commissioner of the undivided Kamrup district for some time. (Borgohain, 2006)

At the very beginning, ASEB had operational jurisdiction over the entire undivided Assam and it was termed as composite ASEB. The Board experienced a minor reorganization in the year 1975 following the formation of the state of Meghalaya carved out of Assam in 1971. After bifurcation, assets, liabilities and the manpower of the composite ASEB were being divided at the proportion of

1. The ASEB was constituted under Section 5 of the Electricity (Supply) Act, 1948 by the Government Notification No. PDEL 60/58 dated 27th May, 1958.
66:33:1 respectively among the states of Assam, Meghalaya and Mizoram by dint of the Circular dated 19th March, 1975 issued by the Joint Secretary, Ministry of Energy and Development of Power, Government of India. With the shifting of the capital of Assam from Shillong to Guwahati temporarily at Dispur in the year 1975, the Office of the Chairman, ASEB also shifted to Guwahati at Narengi. The Head Quarters of ASEB is now located at the 4th Floor, Bijulee Bhawan, Paltan Bazar, Guwahati-781001. The eventual bifurcation, however, gave a big jolt to the hydel power generation in Assam, as the vast hydel power potential of Umtru, Umium went to the State of Meghalaya. After bifurcation, the lower Assam region was left only with the thermal based Chandrapur Thermal Power Station (CTPS). Similarly, the upper Assam side was left with only the Namrup Thermal Power Station (NTPS). The ASEB is mainly responsible for overall development of generation, transmission and distribution of power in Assam. The prime objective is to ensure steady and economical supply of electricity throughout the State. It brings fruitful coordination among the various activities in the power sector in the state. At the time of formation, ASEB served only 13,000 consumers. Today, ASEB has around 25 lakhs consumers under different categories in the state with a peak demand of around 1000 M.W.. Thus, after 50 long years, today the ASEB is on the threshold of a new scenario, where the requirement of power in the state has breached all assumptions.

3.4.1 Organisational Structure of Erstwhile ASEB:

The ASEB has been working as the sole agency for the development of power sector in the state. It is being managed by a Chairman, who is appointed by the

Government of Assam. The Chairman exercises administrative control and supervision over all the major policy decisions of the ASEB. The ultimate power for managing the affairs of the Board is vested in him. The Chairman is assisted by a Board of Members consisting of both technical as well as administrative personnels. After Chairman, there are three important portfolios in the organisational hierarchy of ASEB, namely, Member (Personnel and Administration), Member (Technical) and Member (Finance). Member (Personnel and Administration) looks after the human resources of ASEB. In his job, he is assisted by Director (Personnel), Director (Establishment), Manager (Industrial Relations), Law Officer, Deputy Personnel Manager (DPM) and so on. Member (Technical) supervises all the three major technical aspects of power sector namely, generation, distribution and transmission. In this respect, he is assisted by Chief Engineer (Generation), Chief Engineer (Distribution), Chief Engineer (Transmission), Chief Engineer (Rural Electrification) and Chief Engineer (Civil). The Chief Engineers while discharging their duties get the support and assistance from Additional Chief Engineers (A.C.Es.), Superintending Engineers (S.E.) and other senior ASEB Officials. Similarly, Member (Finance) is the top boss, so far as accounting and financial activities in ASEB is concerned. In his duties, he is mainly assisted by Chief Accounts Officer (CAO), Deputy Chief Accounts Officer (Dy CAO), Cheif Auditor, Deputy Chief Auditor. Below them in the hierarchy, there are a number of positions like Manager (Commercial), Manager (Budget), Manager (Audit) and so on, who supervise their respective departments and report to the top management (Fig. 3.6):
Under Section 5(2) of the Electricity (Supply) Act, 1948 there should be a minimum of three (3) members and a maximum of seven (7) members in the Managing Board of ASEB and the members are to be appointed by the Government of Assam. The Chairman may be appointed from one of the members possessing some specific qualifications. Two of the other four (4) members are ex-Officio members, such as, the Secretary, Finance, Government of Assam and the Secretary, Industry, Government of Assam. The rest two (2) members representing public interest are inducted in the Board in order to give it a character of public corporation. The Electricity Board is a technical organisation and the engineering aspects of power industry is headed by the Chief Electrical Engineer under the active supervision of the Board. The Board is divided into various circles, divisions, subdivisions, stations and substations. The circles stand between the Board and divisions. The sub-divisions and sub-stations are in direct touch with the consumers.

3.5. RATIONALE OF RESTRUCTURING OF ASSAM STATE ELECTRICITY BOARD (ASEB):

In Assam, like other States in India, power generation, transmission and distribution was a government monopoly. The ASEB is the organisation (the State's power producer and supplier) undertaking prime responsibility of integrated power development in our state. Due to gradual deterioration of its own generating system

4. The necessary qualifications for appointment of the Board Members are specified as follows:-

(i) One shall be a person who has vast experience and has shown capacity in commercial and administrative matters,

(ii) One shall be an Electrical Engineer with wide experience and

(iii) One shall be a person, who has sufficient experience in accounting and financial matters in a public undertaking, preferably in an electricity supply undertaking.

(114)
during the last several years, ASEB has been purchasing power from various central and other sources in the neighbourhood at an ever increasing rate. The percentage of shortage of electricity in the State is always on the rise since 2001-02. In 2001-02, Assam experienced an energy shortage of 3.33% only. The shortage of power in the State during 2002-03 and 2003-04 was 196.26 M.U. and 416.72 M.U. respectively signifying an increase in energy shortage to the extent of 5.58% and 11.40% respectively. The requirement and shortage of electricity in Assam has already been shown in table - 3.3 of this chapter. In peak demand also the percentage of shortage of electricity in the State has been fluctuating every year. In 2001-02, the percentage of shortage of electricity in the State during peak hours was 10.20%. However, the peak deficit increase to as high as 23.78% in 2002-03. It further increased to 24.59% in 2003-04 (Table - 3.4).

In order to meet the domestic demand, ASEB continued to purchase power from various sources in the neighbourhood. NEEPCO, NHPC, NTPC, various SEBs like West Bengal State Electricity Board (WBSEB), Meghalaya State Electricity Board (MeSEB) etc. are the major sources from which ASEB has been purchasing power for long. Infact, the amount of power purchased by ASEB from outside sources was increasing every year due to growing demand of electricity in the State (Table - 3.5). The per capita availability of electricity in Assam is also not at all satisfactory. The State is lagging behind many States as well as in all India average. For example, during 2005-06, the per capita electricity availability status was only 114.64 Kwh in Assam against 380.61 Kwh in West Bengal, 633.93 Kwh in Orissa and 1283.77 Kwh in Gujarat. It may be mentioned here that the per capita availability of electricity in India during 2005-06 was 631.41 Kwh. The shortage of power supply in the State has in fact lowered down the industrial production, agricultural output and has ultimately slowed down the economic growth of Assam. The power scenario in Assam very often takes a turn for the worse particularly in hot summer,
when power cuts, load shedding become the order of the day. The prospect of industrialisation of Assam is thus severely jolted by difficult power supply position in State.

ASEB like other SEBs in India experiences severe financial strain due to a number of inherent problems. Revenue earned by ASEB was always less than its expenditure. During 2000-01, ASEB earned Rs. 68,399.15 lakhs whereas it spent as high as Rs. 1,29,119.90 lakhs signifying a loss of Rs. 60,720.75 lakhs. During 2001-02, ASEB spent Rs. 1,33,282.16 lakhs against its earnings of Rs. 70,084.01 lakhs signifying a loss of Rs. 63,198.15 lakhs. Similarly, during 2002-03, 2003-04, 2004-05, the amount of losses incurred by ASEB were Rs. 39,400.25 lakhs, Rs. 52,272.75 lakhs and Rs. 1,08,805.25 lakhs respectively. The details of financial performance of ASEB during the pre-restructuring period are being discussed in table-5.3 of chapter-5.

It is also seen that ASEB had taken huge loans and advances from LIC, IDBI, REC, NEDFI as well as from Government of Assam. As a result, every year ASEB used to pay huge sum against these loans, advances and bonds to outside parties. During 2000-01, ASEB paid Rs. 23,983.87 lakhs against its interest and finance charges. In the next year i.e. 2001-02, ASEB paid Rs. 25,573.67 lakhs against its interest and finance charges. Similarly, ASEB paid Rs. 26,869.17 lakhs, Rs. 26,645.82 lakhs during 2002-03 and 2003-04 respectively as interest and finance charges (Table-5.2, Chapter-5). Thus, ASEB was accumulating huge losses over the years to the extent that it was not possible to manage it profitably or getting rid of its liabilities.

The overall financial performance of ASEB was also in a very bad shape before restructuring. Current ratios, liquid ratios, current assets to total assets ratios, current assets to fixed assets ratios etc. were less than the standard level

(116)
signifying very weak solvency position of ASEB. Moreover, the Board was not at all consistent in controlling these ratios and was suffering from high coefficient of variation. All these ratios have been discussed in table - 5.11, table - 5.13, table - 5.15 and table - 5.17 in Chapter - 5 i.e., Financial Implications. Moreover, ASEB in the pre-restructuring period measurably failed to give any return on its total assets, net assets also (Table - 5.21, Table - 5.23 of Chapter - 5). ASEB thus totally failed to earn any profit for it, rather it was incurring huge losses. Net loss suffered by ASEB during 2000-01; 2001-02 was Rs. 60,720.75 lakhs and Rs. 63,198.15 lakhs respectively (Table - 5.25, Chapter - 5). Similarly, the administrative expenses of ASEB was very high in the pre-restructuring period (Table - 5.27, Chapter - 5).

