PERFORMANCE APPRAISAL OF POWER SECTOR IN HARYANA

(Summary of the Thesis)

INTRODUCTION

Earlier, Haryana State Electricity Board (HSEB) was constituted on May 3, 1967 under Section 5(1) of the Electricity Supply Act, 1948. This Board was responsible for generation, transmission and distribution of power in the entire state of Haryana. Haryana State Electricity Board (HSEB) had the overall liability for the power sector in Haryana on November 1, 1966, when the state Haryana was emerged. The state was allotted 383 MW thermal based generation capacities. At that time Haryana Government was reliant for its electricity necessities on Bhakra Beas Management Board (BBMB) hydro power project located in Punjab. It was started as shared venture of Punjab and Rajasthan. Later on, it was constituted under the Punjab Re-organisation Act, 1966.

The state government unbundled the erstwhile Haryana State Electricity Board (HSEB) in August 1998 into separate functional entities as below:

- Haryana Power Generation Corporation Limited (HPGCL)
- Haryana Vidyut Prasaran Nigam Limited (HVPNL)
- Uttar Haryana Bijli Vitran Nigam Limited (UHBVNL)
- Dakshin Haryana Bijli Vitran Nigam Limited (DHBVNL)

Haryana Power Generation Corporation Limited (HPGCL) was established for generation of power and Haryana Vidyut Prasaran Nigam Limited (HVPNL) for transmission and supply of electricity in the State. Uttri Haryana Bijli Vitran Nigam Limited (UHBVNL) and Dakshin Haryana Bijli Vitran Nigam Limited (DHBVNL) were established for distributing of power state-wise.

As a part of the reorganization of Haryana State Electricity Board (HSEB), all property, interest in property, rights and liabilities of the Board were vested with the state government on 14th August, 1998. The state Government, in turn, transferred the same on the same day.
through the First Transfer Scheme to two new companies incorporated under the Companies Act, 1956. Haryana Power Generation Company Limited (HPGCL) assumed the generation functions while transmission, distribution and system operation functions of Haryana State Electricity Board (HSEB) were transferred to Haryana Vidyut Prasaran Nigam Limited (HVPNL). Thus, Haryana State Electricity Board (HSEB) ceased to exist from August 14, 1998.

**REVIEW OF LITERATURE**

More than 70 studies in the related areas were reviewed which provided an in depth knowledge and a clear direction to the present study.

**RESEARCH METHODOLOGY**

Haryana State Electricity Board (HSEB) was very important organization and essential for development of state. It had responsibilities of generation, transmission and supply of electricity within the state. But there was a huge gap between demand and generation capacity. Due to this reason, Haryana State Electricity Board (HSEB) was at a state of down fall. There were many other reasons for its collapse. Keeping this into consideration, Haryana State Electricity Board (HSEB) was bifurcated into Haryana Power Generation Corporation Limited (HPGCL), Haryana Vidyut Prasaran Nigam Limited (HVPNL), Uttar Haryana Bijli Vitran Nigam Limited(UHBVNL) and Dakshin Haryana Bijli Vitran Nigam Limited(DHBVNL). This study is an investigation to find out that after bifurcation of HSEB, whether these four corporations have contributed in the economy of Haryana or not?

**SCOPE OF STUDY**

Present study entitled “Performance appraisal of power sector in Haryana” is a detailed insight on performance of all the four organizations of power sector i.e. Haryana Power Generation Corporation Limited (HPGCL), Haryana Vidyut Prasaran Nigam Limited (HVPNL), Uttar Haryana Bijli Vitran Nigam Limited (UHBVNL) and Dakshin Haryana Bijli Vitran Nigam Limited (DHBVNL). The study covers entire state of Haryana and also focuses on employees’ satisfaction in particular with the different variables.
PERIOD OF THE STUDY
The study covers time period from 2001 to 2012.

OBJECTIVES OF THE STUDY
The study under consideration would like to achieve the following objectives in the field of electricity supply industry in Haryana.

