# Evaluation of New Government Electric Factory (NGEF) Hubballi

## Department of Public Enterprises

## Executive Summary

The Government of Karnataka established New Government Electric Factory at Bangalore and later at Hubballi during 1984 with a view to promote industries outside Bangalore. The company has been in existence for over thirty years but its performance in recent periods has been one of concern with declining business, leading to losses, while Bangalore unit of the company was closed during 2004 and is under liquidation presently, the Hubballi Unit continues to be operational.

The Government of Karnataka sponsored a study on evaluation of performance and entrusted this task to TECSOK. The TECSOK made a number of recommendations for revival of the company for consideration of GOK which are under GOK consideration. The GOK intended to take a second look at working of this company and has now sponsored another study to be conducted by READI INDIA Dharwad, a Consultancy organization. The main objective of the study is to arrive at the current overall status of the company in terms of its working and future prospects and arrive at 'Gap-Analysis' to ascertain the improvement areas towards revival of the company and suggest necessary steps that need to be taken ..

READI-INDIA carried out the study to all the four Regional offices and interactions with dealers were held. Questionnaires were used to capture data from each of them. However desired quantitative data was not shared by them for their own reasons but qualitative information could be gathered through one to one discussions. The team had three rounds of meetings with the Managing Director and two rounds with Departmental in charges of the Factory at

Hubballi. All relevant data was collected with some gaps due to non-availability of the same.

## BACKGROUND

NGEF Hubballi was established in 1984 under the Indian Companies Act 1956 as a 100% subsidiary of NGEF Ltd. Bangalore engaged in manufacture of electrical motors with German Technology. It has completed 30 years of existence and has made significant contribution to Karnataka's industrial production. The Memorandum of Association of the company among others empowers it to (i) acquire and take over the electric motor division at NGEF Bangalore and Hubballi and (ii) carry on business of manufacture of all kinds of electric motors and rotating machines, starters, regulators etc. The company's vision is to increasing its business opportunities. The company is striving to fulfill its objectives and obligations to the state and country. It has established network of dealers across the country over the years. During three decades of its existence, NGEF product ranges and quality products have earned goodwill of users and as a result it has created a place for itself in the motor manufacturing activity. The company's products have unquestioned superiority over others.

## PERFORMANCE

A study of operations of the company shows that it made good progress with performance except during the years 2010-11 to 2013-14 resulting in erosion of its net worth. Its business income has been scaling down leading to accumulated loss. As per data for 2013-14, the company had made a business of Rs.6.09 Crores and its expenses amounted to Rs.9.56 Crores, resulting in Rs 3.56 Crores of loss. During previous year i.e., 2013-14, it made a business worth Rs10.30 Crores against an expenditure of Rs14.01 Crores resulting to a loss of Rs3.69 Crores. The volume of business has drastically reduced to about 40%

while the fixed overheads keep moving up. Various factors are attributed for this state of affairs and for the company's dwindling business.

The company was working as an extended arm of NGEF Bangalore, its parent company. With the closure of its main unit at Bangalore, its role has changed substantially. Presently it is producing G-1 range of motors. As against production of a range of motors earlier, the company has reduced its production range due to want of facilities at Hubballi including working capital. A major shift in its working is that it has to find its own market for products and explore new markets and products. With changing industrial scenario, demand for higher ranges (G-2 and G-3) is increasing. To meet this demand, addition of new and improved plant and machinery is necessary. Since it is not in a position to make any investments for acquiring new and improved machines, it has to contend itself with available facilities. This has resulted in limited scope for pushing the available ranges of motors into the markets. Large numbers of companies are engaged in motor industry and any of them are able to supply wider ranges of motors. Since available machinery at Hubballi is old and becoming obsolete faster, any addition to the existing ranges is limited and as such the company has to restrict its ranges to the available facilities while the demand for higher ranges is on the rise. Financial constraint is another reason for the company to meet the emerging demands. Since the company is incurring loss, its financial status is eroded so also its net worth. It cannot generate any surplus internally nor can it borrow from financial institutions. Third limitation is comparatively higher per unit cost of products.

**EXTERNAL FACTORS**

Over the years, the industrial scenario of the country in general has undergone tremendous changes with introduction of newer technologies and processes. Coupled with this, private sector entry in this sector has come in a big way with addition of newer and better quality and power saving motors of different ranges. Secondly, the demand pattern of the users also has been changing as with technological advancement the demand for traditionally used ranges has been taken over by higher ranges leading to unprecedented demand for new ranges of motors. Private sector companies have the advantage of responding to the market and are in a position to adjust to such changing conditions while Government units are not in a position to switch over so easily.