Thus, it is evident that the chronic unsatisfactory performance of ASEB has acted as a constraint to attract adequate investments for improving the utilisation level of its existing capacities and for new capacity creation. ASEB did not have a formal capital structure strategy. This has resulted in constraints in its ability to enter into the domestic and international markets for debt and equity capital. ASEB depends considerably upon loans and grants from Government of Assam and Government guarantees for raising debt capital. In the absence of a coherent corporate capital structure policy and excessive financial dependence on State Government, ASEB is very often subject to political interference by the Department of Power, Government of Assam especially in matters related to tariffs, personnel and investment decisions. From the data and information, following factors seem to have contributed to the poor performance and weak financial health of ASEB:

- Inadequate tariff structure, poor revenue collection and increasing costs.
- Lack of investments in generating additional capacity by private parties.
- An inadequate and weak transmission and distribution (T and D) network.
- High cost of power from private power generators.
• Inadequate power infrastructure and improper combination of thermal and hydel power in the State.
• Lack of latest technology.
• Political interference in decision-making.
• Large scale theft of power.
• Certain section of the consumers like farmers and domestic users are getting subsidized power eroding the financial health of ASEB.
• Inadequate investment in Repair and Maintenance head.
• Lack of optimum utilization of the existing generation capacity.
• Inefficient use of electricity by the consumers in the State.
• Inadequate inter-regional transmission links.
• High manpower and manpower costs.
• Operational inefficiency.
• High commercial losses, etc.

All these adverse conditions discussed above prevented ASEB from mobilizing internal resources or private sector lending, which in turn have affected its generation, transmission and distribution network. Demand for power in the state continued to increase steadily and inevitably demand-supply mismatch continued to rise. Like many other SEBs in India, ASEB has problems of mounting negatives in its Balance Sheet and Profit and Loss Accounts. It is providing negative returns on its investments to the State. Thus, ASEB was creating a severe drain on state's resources and therefore, reforms and restructuring in this vital sector was an urgent need on the part of the Government of Assam.

3.6. RESTRUCTURING OF ASSAM STATE ELECTRICITY BOARD (ASEB):

In order to tide over the unsustainability in the operations of ASEB, the
Government of Assam has initiated reforms in the power sector with the support of
the Ministry of Power, Government of India and the Asian Development Bank
(ADB). The Government of Assam has adopted the Assam Power Sector
Development Programme with effect from December, 2003 (ASEB, 2004–05).
The Assam Electricity Regulatory Commission (A.E.R.C.) was set up on 28th
February, 2001. In pursuance of the Indian Electricity Act, 2003 and as a part of the
Assam Power Sector Development Programme (APSDP), the Government of
Assam has initiated the process of unbundling the ASEB into five (5) new entities.
The State Government vide Notification No. PEL. 151/2003/Pt/165 dated the 10th
December, 2004 and No. PEL. 151/2003/Pt/349 dated the 16th August, 2005 took
over the assets and liabilities of the Board as on 31st March, 2005 and re-vested
the assets and liabilities to the Board and the newly formed five (5) companies as a
step towards power sector restructuring in Assam. The five (5) companies which
have come into existence as a result of restructuring of ASEB are:

A. The Assam Power Generation Corporation Ltd. (APGCL)
B. The Assam Electricity Grid Corporation Ltd. (AEGCL)
C. The Upper Assam Electricity Distribution Company Ltd. (UAEDCL)
D. The Central Assam Electricity Distribution Company Ltd. (CAEDCL)
E. The Lower Assam Electricity Distribution Company Ltd. (LAEDCL)

These companies have been incorporated under the Companies Act, 1956.
APGCL is for generation of power, AEGCL is for transmission of power and
UAEDCL, CAEDCL, LAEDCL are for distribution of power in the State. The Assam
Electricity Regulatory Commission (AERC) has already started functioning under
the Central Electricity Regulatory Commission (CERC). As a result of restructuring,
transfer of men, materials, machines, equipments and other assets have been
materialised among the newly formed companies. The People of Assam are
expected to receive quality power and efficient services under the reform process.
These new entities with definite goals and accountabilities in the changed competitive environment are expected to be successful in improving the poor power scenario in the State. A brief description of the restructured ASEB and the newly formed five (5) companies are given below.

3.6.1 **Post-reform Organisational Structure of ASEB:**

Today, under the reform process, the functions, role and responsibilities of ASEB have undergone a wholesome change. Although, before the restructuring, ASEB had an expanded organisation structure (Fig.3.6), the same has been trimmed in view of the restructuring. The post-reform organisational structure of ASEB is shown below (Fig. 3.7):

![Organisational Structure Diagram]

**Fig. 3.7: POST-REFORM ORGANISATIONAL STRUCTURE OF ASEB**

Source: ASEB

From the above, it is seen that the Chairman exercises administrative control and supervision over all the important activities of the ASEB. The Chairman in his job is assisted by the Member (Technical), Member (Finance) and other senior
ASEB Officials. The functions, role and responsibilities of the restructured ASEB may be summarized as follows:

- The bulk purchase and bulk supply, in other words, purchase of electricity in bulk form the generating companies including Assam Power Generation Corporation Ltd. (APGCL) and supply of electricity in bulk to the three DISCOMS, viz, Upper Assam Electricity Distribution Company Ltd. (UAEDCL), Central Assam Electricity Distribution Company Ltd. (CAEDCL), Lower Assam Electricity Distribution Company Ltd. (LAEDCL) till further orders of the State Government. The existing power purchase contracts including the agreements, arrangements, allocation and other commitments for purchase of energy in the future shall also vest in the Board.

- To look after the properties, rights and interest in the Bijulee Bhawan, Paltanbazar, Guwahati and liabilities attached thereto.

- To exercise the control over and supervision of Common Assets and the Management of the Common Facilities and Common Services as the Chairman of the Board may from time to time by order direct during the provisional period specified under Clause 9 of the aforementioned Scheme notified in the Gazette.

- Subject to and until further orders of the State Government, the implementation, co-ordination and monitoring of the projects and Schemes supported by Asian Development Bank (including counterpart funding), APDRP and any other Scheme concerning the electricity sector in the State shall continue to be undertaken by the Board. The State Government may at any time and from time to time direct the transfer of the functions relating to any of the above projects or Schemes or any part thereof to any of the Transferees, as the State Government may decide. (Mandate of ASEB, 2007-08)

3.7 ASSAM POWER GENERATION CORPORATION LTD. (APGCL):

Assam Power Generation Corporation Ltd. (APGCL) is mainly responsible for generation of electricity in the State of Assam. The Registered Office of APGCL.
is situated at Bijulee Bhawan, Paltan Bazar, Guwahati–781001. The company is incorporated under the Companies Act. 1956. APGCL is managed by a Board of Directors under the leadership of a Managing Director (M.D.). The number of Directors of the company shall be not less than six (6) and not more than nine (9). The Managing Director is the head or Chief Executive of the company. He is empowered to undertake all responsibilities regarding the management and control of the affairs of the company, subject to the supervision and approval of the Board of Directors. All the Directors other than the Managing Director are non-executive Directors. The Government of Assam is entitled from time to time to change the persons nominated as Directors in the company. Moreover, all the Directors including the Managing Director may be removed from their Office, if the Selection Committee constituted for the purpose in the same manner as in the case of appointment of Directors recommends such removal to be in the interest of APGCL. The Selection Committee before making such recommendation as to the removal of any Director including the Managing Director, must take into consideration the opinion of other Directors. The Directors may meet together as a Board from time to time but must meet at least once in every three (3) months. There must be at least four (4) meetings in every financial year. Meetings of the Board is generally convened by the Managing Director of the Company. In addition, meetings of the Board may also be convened by the other Directors as well. Generally, all the meetings of the Board is presided over the Managing Director, if he is present at the time of holding the meeting. However, if the Managing Director is not present at the time of the meeting due to some unavoidable reason, the Directors may choose one of them present there to preside over the meeting. Questions arising at any meeting of the Board of Directors is decided by a majority of votes. Once at least in every financial year, the accounts of the company are examined and the correctness of the Profit and Loss Account and the Balance Sheet is ascertained by the Auditor’s Report.
From above (Fig.3.8), it is clear that the Board of Directors exercises administrative control and supervision over the various activities of APGCL. The Board of Directors is assisted by the Chief General Manager (CGM), Commercial, the Chief General Manager (CGM), Hydro, CGM, Generation, CGM, Project Planning, CGM, Finance and Accounts and CGM, Human Resource (HR). Under the rank of CGM, there are a number of General Managers (G.Ms) supervising their respective areas. Under General Managers, next comes in the organisation hierarchy, the posts of Deputy General Managers (DGMs). There are a number of DGMs in APGCL like DGM, Internal Audit, DGM, Vigilence, DGM, Procurement, DGM, Contract, DGM, Regulatory, DGM, Accounts, DGM, Industrial Relations (IR), DGM, Human Resource (HR), DGM, Administration (Admin), DGM, Legal and so on. After DGM, there is a line of Senior Managers (Sr. Mgrs.) in the organisation looking after the various important activities like auditing, purchasing, accounts, training, security etc. Next to the post of senior managers in the organisational set-up of APGCL, we find a number of Managers (Mgrs.) / Deputy Managers (DMs), Assistant Managers (A.Ms.) supervising their respective works.

3.7.1 Main Objectives of Assam Power Generation Corporation Ltd. (APGCL) :

The main objectives to be pursued by the APGCL may be stated as follows :-

- To take over, operate, maintain, and use the existing electricity generation stations and assets of the Assam State Electricity Board (ASEB) under the transfer scheme to be notified by the Government of Assam in terms of the Electricity Act, 2003 and/or relevant State amendments / enactments, as the case may be (hereinafter referred to as “Applicable Law”), and/or the electric generation stations owned or controlled by the Government of Assam or any Government Corporation or Authority or any other person, including any right, title or interest therein in the State of Assam.
or elsewhere.