- To study the overall performance of Haryana power corporations.
- To evaluate the performance of Haryana State Electricity Board (HSEB) before unbundling.
- To examine the performance of Dakshin Haryana Bijli Vitran Nigam Limited (DHBVNL)
- To analyze the performance of Uttar Haryana Bijli Vitran Nigam Limited (UHBVNL).
- To study the performance of Haryana Power Generation Corporation Limited (HPGCL)
- To evaluate the performance of Haryana Vidyut Prasaran Nigam Limited (HVPNL).
- To compare the performance of all the four corporations.
- To assess employee satisfaction of power sector Haryana.
- To suggest valuable parameters or to give valuable suggestions for the improvements of power sector in Haryana.

RESEARCH DESIGN
Present study is based on secondary and primary data. Secondary data has been collected from various annual reports and issues of Statistical Abstract of Haryana, published by Government of Haryana. Primary data has been collected through questionnaire from various units of power sector. The study considers the time period from 2001 to 2012. The available data has been processed and presented in suitable tables. To appraise the performance of Haryana power sector secondary information is used for measuring the productivity, financial performance, situations of loans and expenses in order to get the empirical results. Collected statistics further analyses and calculates different ratios for twelve years i.e. 2001 to 2012 and has been compared compared with NTPC’s ratio.
NTPC is taken as benchmark because of its efficiency. After this, the comparative appraisal of the performance of the four nigams based on comparative analysis of these ratios including NTPC is done for measuring the comparative performance of Haryana power corporations and NTPC. However, the other information requires in the study are collected from research journals, Business Standard, The Economic Times, The Financial Express, periodicals. For the assessment of satisfaction of employees, primary data has been collected from various employees of power sector through a questionnaire.

To appraise the performance of Haryana Power Sector, the following four (n=4) corporations are selected for the study:

- Dakshin Haryana BijliVitran Nigam Limited (DHBVNL)
- Uttar Haryana BijliVitran Nigam Limited (UHBVNL)
- Haryana Power Generation Corporation Limited (HPGCL)
- Haryana VidyutPrasaran Nigam Limited (HVPNL)

LIMITATIONS OF THE STUDY

Data is the foundation of any study in the field of research but in the present study there are chances of deviations and biasness in presentation of secondary data under the influence of political interference. A researcher has to be dependent on the data available but due to attribution of many factors reliability of the secondary data is always limited. Likewise, primary data also contributes to the limitations of the study. Due to the busy work schedule and prior engagements of employees of different organizations of power sector, frequent visits were to be made for filling up of questionnaires. The other limitation due to the primary data has been the attitude and sincerity of the employees of power sector in filling up of questionnaires. Since this job demands high level of seriousness from the respondents but due to their official priorities the process of data collection was not far from limitations. Despite of above mentioned limitations the conclusions of the present study are quite useful. Further, the findings recommend certain improvements in various areas of power sector in Haryana.
CONCLUSIONS

• **Productivity performance:**
  When we look at the performance of Haryana Power Corporations’ the productivity of Haryana Vidyut Prasaran Nigam Limited (HVPNL) is highest. Dakshin Haryana Bijli Vitran Nigam Limited (DHBVNL) and Uttar Haryana Bijli Vitran Nigam Limited (UHBVNL) comes at second and third place respectively. Further there is a need to improve the productivity of Haryana Power Generation Corporation Limited (HPGCL).

• **Profitability performance:**
  Haryana Vidyut Prasaran Nigam Limited (HVPNL) has proved to be profitable amongst the four corporations of power sector in Haryana. Turnover of Haryana Power Generation Corporation Limited (HPGCL) is also positive. Most of the time ratio of other two nigams is negative and needs improvement.

• **Secured borrowing performance:**
  The assessment of secured borrowing performance of the four corporations illustrates that Haryana Vidyut Prasaran Nigam Limited (HVPNL) is less dependent on secured loans. The situations of Dakshin Haryana Bijli Vitran Nigam Limited (DHBVNL) and Uttar Haryana Bijli Vitran Nigam Limited (UHBVNL) are almost equally worsen. There is a need to recover the performance of Haryana Power Generation Corporation Limited (HPGCL).