Though NGEF has fulfilled its mandated responsibility as supplier of motors and other accessories to promote industrial growth, its financial performance has not been satisfactory, mainly on account of (i) Reducing market share and declining demand for NGEF Range of motors (ii) Aggressive marketing and offering competitive prices, discounts, prompt after sale services without loss of time, by competitors have resulted in users gradual switch over from NGEF products to other brands. (iii) On the other hand, inordinate delay in meeting the demand and partial supply of motors against demand have created negative impact. (iv) In Northern and Eastern Indian States, some competitors have even been misinforming users about the existence of NGEF Hubballi and giving an impression that NGEF has closed its operations altogether. However, NGEF inability to take on the challenges is a major reason for reduced demand.

## PRESCRIBED QUALITY STANDARDS

Notwithstanding internal and external limitations, one thing that puts the company in an enviable position is its quality superiority. In spite of products having comparatively higher prices and delivery being uncertain, there is still some section of users who have very high opinion about NGEF products and they still prefer its products over others but their number is small.

The dealers feel that there is gradual deterioration in the quality, packaging and transport leading to frequent problems of breakages. More importantly, repairs/replacements take considerably longer period of time.

During the last five years the company's performance in terms of overall business level, revenue generation, profitability, labour turnover and cash and funds flow has been declining and financial losses are mounting year after year.

## INFRASTRUCTURE

The plant and machinery presently available with the company is old and becoming obsolete. Frequent break-downs and repairs are common. The designed capacity of production is 90,000 HPs/year of different ranges. Average daily output of the factory is between 50-75 motors against which the present production is around 20 or a monthly production of around 500-800.

With material cost and employee emoluments going up, the margin between cost of production and price realized is reducing and in the last three years it has become negative thus eroding the company's financial status. On the other hand, demand for the range of motors manufactured by NGEF is becoming limited due to availability of required ranges of other brands in the market at competitive prices with attractive terms; Entry of a number of companies into motor manufacturing has further eroded market share of the company. Technological lag is another limiting factor. Due to use of improved technologies that reduce the cost of production and enhance efficiency, private companies are in a position to offer their products at much lower price and allow higher discount. (Ranging between 65-70 percent) against 55-58% offered by NGEF. As per market survey the price differential between NGEF and other competitors is anywhere between 10-20 percent.

Dealers and users find that the NGEF delivery schedule and commitment are not maintained as there is considerable delay between placing order and actual delivery. Besides, demands are not fully met at one go but in installments. Absence of storage facilities for stocks at important centers with high potential demand is causing delays in delivery schedules. Users also feel that NGEF motors though rated high in terms of quality, do not have attractive and aesthetic design or look as in the case of other competitors. There is also a feeling among dealers that the users get impressed with new designs apart from quality and price. The dealers also feel that poor and unresponsive after-sale service of NGEF is a major reason for customers dissatisfaction since there are no service centers at strategic locations to attend to the complaints/repairs; There is also total absence of marketing strategy by NGEF with no market promotion, and no direct and close relations nor frequent contacts with dealers/ users as is being done by other companies. The company is not reaching out to users through advertisement and publicity about NGEF products nor any hoardings are displayed in major markets. This is attributed to NGEF inability to cope up with demand. As opposed to this, other companies show their presence by spending good money on display of hoardings and banners at strategic points and centers in major cities. This, coupled with the aggressive marketing overshadows NGEF reputation/ brand image.

## ISSUES

During the last two–three years, the Management of the company has been making efforts to improve working of the factory. Small additions to its activities are being taken up such as (i) Transformer Repairs (ii) Transformer manufacture (partly outsourced).Small incidental income is being earned from these activities.

## OVERHEAD COSTS

It was reported that the Management has been striving to bring about financial and cost disciplines in the working and reducing avoidable costs without affecting the working. The Management is pursuing this policy in respect of wage bills also.