- To acquire, establish, construct, erect, lay, operate, run, maintain, enlarge, alter, renovate, modernise, work and use in the State of Assam and elsewhere, electricity generating stations (including captive generating stations), projects associated and all things connected thereto including civil works, fuel, fuel supply, water and waste storage, use and disposal systems, distribution centres, cables, wires lines, accumulators, plant, motors, meters, apparatus, materials and things connected with the production, generation, use, storage, measurement, transmission, supply and distribution of the power.

- To supply bulk electricity to various entities including distribution companies and to other customers directly as envisaged under the Applicable Law.

- To carry on the business of importing, exporting, producing, trading, manufacturing or otherwise dealing in electric power.

- To coordinate, aid and advise on the activities of other companies and concerns including subsidiaries, associates, affiliates engaged in the generation of electricity on all matters concerning the design, establishment, operation and maintenance of electric generating stations, associated transmission and distribution systems and in the production, generation, use, storage, measurement, supply and distribution of power.

- To study, investigate, collect information and data, review operations, plan, research, design, prepare feasibility reports, prepare project reports, diagnose operational difficulties and weaknesses and advise on the remedial facilities and to undertake for and on behalf of others the setting up of electric power plants and generally work for the efficient and economic management of electric power and the optimum utilization of the resources available.

- To establish, augment, renovate, operate and maintain tie-lines, substations and dedicated transmission lines connected therewith in accordance with the
provision of the Applicable Law.

- To act as a developer and promoter in developing, setting up, building, establishing and operating new electricity generating stations within the State of Assam or elsewhere.

3.7.2 Objectives Incidental or Ancillary to the attainment of the Main Objectives of APGCL:

The objectives incidental or ancillary to the attainment of the main objectives of the Assam Power Generation Corporation Ltd. (APGCL) are:

1. To enter into any arrangement with the Government of India or any Local or State Government or with Authorities, national, state, local, municipal or otherwise or with any person for the purpose of directly or indirectly carrying out the objects or furthering the interests of the company or its members and to obtain from any such Government, State Authority or person any charters, subsidies, subventions, loans indemnities, grants, contracts, decrees, rights, sanctions, privileges, licences or concessions whatsoever, (whether statutory or otherwise) which the Company may think it desirable to obtain and carry out, exercise and comply with the same.

2. To file tariff and other petitions before the State and Central Electricity Regulatory Commisions and to levy and recover tariff as allowed by the regulator; to undertake various actions for seeking, obtaining and maintaining regulatory approvals from State and Central regulators for its activities. In this behalf, filing various documents, pleadings, petitions and affidavits; representing its case and taking other neccessary steps to pursue its cases effectively.

3. To borrow or receive money or deposits for the purpose of financing the business of the Company either with security or mortgage or other security charged on the undertaking on all or any of the assets of the Company including uncalled capital and to increase, reduce or pay off any such securities.

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4. To acquire by purchase, lease, exchange, hire or otherwise, or to construct and maintain factories, works, buildings and conveniences of all kinds, lands, buildings, apartments, plants, machinery, and hereditaments of any tenure or description, situated in India or in any other part of the world and any estate or interest therein and any rights over or connected with land so situated and turn the same to account in any manner as may seem expedient, necessary or convenient to the Company for the purpose of its business.

5. To acquire, possess and undertake the whole or any part of the business, assets, property, goodwill, rights and liabilities of any person, firm, society, association, corporation or Company carrying on any business which the Company is authorized to carry on and to set up special purpose vehicle, subsidiaries for the same.

6. To apply/arrange for, obtain, amend, alter and maintain appropriate permissions, directions or orders in terms of the Applicable Laws for enabling the Company to carry out any of the objects of the Company or for any other purpose which may seem expedient; and to oppose any proceedings or application or any other endeavours, steps or measures which may seem calculated directly or indirectly to prejudice the Company's interests.

7. To establish, provide, maintain and conduct or otherwise subsidize research laboratories aid experimental workshops for scientific, technical or researches, experiments and to undertake and carry on directly or in collaboration with other agencies scientific and technical research experiments and tests of all kinds and to process, improve and invent new products and their techniques of manufacture.

8. To promote, encourage, reward in every manner studies and research, scientific and technical investigations and inventions of any kind that may be considered likely to assist, encourage and promote rapid advances in technology,
economies, import substitution or any business which the company is authorized to carry on.

9. To establish, maintain and operate technical training institutions, and hostels for engineers of all types and other technical staff and artisans and mechanics of all types and kinds, to make such other arrangements as may be expedient for the training of all categories of officers, workers, clerks, store keepers and other personnel likely to be useful to or assist in any business which the Company is authorized to carry on.

10. To sell, improve, manage, develop, exchange, loan, lease or let, underlease, sub-let, mortgage, dispose of, deal with, turn to account or otherwise deal with any rights or property of the Company.

11. To accumulate funds and to invest un-borrowed moneys belonging to or lying with the Company and not immediately required in suitable securities and instruments of a reputed bank or financial institution, recognized by the Reserve Bank of India (RBI) in the best interest of the Company.

12. To enter into joint ventures partnerships, consortium or arrangement with any person or Company or body or authority, Indian or foreign including Government for sharing of investments, creation / participation in funds or sharing of profits, carrying on or engaged in any operation capable of being conducted conveniently in line with the business of the Company or to benefit of the Company or its activities.

13. To provide for the amelioration and welfare of persons employed or formerly employed by the Company and the wives, families, dependants or connections of such persons by building or contributing to the building of houses, dwellings or by grants of money, pensions; allowances, bonuses or other payments or by creating and from time to time subscribing or contributing to Provident Fund and other associations, institutions, funds or trusts or by helping persons employed by the Company to effect or maintain insurance on their lives by contributing to the
payment of premium or otherwise and by providing or subscribing or contributing towards places of instruction and recreation, education to children, hospitals and dispensaries, medical and other attendance and other assistance as the Company shall think fit.

14. To sell or dispose of the undertaking of the Company or any part thereof for such consideration as the Company may think fit and in particular for shares, debentures or securities of any other association, corporation or company, to promote or aid in the promotion of any other company or partnership, for the purpose of acquiring all or any of the properties, rights or liabilities of the Company or for any other purposes which may seem directly or indirectly calculated to benefit the Company.

15. To promote, develop, implement and operate projects on 'Build Operate & Transfer', 'Build, Operate, Own & Transfer' and 'Build, Operate Lease & Transfer' basis.

16. To enter into agreements and contracts for lease, hiring and/or purchase of equipment and for technical, financial, or any other assistance, for carrying out all or any of the objects of the Company.

17. To enter into contracts of indemnity and guarantee, to issue bonds, debentures, debenture stock, and other securities of all kinds and to frame, constitute and secure the same as may seem expedient, with full power to make them transferable by delivery or by instrument of transfer or otherwise, and either perpetual, terminable, redeemable or otherwise and to charge or secure the same by trust deed or otherwise, on the undertakings of the Company or upon, any specific property and rights, present and future, of the Company or otherwise.

18. To establish and maintain agencies, subsidiaries, branches and local registers, to procure registration or recognition of the Company and to carry on business in any part of the world and to take such steps as may be necessary to give the Company such rights and privileges in any part of the world as are possessed by
local companies or partnership or as may be thought desirable.

19. To subscribe for, underwrite, purchase, or otherwise acquire and to hold, dispose of and deal with the shares, stocks, securities and evidences of indebtedness or the right to participate in profits or other similar documents issued by any government authority, corporation or body or by any company or body of persons and any option or right in respect thereof out of surplus un-borrowed funds.

20. To create any depreciation fund, reserve fund, sinking fund, insurance fund, pension fund or any other fund, whether for depreciation or for repairing, improving, extending or maintaining any of the properties of the Company or redeemable preference shares or for benefit of its employees or any other purposes whatsoever conducive to the interests of the Company.

21. To open an account or accounts with any banks or financial institutions recognized by the Reserve Bank of India and to pay into and withdraw money from such account or accounts.

22. To acquire shares, stocks or securities out of surplus un-borrowed funds in or of any company carrying on any business which this Company is entitled to carry on or of any other company or undertaking the acquisition of which may seem likely or calculated directly to promote or advance the interests of or be advantageous or beneficial to the Company and to sell or dispose of or transfer any such shares, stocks or securities.

23. To promote, organize or carry on the business of advisory and consultancy services in any field of activity in which it is engaged.

24. To obtain technical, legal, financial, media and communication, training and human capacity building and managerial advisory services as appropriate in furtherance of its objects, to enter into agreements, contracts and Memoranda of Understanding for the same.

25. To promote or concur in the promotion of any company, which shall be
considered desirable in furtherance of the object or any objects of the Company; to arrange, secure and make available to its subsidiary and other such organisations such facilities, resources, inputs and services as may be required.

26. To carry on any other business to optimally utilize its assets and expertise, as also to develop alternate revenue streams in conjunction with and pursuance of its main objects and activities, in connection with any of the Company’s objects to enhance the value of or render profitable any of the Company’s property, rights or interests.

27. Subject to all applicable regulations and laws to receive money, securities, valuables of all kinds on deposit or safe custody (not amounting to the business of banking as defined under the Banking Regulation, 1949), to issue share capital including preferance shares and debentures, to issue bonds and to borrow any money and secure the repayment of any money borrowed or raised or owing by mortage, charge or lien upon all or any of the Company’s property (both present and future), stocks, debentures (perpetual or otherwise) including its uncalled capital and guarantee performance by the Company or any other such person or body corporate of any obligation undertaken by the Company or any other person or company, as the case may be.

28. Subject to provisions of Sections 391 to 394 and 394A of the Companies Act, 1956 to evolve scheme for restructuring or arrangement, to amalgamate or merge or to enter into partnership or into any arrangement for sharing profits, union of interests, co-operation, joint venture of reciprocal concession with any person or persons, partnership firm/firms, or company carrying on or engaged in any business or transaction which the company is authorised to carry on or engage in.