• **Unsecured borrowing performance:**
  The assessment of unsecured borrowing performance of the four corporations advises that Dakshin Haryana Bijli Vitran Nigam Limited (DHBVNL) is taking less unsecured borrowing. Haryana Vidyut Prasaran Nigam Limited (HVPNL) comes afterward. Uttar Haryana BijliVitran Nigam Limited (UHBVNL) and Haryana Power Generation Corporation Limited (HPGCL) needs to improve.

• **Depreciation expenses:**
  Dakshin Haryana Bijli Vitran Nigam Limited (DHBVNL) is efficient in replacing its long term or fixed assets. Uttar Haryana Bijli Vitran Nigam Limited (UHBVNL) and Haryana Vidyut Prasaran Nigam Limited (HVPNL) assets lose value over time and needs to be replaced on time. Haryana Power Generation Corporation Limited (HPGCL) situation shows that fixed assets have not been replaced with new ones in a timely manner.
• **Employee cost performance:**

Haryana Power Generation Corporation Limited (HPGCL) is the best one to maintain a motivated and skilled workforce in comparison to other nigams of power corporation Haryana. Dakshin Haryana Bijli Vitran Nigam Limited (DHBVNL) and Uttar Haryana Bijli Vitran Nigam Limited (UHBVNL) are less efficient and Haryana Vidyut Prasaran Nigam Limited (HVPN) is incompetent.

• **Total expense performance:**

Haryana Vidyut Prasaran Nigam Limited (HVPN) has proved to be the most cost-effective corporation. Haryana Power Generation Corporation Limited (HPGCL) comes afterwards. Dakshin Haryana Bijli Vitran Nigam Limited (DHBVNL) and Uttar Haryana Bijli Vitran Nigam Limited (UHBVNL) need many improvements in this regard.

• **Regression co-efficient for future growth:**

After inspecting eight financial variables of power sector i.e. net income, total assets, net profit, secured loans, unsecured loans, depreciation, gross fixed assets, employees cost and total expenses and comparing them with variables of National Thermal Power Plant (NTPC), the same has been found better in all aspects of study regarding future growth through regression co-efficient.

• **General Working Conditions:**

A significant difference has been observed amongst power divisions in case of general working condition. Further enquiry reveals that HVPN and DHBVNL plans differ significantly and remaining pairs are not significant. In case of HPGCL, general working condition is correlated with pay and promotion potential, use of skill and abilities. In case of HVPN, general working conditions is significantly correlated with all other factors i.e. pay and promotion potential, use of skill and abilities, work activities and work relationships. Similar trend is also found in UHBVNL and DHBVNL.

• **Pay and Promotion potential:**

Pay and promotion potential of power divisions differ significantly. Further investigations elaborate that two pairs HVPN and DHBVNL, UHBVNL and DHBVNL are the source of overall significant difference between the four divisions. In case of HPGCL and HVPN, pay and promotion potential is significantly correlated with general working conditions and use of skill and abilities. In case of UHBVNL
and DHBVNL, pay and promotion potential is significantly correlated with all other factors i.e. general working conditions, use of skill and abilities, work activities and work relationships.

- **Use of Skill and Abilities:**
  In situation related to the use of skill and abilities across four divisions of power sector reveals that four sectors do not differ significantly. In case of HPGCL, use of skill and abilities is highly correlated with general working conditions, pay and promotion potential and work activities. In case of HVPNL, this factor is significantly correlated with general working conditions, pay and promotion potential and work relationships. In case of UHBVNL and DHBVNL, use of skill and abilities is significantly correlated with all other factors i.e. general working conditions, pay and promotion potential, work activities and work relationships.

- **Work Activities:**
  Work activities in four divisions of power sector reveal that four sectors do not differ significantly. In case of HPGCL, work activities are highly correlated with use of skill and abilities. In case of HVPNL, work activities are highly correlated with general working conditions. In case of UHBVNL and DHBVNL all variables are significantly correlated.

- **Work Relationship:**
  Four divisions differ significantly with regard to work relationships. Further enquiry elaborates that pair HVPNL and UHBVNL is the only source of overall significant difference. In case of HPGCL, work relationship is not correlated with any other factor. In case of HVPNL, work relationship is correlated with general working condition and use of skill and abilities. In case of UHBVNL and DHBVNL work relationship is significantly correlated with all other factors.