## PRODUCTION OUTSOURCING

The second measure being contemplated is to outsource production of its main product, i.e., motors to private company/companies. It was understood that the Management is in the process of entering into an agreement with some private companies / manufacturers for production of motors and tendering process is on .for which certain terms and conditions are laid down and strict quality control by NGEF is to be adhered to. The company manufacturing NGEF products has to pay 11% of net sales price (minus duties) to NGEF. The company also has offered its facilities to private companies within its premises for which separate quotation is envisaged. The Management also is in the process of identifying surplus work force that can be spared and exploring an arrangement under which some of the spare workforce could be deputed to other Govt. Agencies/Departments where there is shortage of skilled workers. The other measures being initiated are (a) Reduction of maintenance cost (b) Power consumption (c) Economizing of consumables etc. Cumulative impact of these measures would be seen in the years.

## REDUCTION IN OVERHEADS

The overhead costs are being controlled and in many cases, reduced through economy measures and disciplining of overhead expenses. However, there is a lower limit below which it may not be prudent or feasible to curtail these costs. An alternative is to enhance production with given level of overheads so as to reduce per unit cost of production. Presently the Prices quoted by the company are stated to be higher than others by about 10-20 percent. With increased production, overheads would be spread over larger number of units and the unit cost would be reduced and efforts should be made to level the listed price to the market price.

## INVENTORIES

A study of Inventories (raw material and semi-finished) to turnover shows that higher level of stocks are maintained (in some years around 40% of annual use). This would amount to carrying cost, besides risk of becoming obsolete if stored over a longer period. The concept of minimum stock should be followed, so that overhead in holding the stock is reduced.

## MANPOWER PROFILE

The Company's man power profile shows that average age is 44 years. As per information, 02 contracts, 06 casual and 17 security personnel were also working taking the total staff strength to 171.

About 75% of the man power is between age group 50-60 years of whom, about 19% are past 55 years. Of the workforce, less than 10% have professional qualifications (Diploma and Degrees in Engineering) while the remaining are skilled workers with long years of experience. Less than 10% are in Non-technical category. It may be seen that there are no personnel below the age of 40 years. The skilled and highly skilled workforce is an asset but their age-group is not favorable to impart any Special software based training to put them to any Production that requires use of modern technology. Since there are no staff within 40 year age group, imparting any specialized training is not possible unless younger and more qualified personnel are recruited in place of elder workmen. This may attract tough resistance from them since there may be very few takers for any GOLDEN HANDSHAKE scheme if introduced. The company has an uphill task of balancing the staff to the best advantage of its business.

Business planning Vs Realization: A study of business planning and actual achievement indicates that there is wide gap between these two. It was observed that actual realization of revenue against projections had progressively declined during 2010-11, 2011-12 and 2012-13 but rose during the next year (2013-14) which again came down and this indicated fluctuating trends in working of the company. During 2014-15, the company has projected revenue of Rs 3200 lakhs but actual turnover was just little above Rs 10.50 Crores.

### CURRENT RATIO

The current ratio i.e. current assets to current liabilities are less than 2, which is normally not a good sign of solvency. Even though there is a significant improvement in the ratio in 2013-14, still the industrial average is not achieved as per banking norms. Ideally accepted ratio is 2:1 and lowers than 2 means that firm is moving towards insolvency i.e. firm does not have enough current assets to cover its current liability.

### LIQUIDITY RATIO

This is another ratio which signifies meeting current liabilities with liquid assets. This ratio is showing downward trend in last three financial years which is not good for company. Ideal ratio accepted is 1:1 which means in order to meet current liability we need to have equivalent amount in liquid asset form. Current liabilities are more than Liquid assets and the company is not in a position to have sufficient assets in liquid form to clear of its current liabilities.

### EMPLOYEE EXPENSES

This is one area which needs immediate attention. It is found that employees salary is gradually increasing from 2012-13 without corresponding increase in productivity and capacity utilization. It is also found that there is a spurt in the employee expenses when compared with the revenue from operation (turnover). Major part of the revenue from turnover is eaten away by employee cost and this has grown over the previous three years. There is a huge disconnect between productivity and employee cost.

## BORROWING COST

There is increase in borrowing cost (interest payment) over last year's (except for 2012-13). Higher interest payment without sufficient operating revenue has resulted in deteriorating company performance. Borrowed funds should be used in a proper way to generate higher sales so that it covers the interest cost, in NGEF case this has not happened, borrowings has not contributed in revenue generation. Interest coverage ratio is negative as there is an operation loss in previous 4 years.