29. To distribute any of the property of the Company in specie or otherwise among the members, in the event of winding up, subject to the provisions of the Companies Act, 1956.
30. To exercise all powers and functions vested under the Applicable Law, including steps/activities:

a) to secure safety of its plants and associated installations / equipment;

b) to undertake various works related to generation and supply of electricity;

c) To maintain, operate, augment, renovate and keep in good condition its generating plants and the associated evacuation system,

d) to take, retain and adjust securities to cover for payment against its power purchase;

e) to install, repair, replace, check and read electric meters, as also to prescribe / install protective devices, and

f) to ensure compliance with applicable regulations and Grid Code.

31. To invest the surplus un-borrowed funds of the Company, insecurities as may from time to time, be determined by the directors and from time to time, to sell or vary all such investments and to execute all assignments, transfers, receipts and documents that may be necessary in that behalf.

32. Generally to do all such other things as may be deemed incidental or conducive to the attainment of the above objects or any of them.

(Memorandum and Articles of Association, Assam Power Generation Corporation Ltd., APGCL).

3.8 ASSAM ELECTRICITY GRID CORPORATION LTD. (AEGCL):

The Assam Electricity Grid Corporation Ltd. (AEGCL) is another important organisation, which has come into existence as a result of restructuring of ASEB. The AEGCL is mainly responsible for transmission of electricity throughout the State of Assam. The Company is also incorporated under the Companies Act, 1956. The Company is administered by its Board of Directors headed by the Managing Director (M.D.). Like the Assam Power Generation Corporation Ltd.
(APGCL), the number of Directors in AEGCL cannot be less than six (6) and more than nine (9). The Managing Director (M.D.) is the Chief Executive of AEGCL. He is authorised with all the power to give necessary directions regarding the management of the Company subject to the approval of the Board of Directors. All the Directors except the Managing Director are non-executive Directors. The Government of Assam is entitled to nominate the Directors of the Company from time to time. All the Director including the Managing Director may be removed from their Office if the Committee constituted for the purpose in the same way as in the case of appointment of Directors recommends the removal to be in the interest of AEGCL. However, the high powered Committee before recommending such removal should take into account the opinions of other Members of the Board of Directors. It may be mentioned that, a person for becoming the Director of the Company is not required to hold any qualification shares in the Company. The remuneration of a Director shall be such amount as the Directors may determine from time to time subject to the provisions of the Companies Act, 1956. The Directors may also be paid all travelling allowances, hotel and other expenses for attending the meetings of the Board or for the general meetings in connection with the business of the Company.

The Directors may meet together as a Board from time to time for smooth running the business of the Company. However, the Directors must meet at least once in every three (3) months and there should be at least four (4) meetings in every financial year. Board meetings are convened generally by the Managing Director. However, such meetings may also be convened by other Directors, as well. Generally, all the Board meetings are presided over by the Managing Director. In his absence, due to some unavoidable reason, the Directors may choose any of them present there to preside over the meeting. In the Board meeting, all the important decisions are taken on the basis of consensus or decided by a majority
of votes. Without prejudice to the provisions of Section 287 of the Companies Act, 1956 the quorum necessary for the transaction of the business of the Board is half of the total number of the Directors or four (4), whichever is more. If a Board meeting is not held for want of quorum then the meeting shall stand adjourned to such day, time and place as Directors present at the meeting may fix. The Company in General Meeting may declare a dividend to be paid to the members according to their respective rights and interest in the Company and may also fix the time for payment of such dividends. However, no dividend shall exceed the amount recommended by the Board. Moreover, the Directors may from time to time decide to pay interim dividends to the members of the Company as in their judgement the position of the Company justifies. In every financial year, the accounts of the Company are examined and the correctness of the Profit and Loss Account and the Balance Sheet is ascertained by Audit Reports.
From Fig 3.9, it is seen that the Board of Directors enjoys administrative control and supervision over the various functions of the Assam Electricity Grid Corporation Ltd. (AEGCL). The Managing Director (M.D.) is the Chief Executive of the Company. The Board of Directors in their work, gets assistance from Chief General Manager (CGM), Finance and Corporate Services, Chief General Manager (CGM), Technical and Chief General Manager (CGM), Operations and Maintenance (O & M) and Project and Planning. Below the rank of CGM, in the organisation hierarchy of Assam Electricity Grid Corporation Ltd. (AEGCL) there is a line of General Managers (GMs). General Manager (GM), Finance and Accounts, General Manager (GM), Project and Planning, General Manager, Operations and Maintenance (O & M) Upper, General Manager, Operations and Maintenance, Lower, General Manager, Civil supervising their respective branches. Next in the structure, we see the rank of Deputy General Managers (DGMs) looking after various responsibilities like. Internal Audit, Human Resource, Industrial Relations and Administration, Expenditure and Budget, Commercial, Design and Planning, Testing and Commissioning and so on. Next to the rank of DGMs, there is a number of Senior Managers (Sr. Mgrs.) supervising their respective areas like Human Resource (HR), Industrial Relations (IR), Accounts, Civil works etc. After the level of Senior Managers (Sr. Mgrs.), there lies the posts of Managers (Mgr), Deputy Managers (Dy. Mgrs.), Assistant Managers (AMs) shouldering various responsibilities of the Assam Electricity Grid Corporation Ltd. (AEGCL).

3.8.1 **Main Objectives of Assam Electricity Grid Corporation Ltd. (AEGCL):**

The major objectives to be achieved by the Assam Electricity Grid Corporation Ltd. (AEGCL) may be mentioned as follows:

- To take over the existing transmission system of voltage level of 66KV and
above of the ASEB including operation and maintenance of transmission lines and sub-stations and related equipment such as cables, wires, accumulators, plants, motors, meters, apparatus, computers, communication and telemetering equipment and other material connected with transmission of electrical energy and construction of new transmission lines and sub-stations as may be transferred in pursuance of a transfer scheme to be notified by the Government of Assam in terms of the Electricity Act, 2003 and/or relevant State amendments/enactments, as the case may be (hereinafter referred to as 'Applicable Law').

- To plan, acquire, establish, design, construct, erect, lay, implement, operate, run, manage, maintain, enlarge, alter, renovate, modernise, work and use a power system transmission network including extra high-voltage (EHV), high voltage (HV) and associated sub-stations covering all voltage level of such sub-stations and transmission lines of 66 KV and above in all its aspects, communication and telemetering equipment, SCADA systems, other machinery, equipment and material, connected with wheeling and transmission of electrical energy, its metering, monitoring, construction and operations of new transmission lines and substations.

- To undertake for and on behalf of others the erection, operation, maintenance, management of extra high voltage, high voltage, lines and associated sub-stations, equipment, apparatus, cables and wires. To design and implement transmission projects. To undertake diagnostic and system studies and to recommend remedial measures.

- To co-ordinate integrated operation of the state grid system, to act as State Load Despatch Centre as envisaged under the Applicable Law, to discharge its obligations effectively and efficiently as a State Transmission Utility. To interact with regional and national grid and the associated load despatch centre at regional/national level as the case may be. To co-ordinate and operate the State Grid in accordance with appropriate Grid Codes, Availability Based Tariff or any other Tariff.
Operational Regime in force.

- To undertake planning and coordination activities in regard to transmission of electricity works connected with the transmission, within and outside the State of Assam and also to the neighbouring countries, and such other functions as may be assigned to the Company by law.

- To coordinate, aid and advise on the activities of other companies and concerns, including subsidiaries, associates and affiliates, engaged in generation, transmission, distribution, supply and wheelings of electrical energy.

- To study, investigate, collect information and data, review operations, plan, research, design and prepare project reports, diagnose operational difficulties and weaknesses and advise on the remedial measures to improve and modernise existing transmission and supply lines and sub-stations.

- To develop communication system for the purpose of maintaining, operating and managing the electricity transmission system as well as for use by other agencies on payment of appropriate charges.

3.8.2 **Objectives Incidental or Ancillary to the attainment of Main Objects of AEGCL**:

The incidental or ancillary objectives of the Assam Electricity Grid Corporation Ltd. (AEGCL) are:

1. To apply for and obtain, maintain and operate License for transmission and wheeling of electricity under the Electricity Act, 2003 and any state enactment as the case may be.

2. To file tariff and other petitions before the State and Central Electricity Regulatory Commissions, and to levy and recover tariff as allowed by the regulator, to undertake various actions for seeking, obtaining and maintaining regulatory approvals from State and Central regulators for its activities. In this behalf, filing
various documents, pleadings, petitions and affidavits representing its case and taking other necessary steps to pursue its cases effectively.

3. To enter into any arrangement with the Government of India or any Local or State Government or with Authorities, national, state, local, municipal or otherwise or with any person for the purpose of directly or indirectly carrying out the objects or furthering the interests of the company or its members and to obtain from any such Government, State Authority or person any charters, subsidies, loans, indemnities, grants, contracts, decrees, rights, sanctions, privileges, licences or concessions whatsoever, (whether statutory or otherwise) which the Company may think it desirable to obtain and carry out, exercise and comply with the same.

4. To borrow or receive money or deposits for the purpose of financing the business of the Company either with security or mortgage or other security charged on the undertaking on all or any of the assets of the Company including uncalled capital and to increase, reduce or pay off any such securities.

5. To acquire by purchase, lease, exchange, hire or otherwise, or to construct and maintain factories, works, buildings and conveniences of all kinds, lands, buildings, apartments, paints, machinery and hereditaments of any tenure or description, situated in India or in any other part of the world and any estate or interest therein and any rights over or connected with land so situated and turn the same to account in any manner as may seem expedient, necessary or convenient to the Company for the purpose of its business.

6. To acquire, possess and undertake the whole or any part of the business, assets, property, goodwill, rights and liabilities of any person, firm, society, association, corporation or Company carrying on any business which the Company is authorized to carry on.