- **Overall Job Satisfaction in Power Sector:**
  Power divisions differ significantly with regard to overall job satisfaction. In case of overall job satisfaction HPGCL and HVPNL, HVPNL and DHBVNL are the sources of overall significant. In case of power sector in Haryana, all variables are significantly correlated with each other.
Comparison of Power Sector in Haryana with National Thermal Power Corporation (NTPC):
National Thermal Power Plant (NTPC) is found to be an efficient organization while comparing to power corporation Haryana. So it is taken as benchmark. But in Secured and unsecured loan performance HVPNL is less dependent than NTPC and in unsecured performance DHBVNL and HVPNL are less dependent than NTPC.

SUGGESTIONS

- Productivity is a good measure for overall evaluation of the power units. The study concluded that Haryana Power Generation Corporation Limited (HPGCL) needs to raise its productivity through maximum utilization of the assets and seasonal changes should be handled tactfully.
- Dakshin Haryana Bijli Vitran Nigam Limited (DHBVNL) and Uttar Haryana Bijli Vitran Nigam Limited (UHBVNL) should make strict rules for collection of bills, must impose high penalty on default consumers. Staff should be made accountable and incentive should be given for the achievement concerning effective financial planning.
- Haryana Power Generation Corporation Limited (HPGCL) in the power unit is hereby advised on the basis of the present study, to manage the working capital for day to day operational activities.
- Uttar Haryana Bijli Vitran Nigam Limited (UHBVNL) and Haryana Power Generation Corporation Limited (HPGCL) borrows more unsecured loan for their operations so they are required to pay more attention towards cost cutting measures to reduce the expenditures, wastage and units produced for consumption.
- The efficiencies of employees should be improved in financial terms and they should be encouraged with monetary and non-monetary incentives to improve their performance. Job analysis is also required to put right person for the right job in order to improve overall profitability status of HPUs.
- Except Haryana Vidyut Prasaran Nigam Limited (HVPNL), competencies of employees of all other nigams of Haryana Power Corporation need to be improved in financial terms and they should be controlled well to improve their
performances. Job analysis is also required to put right person for the right job in order to improve overall profitability status of HPUs.

- Senior executives should be provided training on working capital management and capital budgeting in order to take effective financial decisions.
- There is a need of privatization of power distribution at local level. It is suggested that it should be given in private hands as in today’s world of competition private sector has more chance to show better results.
- CFL tubes would definitely help the power units to remove power shortage problem.
- Everyone in power units from top official to supporting staff should work with full efforts to improve the condition of units. Top officials must motivate staff members to work with full efforts.
- Special incentives should be given to those employees who work more efficiently for collecting revenue from bills. The improvements in the performance can be achieved can only with the joint efforts of unit members.
- Reform and restructuring of the power sector would not be successful unless the requisite resources are generated to finance expression and modernization of all parts of the system, i.e. generation, transmission or distribution. In the long run, investment in generation could be largely mobilized from the private sector. Private investment would be slow to come in the transmission segment. While supporting the creation of an enabling framework to attract private investment in transmission in the longer term, the setting up of state-owned transmission companies whose functions should be restricted to wheeling of electricity is recommended.
- It is a well-known fact that an employee’s/worker’s participation would build his morale and ultimately results in increased productivity. Thus, an employee, and worker, whether they are skilled or unskilled is a partner in the organization. It is essential that top management personnel must encourage participative management among personnel to raise their morale. In such conditions, the energy and initiative in personnel would be self-generating. Therefore, board should take steps towards this important factor.
• Welfare is one of the important activities of the personnel department in all organizations. The welfare facilities in Electricity units are; provision of house building advance, motor/car/cycle/ advance, marriage loan, festival advance, project allowance and medical facilities etc. but there is no uniform system for extending these facilities. It is, therefore, suggested that loan should be sanctioned to an employee to the extent he/she is entitled to or to the extent it is possible in view of the financial position.

• The private players should be encouraged in generation, transmission and distribution functions. The Public Private Partnership (PPP) route should be used to support the electricity supply in the peak hours of demand.