## ASSET TURNOVER RATIO

This ratio signifies how effectively assets are used in generating revenue from the business. Assets used are not contributing much to the revenue; it is due to assets being underutilized/unutilized to full extent. It is also found that most of the assets are obsolete and do not have proper maintenance

## INVENTORY TURNOVER

This ratio signifies how fast inventory gets converted in to Sales (revenue generation). This ratio does not show a good picture as it is taking long time to get inventories converted in to sales. Absence of proper inventory management is resulting in this problem. Most of the raw materials are remaining in stores, there is significant high work-in-progress, and finished goods inventory which has resulted in low inventory turnover ratio.

## DEBTORS TURNOVER

This ratio indicates the speed at which collections of debtors. Higher the ratio indicates that it takes lesser days to collect from the customers and lower ratio indicates that it takes more time to collect from customers. Here the ratio for last few years shows that the collections are not happening very fast. There is an increasing trend in receivables over the period of time and there is every chances that some of the debts may go as bad (irrecoverable in the coming years). During 2013-14, there were doubtful debts of Rs 56.60 lakhs and this may increase further if times actions is not taken for collection of outstanding amount from the customers.

### WORKING CAPITAL TURNOVER

This ratio indicates firm's ability to generate sales per rupee of working capital. It can be seen from the chart, that the ratio is not significant, the sales are only 2.5 times the working capital and it was negative in 2012-13. The firm is not utilizing the working capital for generating sales; it is diverting the working capital to non-operating activities because of which the significant increase in working capital is not contributing to more sales.

### MOTOR SALES

There was a gradual decrease in motor sales over the period 2010-11, 2011-12, 2012-13 and there is significant change in the year 2013-14 during which the sales have increased compared to previous years. This is a positive sign and a strong case to indicate that honest and sincere efforts have been made to bring back the company in to a profit making unit. The increase in sale has also restored confidence in the minds of the agents and dealers who are now working towards getting more and more business.

### MEASURES FOR PERFORMANCE IMPROVEMENT

In case of Motors, there is need to add a few new ranges as there demand for wide ranging types of motors. A market study indicated that different regions have different demands. The Company has a present designed capacity to produce motors with a cumulative capacity of 90,000 HP. But the actual utilization is around 40-45 % (or 40,000 HP) leaving a balance of around 50,000 HP of designed capacity unutilized. Interactions with the MD NGEF indicated that there is adequate work force on the rolls of the factory which is presently under-utilized due to various reasons. This idle capacity work-force can be used to reach 100% designed capacity level. However, there would be need to improve facilities/add to the present facility if this objective is to be fulfilled

### ENHANCING PRODUCTION CAPACITY OF MOTORS

The Company has a present Designed capacity to produce motors with a cumulative capacity of 90,000 HP. But the actual utilization is around 40-45 % (or 40,000 HP) leaving a balance of around 50,000 HP of designed capacity unutilized. Hitherto the company is manufacturing G-1 types of motors for which there is huge competition particularly in pricing and discounts. There is scope to go for G-2 and G-3 ranges where the competition is comparatively less since limited number of companies are in this business. This of course, requires availability of plant and machinery besides finance to meet working capital requirement..

The Hubballi unit was mainly considered as an assembling unit and took us producing G-1 group motors with 0.25HP to 15HP ranges and Bangalore unit was producing higher ranges. Consequent on closure of main unit, production of higher ranges was topped and Hubballi unit which was to produce earlier ranges took up motor production up to 30 and subsequently 40 HPs. Due inadequate facilities, production of higher ranges is not being done.

A request by NGEF Hubballi for transfer of available plant and machinery from Bangalore to Hubballi is presently pending with official liquidator (it was understood that almost all machinery has been disposed off) The GOK may consider this request and take a favorable decision in this matter so that additional plant and machinery are available at Hubballi. Simultaneously, it is also necessary make an assessment of need for replacement of some of the older machines/facilities with new and improved versions so as to meet quality and quantity requirements of motors production section.