7. To apply/arrange for, obtain, amend, alter and maintain appropriate permissions, directions or order in terms of the applicable laws for enabling the
Company to carry out any of the objects of the Company or for any other purpose which may seem expedient and to oppose any proceedings or application or any other endeavours, steps or measures which may seem calculated directly or indirectly to prejudice the Company’s interests.

8. To establish, provide, maintain and conduct or otherwise subsidize research laboratories and experimental workshops for scientific, technical or researches, experiments and to undertake and carry on directly or in collaboration with other agencies scientific and technical research experiments and tests of all kinds and to process, improve and invent new products and their techniques of manufacture.

9. To promote, encourage, reward in every manner studies and research, scientific and technical investigations and inventions of any kind that may be considered likely to assist, encourage and promote rapid advances in technology, economies, import substitution or any business which the Company is authorised to carry on.

10. To establish, maintain and operate technical training institutions, and hostels for engineers of all types and other technical staff and artisans and mechanics of all types and kinds; to make such other arrangements as may be expedient for the training of all categories of officers, workers, clerks, store keepers and other personnel likely to be useful to or assist in any business which the Company is authorised to carry on.

11. To sell, improve, manage, develop, exchange, loan, lease or let, under-lease, sub-let, mortgage, dispose of, deal with in any manner, turn to account or otherwise deal with any rights or property of the Company.

12. To accumulate funds and to invest un-borrowed moneys belonging to or lying with the Company and not immediately required in suitable securities and instruments of a reputed bank or financial institution, recognized by the Reserve Bank of India (RBI) in the best interest of the Company.
13. To enter into partnership, consortium or arrangement with any person or Company or body or authority, Indian or foreign including Government for sharing of investments, creation / participation in funds, or sharing of profits, carrying on or engaged in any operation capable of being conducted conveniently in line with the business of the Company.

14. To provide for the amelioration and welfare of persons employed or formerly employed by the Company and the wives, families, dependants or connections of such persons by building or contributing to the building of houses, dwellings or by grants of money, pensions, allowances, bonuses or other payments or by creating and from time to time subscribing or contributing to Provident Fund and other associations, institutions, funds or trusts or by helping persons employed by the Company to effect or maintain insurance on their lives by contributing to the payment of premium or otherwise and by providing or subscribing or contributing towards places of instruction and recreation, hospitals and dispensaries, medical and other attendance and other assistance as the Company shall think fit.

15. To sell or dispose of the undertaking of the Company or any part thereof for such consideration as the Company may think fit and in particular for shares, debentures or securities of any other association, corporation or company, to promote or aid in the promotion of any other company or partnership, for the purpose of acquiring all or any of the properties, rights or liabilities of the Company or for any other purposes which may seem directly or indirectly calculated to benefit the Company.

16. To outsource various functions and activities to carry out different works including efficient operations, renovation and modernization, maintenance, capital works and system augmentation and franchised system operation.

17. To promote, develop, implement and operate projects on 'Build, Operate and Transfer', 'Build, Operate, Own and Transfer' and 'Build, Operate, Lease and
18. To enter into agreements and contracts for lease, hire, rent, purchase of equipment and for technical, financial, or any other assistance, for carrying out all or any of the objects of the Company.

19. To enter into contracts of indemnity and guarantee, to issue bonds, debentures, debenture stock, and other securities of all kinds and to frame, constitute and secure the same as may seem expedient with full power to make them transferable by delivery or by instrument of transfer or otherwise, and either perpetual, terminable, redeemable or otherwise, and to charge or secure the same by trust deed or otherwise, on the undertakings of the Company or upon, any specific property and rights, present and future, of the Company or otherwise.

20. To establish and maintain agencies, subsidiaries, branches and local registers, to procure registration or recognition of the Company and to carry on business in any part of the world and to take such steps as may be necessary to give the Company such rights and privileges in any part of the world as are possessed by local companies or partnership or as may be thought desirable.

21. To subscribe for, underwrite, purchase or otherwise acquire and to hold, dispose of and deal with the shares, stocks, securities and evidences of indebtedness or the right to participate in profits or other similar documents issued by any government authority, corporation or body or by any company or body of persons and any option or right in respect thereof out of surplus unborrowed funds.

22. To create any depreciation fund, reserve fund, sinking fund, insurance fund, pension fund or any other fund, whether for depreciation or for repairing, improving, extending or maintaining any of the properties of the Company, for benefit of its employees or redeemable preference shares or for any other purpose whatsoever conducive to the interests of the Company.

23. To open an account or accounts with any banks or financial institutions.
recognized by the Reserve Bank of India and to pay into and withdraw money from such account or accounts.

24. To acquire shares, stocks or securities out of surplus unborrowed funds in or of any company carrying on any business which this Company is entitled to carry on or of any other company or undertaking the acquisition of which may seem likely or calculated directly to promote or advance the interests of or be advantageous or beneficial to the Company in pursuit of its objects, to set up special purpose vehicles and / or subsidiaries for the same and to sell or dispose of or transfer any such shares, stocks or securities.

25. To promote, organize or carry on the business of advisory consultancy services in any field of activity in which it is engaged.

26. To obtain technical legal, financial, media and communication, training and human capacity building and managerial advisory services as appropriate in furtherance of its objects, to enter into agreements, contracts and Memoranda of Understanding for the same.

27. To promote or concur in the promotion of any company, which shall be considered desirable in furtherance of the object or any objects of the Company. To arrange, secure and make available to its subsidiary and other concerned organizations such facilities, resources, inputs and services as may be required.

28. To carry on any other business optimally utilize its assets and expertise, as also to develop alternate revenue streams in conjunction with and pursuance of its main objects and activities, in connection with any of the Company's objects to enhance the value of or render profitable any of the Company's property, rights or interests.

29. Subject to all applicable regulations and laws to receive money, securities valuables of all kinds or deposit or safe custody (not amounting to the business of banking as defined under the Banking Regulation, 1949), to issue share capital
including preference shares and debentures, to issue bonds and to borrow any money and secure the repayment of any money borrowed or raised or owing by mortgage, charge or lien upon all or any of the Company's property (both present and future), stocks, debentures (perpetual or otherwise) including its uncalled capital and guarantee performance by the Company or any other such person or body corporate of any obligation undertaken by the Company or any other person or Company, as the case may be.

30. To exercise all powers and functions vested under the Applicable Law, including steps/activities:
   a) to secure safety of the system as also the consumers and general public;
   b) to undertake various works related to transmission, wheeling and load-despatch of electricity;
   c) to maintain, operate, augment, renovate and keep in good condition the transmission system;
   d) to install, repair, replace, check and read electric meters, as also to prescribe/install protective devices;
   e) to ensure compliance with applicable regulations, Grid Code, Supply Code and Standards; and
   f) to initiate and pursue prosecution of offenders under Applicable Law and other State and Central enactments in force.

31. Subject to provisions of Sections 391 to 394 and 394A of the Companies Act, 1956 to evolve scheme for restructuring or arrangement, to amalgamate or merge or to enter into partnership or into any arrangement for sharing profits, union of interests, co-operation, joint venture of reciprocal concession with any person or persons, partnership firm/firms, or company carrying on or engaged in any business or transaction which the company is authorised to carry on or engage in.

32. To distribute any of the property of the Company in specie or otherwise among the members, in the event of winding up, subject to the provisions of the Companies Act, 1956.
33. To invest the surplus unborrowed funds of the Company, in securities as may from time to time, be determined by the directors and from time to time, to sell or vary all such investments and to execute all assignments, transfers, receipts and documents that may be necessary in that behalf.

34. Generally to do all such other things as may be deemed incidental or conducive to the attainment of the above objects or any of them.

(Memorandum and Articles of Association, Assam Electricity Grid Corporation Ltd., AEGCL).

3.9 UPPER ASSAM ELECTRICITY DISTRIBUTION COMPANY LTD. (UAEDCL):

After generation and transmission, proper distribution of electricity is another crucial area upon which the efficiency of the power sector depends to a great extent. Three (3) distribution companies (DISCOMS) have come into existence as a result of restructuring of the erstwhile Assam State Electricity Board (ASEB). The Upper Assam Electricity Distribution Company Ltd. (UAEDCL) is incorporated under the Companies Act, 1956. The main objective of the Upper Assam Electricity Distribution Company Ltd. (UAEDCL) is to ensure steady and smooth distribution of electricity in the Upper Assam region of our State. The UAEDCL mainly covers Dibrugarh, Tinsukia, Sivasagar, Lakhimpur and Jorhat districts. The business of UAEDCL is managed by its Board of Directors. The Managing Director is the Chief Executive of the Company with power to undertake all things in regard to the administration and control of the affairs of UAEDCL, subject to the supervision and approval of the Board of Directors. The number of Directors of the Company cannot be less than six (6) and more than nine (9). All the Directors other than the Managing Director are non-executive Directors. The Government Assam is empowered to
nominate the Directors from time to time. Again, all the Directors including the Managing Director (M.D.) are subjected to removal from their Office, if the Selection Committee constituted for the purpose recommends such removal. However, the Selection Committee before recommending such decision as to the removal of any Director including the M.D. must take into consideration the opinions of other Directors. It may be noted here that a Director is not required to hold any qualification shares of UAEDCL. The remuneration of a Director is determined by the Directors from time to time under the provisions of Companies Act, 1956. The Directors are paid travelling allowances, hotel and other expenses for attending Board meetings or general meetings in connection with the business of UAEDCL.