## DESIGN MODIFICATION

Castings in particular are produced with multi core patterns which are complicated to produce. Hence casting suppliers are reluctant to give priority to supplies which are low yielding causing less return. This results in improper and delayed supplies, ultimately resulting in lower productivity. Casting Suppliers consistently advising to have twin core patterns due to which yields are good and supplies can be uninterrupted. b) Alternatively switching over to aluminum bodies and end covers which results in  productivity and gives aesthetic look. c) Change/Improvement in painting process is needed by modernizing entire painting process. For the above activities the approach by hiring services of specialized external experts (who are to be located) in the field is needed. In-plant production of shafts and rotor cores should be almost stopped. Dropping in winding and making stator core to be entirely outsourced. The existing internal infrastructure for above activities should be sparingly used wherever too many specialties are required to be met. Winding and stator, assembly, testing, painting and packing are the only activities NGEF is needed to be performed. By outsourcing all other activities as mentioned above at the component and sub-assembly levels, the problems due to old machineries and frequent maintenance can be overcome. All these activities reduce the cycle time of the production; increase the productivity there-by enabling NGEF to meet market demand at lower cost which helps NGEF Hubballi Ltd to regain its market share which is already lost, to meet these requirements along with G-1 range motors, NGEF has to start producing G-2 & G-3 range motors. As early as 1999-2000 line viability was drawn by a project team of NGEF Bangalore for the possibility of developing the in plant and external infrastructure locally available for the production of G-2 range motors, restricting the number of motors to be produced to 4000, though the demand was 8000 at that range. The remaining 4000 were retained for NGEF Bangalore. In the process design data for G-2 range were collected from NGEF Bangalore and launching of production of G-2 motors was taken up, targeting around 1500 to 2000 motors for production in the beginning. However, since NGEF Bangalore is liquidated the entire range of 8000 motors in G-2 range is open for development at Hubballi. The viability was drawn considering the spare capacity available on some of the existing machineries available in plant which are meant for G-1 range of production, requirement of additional new machineries and local external infrastructure. This viability was drawn as long back as 15 years, when the plant and machineries had already outlived their lives. However, since the market has dropped for G-1 range of motors and due to increase in demand for G-2 & G-3 range motors in Northern and Eastern Region, restricting the production of G-1 range of motors further development of G-3 range motors along with partially developed G-2 range motors has to be taken up for which a detailed market survey has to be made. Based on the survey a detailed project report has to be prepared considering, New plant, Machinery and Equipments, Man Power etc.

**DIVERSIFICATION**

The Company is in the process of finding alternative lines of production/ servicing in addition to motor manufacture which has now become a highly competitive proposition due to entry of a number of private players. This new step is most desirable since the present day market dynamics are quite complex and one has to be constantly on the lookout of newer areas that have emerging markets. Over the years, NGEF has made good name in market and established its credibility as manufacturer of best quality motors and bringing any new product in the name of NGEF should not be difficult for the company. The Company has conducted a Feasibility study of production of Transformers to cater to the emerging needs of power sector. The proposal aims at production of transformers to add to its revenue/income The cost of the project is estimated at Rs 100.00 Crores for both phases including land value and value of plant and machinery (presently at Bangalore unit) to be entirely funded by Government of Karnataka. In the first phase, transformers up to 1600 KVA are proposed and in second phase higher capacity transformers. Major market for the products are Electricity Boards, Private sector users, Housing colonies, Agriculture users and other small scale users. The proposed project is expected to provide employment to good number of young professional and skilled personnel and more importantly, this would help NGEF overcome present precarious condition. While this proposal deserves to be considered, there is need to carry out a Detailed Project Report preparation exercise with details on technical, financial, economic, marketing and legal aspects. As per NGEF estimates, in Karnataka itself, the demand for Transformers is estimated at around 100,000 units by various ESCOMs over a period of time. This itself provides opportunity for the company to take up transformer production. This of course, calls for fulfillment of the following conditions. Firm commitment by ESCOMs to place orders for the supply of transformers to NGEF with time-line supported by payment of some advance (i) Addition of facilities for transformer production in terms of machinery and skilled and trained man power. It was understood that the ESCOMs have agreed to advance to the extent of 90% of the price. As such, the company does not have to borrow on interest. The NGEF will have to estimate both of these two with likely phases;(ii)If the NGEF proposes to outsource production of any part/substantial part of transformers to any single or number of private agencies, there would be need to have an agreement between the two with legal provisions to safeguard the interests of both parties;(iii)The NGEF has strength of 139 technical and non-technical man powers which are under-utilized at present. The Company has to take up a staff restructuring programme including skill up gradation through some structured training programmes.

## STREAMLINING REPAIRS/SERVICING

Presently NGEF is engaged in carrying out repairs to transformers for HESCOM and other ESCOMs may also avail such service in future. The company has been earning some small income from this service and at the same time, the under-utilized workforce is being used for this purpose. Even though this service may not yield big income, the proposition is welcome due to the fact that unproductive cost on wages/remuneration is being avoided for earning small sums of moneys. The company should focus on this activity and pursue on a more commercial line so that eventually, it can provide wide ranging repair-servicing facility. The company has to add to infrastructure/plant and machinery to meet the demand. Since there is huge gap between planned production and actual production, the Management has to think seriously as to how to cope up with this difference and how best the skilled man power could be deployed for productive purpose. There is need to focus on finding ways and means of utilizing the idle capacity. The changing market demand and competitive environment is key factor which if not considered would lead to a situation of perpetual losses.

## MANUFACTURE OF TRANSFORMERS

The Company has taken up transformer repairs during financial year 2013-14 from HESCOM, along with the production of motors in the existing plant and intends to have its own separate distribution transformers manufacturing unit. A pre-feasibility report prepared by the company proposes to diversify it's by adding a high income and employment generation activity. Keeping in view the requirement of plant machinery and equipments for taking up additional product line vis –a –vis available stock of machinery and their utility levels, the company has plans to outsource the manufacture to few local industries.

## HUMAN RESOURCES

The company has on its pay roll, 139 staff comprising technically qualified (2 Degree and 15 Diploma holders) and highly skilled workers with long years of experience. In addition there are 12 support staff in Sales, Marketing, Administration and Accounts departments. In addition as many as 27 contractual and casual workforces also are also working in the factory. Availability technically trained and skilled manpower augurs well for the company's plan to accept challenges of changing marketing scenario, since manpower availability has many advantages. Thus, about 90% of the staff has one or other technical qualification and skill coupled with experience on the job. To be able to implement revival plan, it is necessary to go for man-power planning for the next five-seven years when over 50% of the skilled staff would superannuate from the services. If the Management is unable to utilize the services of any of the skilled/semi-skilled workforce, it is desirable that a mutually-agreed and acceptable Golden Handshake scheme may be thought of under which willing workers are covered under Voluntary Retirement Scheme. Since the company is hard-pressed of resources, any additional financial burden at this stage could put additional stress on financial status of the company. Hence, an amicable settlement between the willing workforce for VRS on the mode and method of payment of VRS compensation to them will be necessary. There are a number of alternatives available for their compensation, such as: Payment of compensation for the remaining period of their service using certain formulae

## CONCLUSIONS

The Company which was in limelight has slid into a difficult position owing to a number of internal and external factors. It has earned respectable goodwill over the years for its high quality standards but entry of a number of private players into motor business has resulted in limited scope. The company's market share has been going down in major markets i.e. Eastern and Northern regions, mainly for its inability to meet changing market demand and price disadvantage in comparison with private suppliers; NGEF is not in a position to meet demand for G-2 and G-3 ranges from major markets leading to declining business in these regions; Non-availability of improved and modern machinery has restricted scope for the company to cope up with changing market demand; Comparatively higher overhead (disproportionate to production level) has been pushing the company in loss; Due to inherent limitations, the company has not been able to fulfill its commitment even for the G-1 ranges; Dealers in NGEF products are highly appreciative of the Quality of products but are not happy with the company's lukewarm and slow response to the changing needs The dealers feel that the company lacks good marketing strategy which has given an opportunity to rivals/competitors an upper hand; In spite of several weaknesses, there is still high respect for NGEF and its products and Dealers and Regional in charges strongly suggest revival of the company ;

**RECOMMENDATIONS**

There is need to take immediate steps for its revival through series of measures such as (i) Enhance infrastructure/plant machinery and equipments to produce higher ranges, in required numbers to meet the changing demand.(ii) Add new product lines like transformer manufacture since there is huge demand for them. Tap markets within the state and outside (with electricity Companies and other bulk users. Consider appealing GOK to take a policy decision under which all the government Department and undertaking should be advised to use NGEF products instead of buying from open markets under Tendering system. Consider appealing GOK to consider waiving duties and taxes in order to reduce the cost of production; (for a fixed period of say 3-5 years till the company reaches a viable status and stands on its own) iii) Take aggressive marketing through a young team of field force. In addition, provide motivation to the dealers, in monetary and non-monetary terms to cope up with competitors iv) Consider outsourcing in some activities since the present facilities are not adequate to augment motor production/transformer manufacture Formulate a plan for reduction of surplus workforce through Golden Handshake or deputation to other GOK agencies/departments where there need for such workforce. Increase employee skills and productivity through training and exposures. Introduce cost/management accounting and cost control system in addition to the present MIS, to facilitate close monitoring of the performance of the company and taking corrective steps;

The GOK should consider positioning a Chief Executive (MD) for a minimum period of 3 years in order the incumbent is able to bring back the company to sustainability level.