The Board of Directors shall always provide a common seal for the Company and have power from time to time to destroy the same and substitute a new seal in lieu thereof. The Board of Directors shall also provide the safe custody of the seal. The Directors meet together from time to time as a Board in order to discuss the important Company matters. However, they must meet at least once in every three (3) months and there should be at least four (4) meetings in every financial year. Meetings of the Board is usually convened by the Managing Director. In addition, meetings of the Board may also be convened by other Directors al well. As per the provisions of Section 287 of the Companies Act, 1956 the necessary quorum for transaction of business in the Board meetings is half of the total number of the Directors or four (4), whichever is more. If a Board meeting cannot be held for lack of quorum, then the meeting shall stand adjourned to such day, time and place as the Directors present at the meeting may decide. All meetings of the Directors is normally presided over by the Managing Director ; if he is available. But at any meeting of the Directors, if the M.D. is absent under unavoidable circumstances, the Directors present there may choose on the basis of consensus one of them to preside over the meeting. All the important decisions in the meeting are adopted on
consensus basis or decided by a majority of votes. The Company in General Meeting may announce a dividend for paying to the members as per their respective interests and rights in the profits of the Company. The meeting may also fix the time for payment of dividends but dividend shall not exceed the amount recommended by the Board. In addition to that, the Board of Directors may pay to the members such interim dividends as in their opinion the financial position of the Company permits. The accounts of the Company are examined every year. In order to maintain transparency, the correctness of the Profit and Loss Account and the Balance Sheet are ascertained by one or more auditors.
From the above (Fig. 3.10), it is seen that the Managing Director (M.D.) is the Chief Executive Officer of UAEDCL. The Board of Directors administers the various key activities of UAEDCL. In this respect, the Board is assisted by the Chief General Manager (CGM), Finance/Accounts, Chief General Manager (CGM), Technical/Field Operations. After the rank of CGM in the organisation hierarchy of UAEDCL, we find a number of General Managers (GMs) like General Manager (GM), Commercial, General Manager, Finance and Accounts, General Manager, Human Resource (HR), General Manager, Projects, General Manager, Operations supervising their respective branches. Below the rank of General Managers (GMs), there is a number of Deputy General Managers (DGMs) controlling Legal, Vigilance, Accounts, Rural Electrification, Civil, Field operations and so on. After the position of Deputy General Managers (DGMs), there is a number Senior Managers (Sr. Mgrs.) looking after Tariff, Customer Care, Technical, Accounts, Administration, Rural Electrification, Industrial Relations, Human Resource, Civil Design, Stores, Audits etc. Below the level of Senior Managers, then comes in the organisation hierarchy, the positions of Managers (Mgrs.) and Assistant Managers (A.Ms) performing various responsibilities of UAEDCL and coordinating with the upper levels.

3.9.1 Important Objectives of the Upper Assam Electricity Distribution Company Ltd. (UAEDCL):

The major objectives of the Upper Assam Electricity Distribution Company Ltd. (UAEDCL) may be stated as follows:

1. To take over, manage and operate the electricity distribution system, assets, liabilities, undertakings of the Assam State Electricity Borad (ASEB), as may be transferred to it pursuant to a notified transfer scheme in terms of Part XIII of the Electricity Act, 2003 and/or relevant State enactments, as the case may be.
2. a) To undertake the electricity distribution, trading, supply (bulk and retail) in the State of Assam or outside in accordance with provisions of Applicable Law and all activities ancillary or appurtenant thereto.

b) For the above purpose, to plan, acquire, establish, construct, erect, lay, operate, run, manage, maintain, enlarge, alter, renovate, modernise work and use a electricity sub-transmission and distribution system and network in all its aspects - including lines of voltage up to and including 33KV level, associated sub-stations, distribution centres, cables, wires, accumulators, plants, motors, meters, apparatus, computers, SCADA system, communication and telemetering equipment and any other materials connected with sub-transmission, distribution and supply of electrical energy.

c) To undertake for and on behalf of others, within and outside the State of Assam erection, installation, commissioning, operation, maintenance, renovation and management of electricity distribution systems comprising of lines of voltage upto and including 33 KV level and associated sub-stations, equipment, apparatus, cables, wires etc.

d) To provide Advisory Services in electricity sub-transmission, distribution, trading and supply.

e) To undertake load-surveys and load-forecasting resulting in electricity distribution systems planning, and developmental works in distribution system and network pursuant to the same.

3. a) To carry on the business of purchasing, selling, supplying, importing, exporting, wheeling, trading of electrical energy.

b) To enter into, execute and implement agreements for purchase and sale of electrical energy from and to other distribution companies and other persons including franchisees, sub-licensees and consumers.
c) To enter into, execute and implement agreements with State, Central and/or other Transmission Companies for wheeling and transmission of electricity.

d) To carry out evacuation, scheduling of electricity supply and distribution in consultation with the State and Regional Load Despatch Centre, transmission company. To carry out evacuation, scheduling of electricity supply and distribution in consultation with the State and Regional Load Despatch Centre, transmission company (ies) and generating stations/companies.

e) To tender, finalise and enter into contracts for purchase of electrical energy from any generating station or plant and electricity supply and trading agencies.

f) To promote, develop, set up, establish, own, operate and manage by itself or through a subsidiary captive electricity generating stations.

g) To undertake other similar businesses with a view to optimally utilizing its assets and expertise, as also to perform its functions and obligations.

4. To coordinate, aid and advise on the activities of other companies and concerns, including subsidiaries, associates and affiliates, engaged in trading, distribution, supply and wheeling of electrical energy,

5. To study, investigate, collect information and data, review operations, plan, research, design and prepare project reports, diagnose operational difficulties and weaknesses and advise on the remedial measures to improve and modernize existing sub-transmission, and distribution lines and sub-stations, in the State of Assam and outside.

3.9.2 Objectives Incidental or Ancillary to the attainment of the Main Objects of UAEDCL:

The objectives incidental or ancillary to the attainment of the main objectives of the Upper Assam Electricity Distribution Company Ltd. (UAEDCL) are:

1. To arrange, secure and make available to its subsidiary and other concerned...
organizations such facilities, resources, inputs and services as may be required.

2. To enter into any arrangement with the Government of India or any Local or State Government or with Authorities, national, state, local, municipal or otherwise or with any person for the purpose of directly or indirectly carrying out the objects or furthering the interests of the Company or its members and to obtain from any such Government, Regulatory Authority or person any charters, subventions, subsidies, loans, indemnities, grants, contracts, decrees, rights, sanctions, privileges, licences or concessions whatsoever, (whether statutory or otherwise) which the Company may deem desirable to obtain and carry out, exercise and comply with the same.

3. To file tariff and other petitions before the State and Central Electricity Regulatory Commissions, and to levy and recover tariff as allowed by the regulators; to undertake various actions for seeking, obtaining and maintaining regulatory approvals and licences from State and Central regulators for its activities. In this behalf, filing various documents, pleadings, petitions and affidavits; representing its case and taking other necessary steps to pursue its cases effectively and to carry out all actions in pursuance of the same.

4. To execute Power Purchase Agreements and other contracts and agreements with the Bulk suppliers, power traders, generating utilities, Central and State companies and departments, other generating stations, electricity boards States / utilities and entities.

5. To outsource various functions and activities for carrying out different works under the Applicable Law including efficient operations, renovation and modernization, repair and maintenance, capital works and system augmentation and franchised system operations.

6. To promote, develop, implement and operate projects on ‘Build, Operate & Transfer’, ‘Build, Operate, Own & Transfer’ and ‘Build, Operate, Lease & Transfer’ basis.
7. To borrow or receive money or deposits for the purpose of financing the business of the Company either with security or mortagage or other security charged on the undertaking on all or any of the assets of the Company including uncalled capital and to increase, reduce or pay off any such securities.

8. To acquire by purchase, lease, exchange, hire or otherwise, or to construct and maintain factories, works, buildings and conveniences of all kinds, lands, buildings, apartments, plants, machinery and hereditaments of any tenure or description, situated in India or in any other part of the world and any estate or interest therein and any rights over or connected with land so situated and turn the same to account in any manner as may seem expedient, necessary or convenient to the Company for the purpose of its business.

9. To acquire, posses and undertake the whole or any part of the business, assets, property, goodwill, rights and liabilities of any person, firm, society, association, corporation or Company carrying on any business which the Company is authorized to carry on.

10. To apply/arrange for, obtain, amend, alter and maintain appropriate permissions, directions or orders in terms of the applicable laws for enabling the Company to carry out any of the objects of the Company or for any other purpose which may seem expedient and to oppose any proceedings or application or any other endeavours, steps or measures which may seem calculated directly or indirectly to prejudice the Company's interests.

11. To establish, provide, maintain and conduct or otherwise subsidize research laboratories aid experimental workshops for scientific, technical or reserches, experiments and to undertake and carry on directly or in collaboration with other agencies scientific and technical research experiments and tests of all kinds and to process, improve and invest new products and their techniques of manufacture.
12. To promote, encourage, reward in every manner studies and research, scientific and technical investigations and inventions of any kind that may be considered likely to assist, encourage and promote rapid advances in technology, economies, import substitution or any business which the Company is authorized to carry on.

13. To establish, maintain and operate technical training institutions and hostels for engineers of all types and other technical staff and artisans and mechanics of all types and kinds to make such other arrangements as may be expedient for the training of all categories of officers, workers, clerks, store keepers and other personnel likely to be useful to or assist in any business which the Company is authorized to carry on.

14. To sell, improve, manage, develop, exchange, loan, lease or let, underlease, sub-let, mortgage, dispose of, deal with, turn to account or otherwise deal with any rights or property of the Company.

15. To accumulate funds and to invest unborrowed monies belonging to or lying with the Company and not immediately required in suitable securities and instruments of a reputed bank or financial institution, recognized by the Reserve Bank of India (RBI), in the best interest of the Company.

16. To enter into partnership, consortium or arrangement with any person or Company or body or authority, Indian or foreign including Government for sharing of investments, creation/participation in funds, or sharing of profits, carrying on or engaged in any operation capable of being conducted conveniently in line with the business of the Company or to benefit of the Company or its activities.

17. To provide for the amelioration and welfare of persons employed or formerly employed by the Company and the wives, families, dependants or connections of such persons by building or contributing to the building of houses, dwellings or by grants of money, pensions; allowances, bonuses or other payments.
or by creating and from time to time subscribing or contributing to Provident Fund and other associations, institutions, funds or trusts or by helping persons employed by the Company to effect or maintain insurance on their lives by contributing to the payment of premium or otherwise and by providing or subscribing or contributing towards places of instruction and recreation, hospitals and dispensaries, medical and other attendance and other assistance as the Company shall think fit.

18. To sell or dispose of the undertaking of the Company or any part thereof for such consideration as the Company may think fit and in particular for shares, debentures or securities of any other association, corporation or company, to promote or aid in the promotion of any other company or partnership, for the purpose of acquiring all or any of the properties, rights or liabilities of the Company or for any other purposes which may seem directly or indirectly calculated to benefit the Company.

19. To enter into agreements and contracts for purchase of equipment and for technical, financial or any other assistance, for carrying out all or any of the objects of the Company.

20. To enter into contracts of indemnity and guarantee, to issue bonds, debentures, debenture stock, and other securities of all kinds and to frame, constitute and secure the same as may seem expedient, with full power to make them transferable by delivery or by instrument of transfer or otherwise, and either perpetual, terminable, redeemable or otherwise, and to charge or secure the same by trust deed or otherwise, on the undertakings of the Company or upon, any specific property and rights, present and future, of the Company or otherwise.

21. To establish and maintain agencies, subsidiaries, branches and local registers, to procure registration or recognition of the Company and to carry on business in any part of the world and to take such steps as may be necessary to give the Company such rights and privileges in any part of the world as are possessed by local companies or partnership or as may be thought desirable.

22. To subscribe for, underwrite, purchase or otherwise acquire and to hold,
dispose of and deal with the shares, stocks, securities and evidences of indebtedness or the right to participate in profits or other similar documents issued by any government authority, corporation or body or by any company or body of persons and any option or right in respect thereof out of surplus un bor rowed funds.

23. To create any depreciation fund, reserve fund, sinking fund, insurance fund, pension fund or any other fund, whether for depreciation or for repairing, improving, extending, or maintaining any of the properties of the Company or redeemable preference shares or for benefit of its employees or any other purposes whatsoever to the interests of the Company.

24. To open an account or accounts with any banks or financial institutions recognized by the Reserve Bank of India and to pay into and withdraw money from such account or accounts.

25. To acquire shares, stocks or securities out of surplus un bor rowed funds in or of any company carrying on any business which this Company is entitled to carry on or of any other company or undertaking the acquisition of which may seem likely or calculated directly to promote or advance the interests of or be advantageous or beneficial to the Company in pursuit of it objects and to sell or dispose of or transfer any such shares, stocks or securities.

26. To promote, organize or carry on the business of consultancy advisory services in any field of activity in which it is engaged.

27. To obtain technical, legal, financial, media and communication, training and human capacity building and managerial advisory services as appropriate in furtherance of its objects, to enter into agreements, contracts and Memoranda of Understanding for the same.

28. To promote or concur in the promotion of any Company, which shall be considered desirable in furtherance of the object or any objects of the Company.

29. To carry on any other business to optimally utilize its assets and expertise,
as also to develop alternate revenue streams in conjunction with and pursuance of its main objects and activities, in connection with any of the Company’s objects to enhance the value of or render profitable any of the Company’s property, rights or interests.

30. Subject to all applicable regulations and laws to receive money, securities, valuables of all kinds on deposit or safe custody (not amounting to the business of banking as defined under the Banking Regulation, 1949), to issue share capital including preference shares and debentures, to issue bonds and to borrow any money and secure the repayment of any money borrowed or raised or owing by mortgage, charge or lien upon all or any of the Company’s property (both present and future), stocks, debentures (prepetual or otherwise) including its uncalled capital and guarantee preformance by the Company or any other such person or body corporate of any obligation undertaken by the Company or any other person or Company, as the case may be.

31. Subject to provisions of Sections 391 to 394 and 394A of the Companies Act, 1956 to evolve scheme for restructuring or arrangement, to amalgamate or merge or to enter into partnership or into any arrangement for sharing profits, union of interests, co-operation, joint venture of reciprocal concession with any person or persons, partnership firm /firms, or company carrying on or engaged in any business or transaction which the Company is authorised to carry on or engage in.

32. To distribute any of the property of the Company in specie or otherwise among the members, in the event of winding up, subject to the provisions of the Companies Act, 1956.

33. To exercise all powers and functions vested under the Applicable Law, including steps/activities :-

a) to secure safety of the system as also the consumers and general public,
b) to safeguard consumer interest and redress grievances,
c) to undertake various works related to sub-transmission, distribution and supply of electricity;

d) to repair, maintain, operate, augment, renovate and keep in good condition the sub-transmission and distribution system;

e) to take, retain and adjust consumer security deposits and other securities;

f) to install, repair, replace, check and read electric meters, as also to prescribe/install protective devices;

g) to ensure compliance with supply regulations and conditions, Grid Code, Supply Code/Standards;

h) to undertake inspections, search, seizure, provisional assessment, recoveries, dis-connections, and other actions against defaulting consumers or unauthorized users of electricity; and

i) to initiate and pursue prosecution of offenders under the Applicable Law and other State and Central Government enactments in force.

34. Generally to do all such other things as may be deemed incidental or conducive to the attainment of the above objects or any of them.

(Memorandum and Articles of Association, Upper Assam Electricity Distribution company Ltd., UAEDCL).

3.10 CENTRAL ASSAM ELECTRICITY DISTRIBUTION COMPANY LTD. (CAEDCL) :

The Central Assam Electricity Distribution Company Ltd. (CAEDCL) is an important distribution company, which has been formed as a result of restructuring of Assam State Electricity Board (ASEB). The CAEDCL is also incorporated under the Companies Act, 1956 and its Registered Office is situated in Bijulee Bhawan, Paltan Bazar, Guwahati. The main responsibility of CAEDCL is to have proper and fair distribution of electricity in the Central Assam districts of our State. The Central
Assam Electricity Distribution Company Ltd. (CAEDCL) mainly covers Karbi Anglong, Cachar, North-Cachar, Nagaon and Sonitpur districts. As on 31st March, 2008, the CAEDCL has four Circles under it, namely, Tezpur Electrical Circle, Nagaon Electrical Circle, Cachar Electrical Circle and Kanch Electrical Circle. The Distribution Company has eighteen (18) divisions and fifty two (52) sub-divisions under it (5th Annual Report and Accounts, 2007–08, CAEDCL).

Like Upper Assam Electricity Distribution Company Ltd. (UAEDCL), the business of CAEDCL is managed by its Board of Directors with the active support and control of the Managing Director (M.D.). The number of Directors of the Company lies between six (6) and nine (9). The Government of Assam nominates the Managing Director (M.D.) as well as other functional Directors from time to time as the Government may consider appropriate for the Company during a particular period. The M.D. is the Chief Executive of the Company and all Directors other than the M.D. are non-executive Directors. It may be mentioned here that a Director is not required to hold any qualification shares in the Company. All the Directors including the M.D. may be removed from their Office by the Government of Assam, if the Selection Committee constituted for the purpose recommends such removal in the better interest of the Company. However, the Selection Committee must take into account the views of other Directors before making such recommendations. The remuneration of a Director shall be such as the Directors may determine from time to time under the provisions of the Companies Act, 1956. The Directors are also paid all travelling allowances, hotel and other expenses for attending the meetings of the Board including the general meetings. The Board of Directors provides a common Seal to the Company for carrying on its business. The Board is also empowered from time to time to substitute a new Seal for the Company and destroy the old one.
The Directors may meet together from time to time as a Board but they must meet at least once in every three (3) months. There should be at least four (4) Board meetings in every financial year. Generally, the meetings of the Board is convened by the Managing Director. In addition, the Board meetings may also be convened by other Directors also. All meetings of the Directors are usually presided over by the M.D. But under unavoidable circumstances, Board meetings may also be presided over by other Directors as well. Without prejudice to the provisions of Section 287 of the Companies Act, 1956 the necessary quorum for the transaction of business in the Board is half of the total number of Directors or four (4) whichever is more. If a Board meeting can not be held due to lack of quorum, the meeting shall stand adjourned to such day, time and place as per the decisions of the Directors present there. All the major decisions are made on the basis of consensus or by a majority of votes. Like Upper Assam Electricity Distribution Company Ltd. (UAEDCL), the dividend of Central Assam Electricity Distribution Company Ltd. (CAEDCL) is also announced in its General Meeting. The Board fixes the time for payment of such dividend but no dividend shall exceed the amount suggested by the Board. In addition to dividend, the provisions of interim dividend is also there. The accounts of the Company are examined regularly followed by proper auditing system. The Directors from time to time may determine whether and to what extent, at what time, places and under what conditions or regulations, the accounts and books of the Company or any of them shall be open to the members for inspection. No member (except Director) shall have any right of inspecting any account or book or document of the Company except as conferred by Law or authorized by the Board or by the Company in its General Meeting.
Source : Supplied by ASI
The Master Organisation Structure of the Central Assam Electricity Distribution Company Ltd. (CAEDCL) is shown in Fig. 3.11. From the figure, it is evident that, the Board of Directors exercises administrative control and supervision over the various functions of CAEDCL with the active support of its Managing Director (M.D.). The Board in its duties get assistance from the Chief General Manager (CGM), Finance/Accounts and the Chief General Manager (CGM), Technical (Projects, RE/Field Operations). After the position of Chief General Managers (CGMs), in the organisation hierarchy, we find a line of General Managers (GMs) looking after various important activities like Commercial, Finance and Accounts, Human Resource, Projects, Operations etc. Then in the hierarchy, there lies the rank of Deputy General Managers (D.G.Ms.) like D.G.M., Legal, D.G.M., Vigilance, D.G.M. Accounts, D.G.M., Industrial Relations (IR), Administration and Human Resource (HR), D.G.M., Rural Electrification, D.G.M., Civil, D.G.M., Materials/Stores, D.G.M., Internal Audit and so on. After the rank of Deputy General Manager, there is the position of Senior Managers (Sr. Mgrs.) controlling Tariff, Customer Care, Accounts, Administration, Rural Electrification, Civil Designing, Stores, Audit and so on. Below the rank of Senior Managers (Sr. Mgrs.) in the organisational set-up of CAEDCL, there lies the position of Managers/Deputy Managers (Mgrs./DMs), Assistant Managers (A.Ms.) shouldering various responsibilities of CAEDCL as per the directions of the top management and the requirements of the organisation.