### IMPROVING FINANCIAL HEALTH

A clear cut Costing system should be put in place. The present system of costing is lacking with lot of shortcomings. There is an immediate need to engage a cost consultant to design the costing system and to revisit the entire costing policy. It is recommended to have a strong inventory policy focusing on ordering, issuing and managing the stocks. Presently there is no systematic inventory policy and there is no proper ordering policy as well existing. Even though ERP system is introduced, most of the people who are working at stores are not familiar with working and usage of ERP system. Computation of Cost of product is not significant and there is no base on which standards are fixed. There is no proper cost sheet maintained and no one is aware of on what basis the standards are fixed. This is resulting in high cost and there is urgent need to address this issue and see to it that proper cost data are gathered and used to arrive at cost of production. As per the feedback of the dealers and also our interaction with them, it is clear that NGEF brand is still prevalent in market and there are lots of customers who still prefer to buy NGEF motors in high numbers. There is lot of demand but, there is huge supply shortfall which is resulting in not catering to market demand. As we can see that the capacity is not getting utilized fully, the company should work towards, better capacity utilization and should target to achieve at least 80% (from present 50%) and see that it caters to the market demand. Replacing of old machine with sophisticated and better technology machine and having a proper maintenance policy of existing machine. It is found that the machines used are not contributing to high sales, the reason being because of obsolescence and poor maintenance. The firm should bring an effective machine management policy and address this issue on top priority.MIS (Management Information system) reporting system should be developed in a robust manner. The firm should have a strong MIS reporting introduced and all the critical and important data should be shared on timely basis (daily/weekly/monthly etc) to the management for taking further decisions. Better unitization of human resources. The firm should work towards motivating these employees in using their rich experience in increasing efficiency and productivity to greater extent. Dealers have complained on the poor packing conditions under which motors are dispatched and this needs to be taken care. A cost effective packing system should be introduced to make sure that there is no sever damage caused to the motors while in transit and at point of unloading. The company should seek financial assistance from the GOK to (i) provide some short term financial assistance to tide over debt and meet working capital(around Rs 10.00 Crores and (ii) provide funds for Transformer manufacture (estimated at Rs 15.00 Crores to meet plant and machinery requirement only.

# Conclusions and Recommendations

## Conclusions

- ✓ The Company which was in limelight has slid into a difficult position owing to a number of internal and external factors;
- ✓ It has earned respectable goodwill over the years for its high quality standards but entry of a number of private players into motor business has resulted in limited scope;
- ✓ The company’s market share has been going down in major markets i.e. Eastern and Northern regions, as reflected in the annual sales, mainly for its inability to meet changing market demand & price disadvantage in comparison with private suppliers;
- ✓ NGEF is not in a position to meet demand for G-2 and G-3 ranges from major markets leading to declining business in these regions;
- ✓ Non-availability of improved and modern machinery has restricted scope for the company to cope up with changing market demand;
- ✓ Comparatively higher overhead (disproportionate to production level) has been pushing the company in loss;
- ✓ Due to inherent limitations, the company has not been able to fulfil its commitment even for the G-1 ranges;
- ✓ Dealers in NGEF products are highly appreciative of the Quality of products but are not happy with the company’s lukewarm and slow response to the changing needs;
- ✓ The dealers feel that the company lacks good marketing strategy which has given an opportunity to rivals/competitors an upper hand; The

Company has no presence in terms of service centres to attend to repairs/after sale services. Its Regional Officers have to face queries /comments from dealers;

- ✓ In spite of several weaknesses, there is still high respect for NGEF and its products and Dealers and Regional in charges strongly suggest revival of the company;

# Recommendations

## Short Term

There is need to take immediate steps for its revival through series of measures such as:

(i) Enhance infrastructure/plant machinery and equipments to produce higher ranges in required numbers to meet the changing demand.

- ✓ Slowly the machineries are to be modernized even for manufacturing G2 and G3 motors and designed capacity to be fully used for improving the financial status of the company. Before liquidating Bangalore unit of the Company, the machineries should have been shifted to Hubballi.

(ii) Add new product lines like transformer manufacture since there is huge demand for them. Tap markets within the state and outside (with electricity supply Companies and other bulk users). Provide financial support for this purpose.

- ✓ Carry out a detailed market demand study for transformers to assess the annual requirement before taking up transformer business.

- ✓ Consider appealing GOK to take a policy decision under which all the government Departments and undertakings are advised to use NGEF products instead of buying from open markets under Tendering system subject to quality priority.

- ✓ Consider appealing GOK to consider waiving duties and taxes in order to reduce the cost of production; (for a fixed period of say 3-5 years till the company reaches a viable status and stands on its own.)

(iii) Take aggressive marketing through a young team of field force. In addition, provide motivation to the dealers, in monetary and non-monetary terms to cope up with competitors.

(iv) Consider outsourcing in some activities (other than transformer) since the present facilities are not adequate to augment motor production/transformer manufacture; while doing so necessary safeguard should be provided in the agreements on a long term basis so that private manufacturers do not compromise on quality & bring bad name to the company and start dictating terms.

v) Formulate a plan for reduction of surplus workforce through Golden Handshake or deputation to other GOK agencies/departments where there need for such workforce.

vi) Induct technical workforce in phases synchronising superannuation and increase in sales.

- ✓ Introduce cost/management accounting and cost control system in addition to the present MIS, to facilitate close monitoring of the performance of the company and taking corrective step

**Recommendations - Financial**

1. A clear cut Costing system should be put in place. The present system of costing is lacking with lot of shortcomings. There is an immediate need to engage a cost consultant to design the costing system and to revisit the entire costing policy.
2. It is recommended to have a strong inventory policy focusing on ordering, issuing and managing the stocks. Presently there is no systematic inventory policy and there is no proper ordering policy as well existing. Even though ERP system is introduced, most of the people who are working at stores are not familiar with working and usage of ERP system.
3. Computation of Cost of product is not significant and there is no base on which standards are fixed. There is no proper cost sheet maintained and no one is aware of on what basis the standards are fixed. This is resulting in

high cost and there is urgent need to address this issue and see to it that proper cost data are gathered and used to arrive at cost of production.

4. As per the feedback of the dealers and also our interaction with them, it is clear that NGEF brand is still prevalent in market and there are lot of customers who still prefer to buy NGEF motors in high numbers. There is lot of demand but, there is huge supply shortfall which is resulting in not catering to market demand. As we can see that the capacity is not getting utilized fully, the company should work towards, better capacity utilization and should target to achieve at least 80% (from present 50%) and see that it caters to the market demand. For this purpose NGEF may seek financial assistance from GOK or seek additional accommodation from Banks under GOK guarantee.
5. The GOK might consider providing Rs. 10 Crores as proposed by NGEF to meet with demand and manufacture of transformer.
6. Replacing of old machine with sophisticated and better technology machine and having a proper maintenance policy of existing machine. It is found that the machines used are not contributing to high sales, the reason being because of obsolescence and poor maintenance. The firm should bring an effective machine management policy and address this issue on top priority.
7. MIS (Management Information system) reporting system should be developed in a robust manner. The main drawback which we found is that there is no proper data available on time and the data available is also not accurate and clear. The firm should have a strong MIS reporting introduced and all the critical and important data should be shared on timely basis (daily/weekly/monthly etc) to the management for taking further decisions.
8. Better unitization of human resources. It is found from the HR records that 96% of the employees have more than 24 years of service to their credit

working for NGEF and somewhere the company is not capitalizing on the rich experience of such people to improve productivity and efficiency. The firm should work towards motivating these employees in using their rich experience in increasing efficiency and productivity to greater extent. There seems to be lack of coordination and co-operation between different levels of management when it comes to the question of delegation and accountability. Management should aim at bridging this gap. Training for skill staff up-gradation of technical should be prioritised.

9. Dealers have complained on the poor packing conditions under which motors are dispatched and this needs to be taken care. A cost effective packing system should be introduced to make sure that there is no sever damage caused to the motors while in transit and at point of unloading.

10. There are some complaints of deteriorating quality standards and this was openly expressed by few dealers. Firm should take strong measures to improve quality by having better quality control and checks in place and see to that all the standards are fulfilled before dispatching the motors.