Since the main objectives and the incidental/acillary objectives of the Central Assam Electricity Distribution Company Ltd. (CADCL) are the same to that of the Upper Assam Electricity Distribution Company Ltd.: (UAEDCL), these objectives are not repeatedly presented here (Memorandum and Articles of Association, CAEDCL).
Like the two other distribution companies, namely UAEDCL and CAEDCL, the Lower Assam Electricity Distribution Company Ltd. (LAEDCL) is also a product of restructuring of the Assam State Electricity Board (ASEB) under the reform process. The Company is also incorporated under the Companies Act, 1956 and its Registered Office is situated at Bijulee Bhawan, Paltan Bazar, Guwahati. The main responsibility of Lower Assam Electricity Distribution Company Ltd. (LAEDCL) is to ensure proper and smooth distribution and supply of electricity in the Lower Assam districts of our State. LAEDCL mainly covers Kokrajhar, Bongaigaon, Mangaldoi, Barpeta and the undivided Kamrup districts. The undivided Kamrup district consists of seventeen (17) Blocks, namely, Bangaon, Bezera, Bihdia Jarikona, Boko, Chamaria, Chandrapur, Chyagaon, Chayani Borduar, Dimoria, Goreswar, Goroimari, Hajo, Kamalpur, Rampur, Rangia, Rani and Sualkuchi (Official Sources).

Like the other two (2) Distribution Companies, the business of LAEDCL is also managed by its Board of Directors. The number of Directors in the Company shall not be less than six (6) and more than nine (9). The Managing Director (M.D.) is the Chief Executive of the Company with power to undertake all things regarding the management and control of the affairs of the Company, subject to the supervision and approval of the Board of Directors. All the Directors except the M.D. are non-executive Directors. The Government of Assam nomi rates the Directors including the M.D. from time to time as the Government may think appropriate for the Company during a particular period. However, a Director is not required to hold any qualification shares in LAEDCL. All the Directors including the M.D. are subjected to removal from their Office by the Government of Assam, if the Selection Committee constituted for the purpose in the same manner as in the case of appointment of
Directors, recommends such removal to be in the interest of LAEDCL. But the Selection Committee before making any recommendation as to the removal of any Director including the M.D. must consult the other Directors of the Company. The remuneration of a Director shall be such sum as the Directors determine from time to time subject to the provisions of the Companies Act. The Directors are also entitled to avail all travelling allowances, hotel and other expenses for attending the meetings of the Board as well as the general meetings in connection with the business of LAEDCL. The Directors meet together as a Board from time to time to settle important matters of the Company. But they have to meet at least once in every three (3) months and there should be minimum four (4) meetings in each financial year. Meetings of the Board are normally convened by the M. D. In addition, such meetings may also be convened by other Directors as well. As per the provisions of Section 287, of the Companies Act, 1956 the necessary quorum for the normal transaction of the business of the Board is half of the total number of Directors or four (4), whichever is more. If any such Board meeting cannot be held for want of a quorum the meeting stands adjourned to such day, time and place as per the decisions of the Directors present at the meeting.

All meetings of the Directors are normally presided over by the Managing Director. (M.D.). But at any such meeting, if the M.D. is unavailable, the Directors may choose one of them present there to preside over the meeting. In the meetings, all the important decisions are taken on consensus basis or by a majority of votes. The Board of Directors shall always provide a common Seal for the Company and enjoys the power from time to time to destroy the same by substituting a new Seal in lieu thereof. The Board of Directors also provides for the safe custody of the Seal. Like the other two Distribution Companies i.e, UAEDCL and CAEDCL, the dividend of the Company is also declared in the General Meeting. The time for payment of dividend is also announced in the General Meeting. However, no dividend shall exceed the amount recommended by the Board of Directors. The Memorandum and Articles of Association of the Company also permits the payment of interim dividend...
dividends provided the financial position of the Company justifies such payment. Once at least in every financial year, the accounts of the Company are examined and the correctness of the Profit and Loss Account and the Balance Sheet are ensured by suitable auditing system. The provisions regarding the inspection of Company Accounts and Books of the Company are exactly the same to that of other two distribution companies.
Thus, the master organisation structure of the Lower Assam Electricity Distribution Company Ltd. (LAEDCL) (Fig. 3.12) is similar to that of the other two distribution companies, namely, UAEDCL and CAEDCL. Here also the Board of Directors supervises and controls the various activities of LAEDCL under the active participation and support of its Managing Director (M.D.). In their job, the Board Members get assistance from the Chief General Manager (CGM), Finance/Accounts, Chief General Manager (CGM), Technical/Field Operations. If we move down the organisational hierarchy of LAEDCL, we see a few General Managers (GMs) like G.M., Commercial, G.M., Finance and Accounts, G.M, Human Resource (HR), G.M., Projects, G.M., Operations looking after their respective departments. Next to the rank of General Managers (GMs), there is a number of Deputy General Managers (D.G.Ms.) supervising Legal, Vigilance, Accounts, Industrial Relations (IR), Administration and Human Resource (HR), Rural Electrification, Projects, Civil and other aspects. After the rank of DGM, there is a number of Senior Managers (Sr. Mgr.) like Sr. Mgr., Tariff, Sr. Mgr. Contracts, Sr. Mgr. Customer Care, Sr. Mgr., Budget/Expenditure/Costing, Sr. Mgr. Administration, Sr. Mgr. Public Relations/Training and Human Resource (HR), Sr. Mgr., Rural Electrification, Sr. Mgr. Projects, Sr. Mgr. Electrical/Mechanical Design, Sr. Mgr., Civil Design, Sr. Mgr., Civil Works and so on. Next to the rank of Senior Managers, there are Managers (Mgrs.), Deputy Managers (DMs) and Assistant Managers (AMs) shouldering various key activities of LAEDCL. Since the main objectives as well as the incidental or ancillary objectives are the same for all the three distribution companies, these objectives are not presented here (Memorandum and Articles of Association, LAEDCL).

3.12 CONCLUSION:

Thus, from the above discussion we see that the power sector has undergone significant changes in the initial post reform period in our state. Generation of power has been showing an increasing trend in Assam since 2004-05. During 2003-04,
only 710.67 M.U. power was generated in the State. During 2007-08, the power
generation has increased to 1541.317 M.U. But this increase in not at all sufficient to
meet our power requirements in the State. During 2007-08, energy shortage was as
high as 23.96% of our total electricity demand. In order to meet the continuously
rising demand of electricity in the state, purchase of power from outside sources has
also been increasing every year. During 2007-08 alone, 3375.10 Mkwh power was
purchased from outside sources. Thus, it is clear that our generating system has
totally failed to meet the power demand in the state, which is a matter of serious
concern and needs sincere thought on the part of the Ministry of Power, Government
of Assam, senior Officials of Assam State Electricity Board (ASEB) and its post
reform entities. However, the distribution efficiency (reduction of aggregate
transmission and commercial losses) has been showing some marginal improvement
in the state in the initial post-reform period.

While analysing the consumption pattern of electricity, it is found that for
irrigation purposes only a very negligible amount of electricity is being utilized in the
state. It is always less than even 1% of total electricity consumed in the state. This is
again a matter of great concern. In order to increase our agricultural productivity,
modernization of agricultural sector is a pre-requisite. Greater use of electricity in
this sector will play a big role in increasing our agricultural output through energisation
of pump sets coupled with associated modern technologies. Similarly, per capita
availability of electricity in Assam is also very less and needs an immediate upliftment.
In the case of rural electrification in the state, the performance of ASEB is found to be
satisfactory to some extent. More than half of the total villages of the state (57.78%)
have been electrified upto 31st March, 2007. However, the quality of power supply in
rural areas is very poor and calls for urgent steps on behalf of ASEB authorities.

Today, a major change in the organisational and structural set up is noticed in
the power sector in the State. Under the restructuring process, the role, functions and
responsibilities of ASEB have undergone a wholesome change. In pursuance of the
Indian Electricity Act, 2003 and as a part of Assam Power Sector Development Programme (APSDP), the Government of Assam has unbundled the ASEB into five (5) new entities. Important activities like generation, transmission and distribution have been separated for better performance. Today, Assam Power Generation Corporation Ltd. (APGCL) looks after the generation activities, Assam Electricity Grid Corporation Ltd. (AEGCL) supervises the transmission functions and the three distribution companies co-ordinating the distribution activities in the three regions in the State. While more than eight (8) years (2003-2011) of reforms in the power sector in the State has yielded mixed results, still there is a long way to go. But it seems that there is no options left except continuous adoption of further reforms and restructuring of our power sector. In order to make the reform programme a successful one, it is essential that the future measures are adopted only after taking into consideration the shortcomings of the earlier years. Special endeavours should be given to solve the future difficulties by arriving at a consensus about the strategies to be selected under the reform process. Reforms and restructuring would, however, remain unsuccessful and incomplete until and unless, there is a genuine political will on the part of both the Cental and State Governments to make the reform process really productive. The ASEB, the successor companies and their trade unions too have to play a positive role in this regard. In spite of some progress made in certain areas, the fact remains that a lot is still required to be done in the power sector in the State. A proper synchronization among technologies and the available resources to meet the future power requirement in a sustainable way is the need of the day.
REFERENCES:


