

C.P.U. No. 936

3

## THIRD REPORT

COMMITTEE ON PUBLIC UNDERTAKINGS  
(2009 - 2010)

(FIFTEENTH LOK SABHA)

BHARAT EARTH MOVERS LIMITED

MINISTRY OF DEFENCE  
(Department of Defence Production)

(Action Taken by the Government on the recommendations contained in the Twenty-Fifth Report (14<sup>th</sup> Lok Sabha) on Performance of Engine Division of Bharat Earth Movers Limited based on C&AG Report No. 9 (Commercial) of 2007).



Presented to Lok Sabha on 5.3.2010

Laid in Rajya Sabha on 5.3.2010

LOK SABHA SECRETARIAT  
NEW DELHI

2010 / Phalgun 1930(S)

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**COMPOSITION OF THE COMMITTEE ON PUBLIC UNDERTAKINGS**  
**(2009-2010)**

**Chairman**

**Shri V. Kishore Chandra S. Deo**

**Members, Lok Sabha**

- 2 Shri K.C. Singh 'Baba'
- 3 Shri Ramesh Bais
- 4 Shri Hemanand Biswal
- 5 Shri Anant Kumar Hegde
- 6 Shri Sukhdev Singh Libra
- 7 Dr. Charan Das Mahant
- 8 Shri Baijayant Panda
- 9 Shri L. Rajagopal
- 10 Shri Nama Nageswara Rao
- 11 Chaudhary Lal Singh
- 12 Shri Ganesh Singh
- 13 Shri N. Dharam Singh
- 14 Shri Rajiv Ranjan Singh alias Lalan Singh
- 15 Shri Bhisma Shankar alias Kushal Tiwari

**Members, Rajya Sabha**

- 16 Shri Birendra Prasad Baishya
- 17 Shri Bharatkumar Raut
- 18 Ms. Mabel Rebello
- 19 Dr. T. Subbarami Reddy
- 20 Shri Vijay Kumar Rupani
- 21 Shri Tapan Kumar Sen
- 22 Shri Amar Singh

**Secretariat**

1	Shri J.P. Sharma	Joint Secretary
2	Shri Ajay Kumar Garg	Additional Director
3	Smt. K. Rangamani Narasimhan	Executive Officer

## **INTRODUCTION**

I, the Chairman, Committee on Public Undertakings having been authorized by the Committee to submit the Report on their behalf, present this Third Action Taken Report on Action Taken by the Government on the recommendations contained in the Twenty Fifth Report of the Committee on Public Undertakings (Fourteenth Lok Sabha) on Performance of Engine Division of Bharat Earth Movers Limited based on C&AG Report No. 9 (Commercial) of 2007.

2. The Twenty-Fifth Report of the Committee on Public Undertakings (2007-2008) was presented to Lok Sabha on 5<sup>th</sup> March, 2008. Action Taken Replies of the Government to the recommendations contained in the Report were received on 16<sup>th</sup> February, 2009. The Committee on Public Undertakings considered and adopted this Report at their sittings held on 12.02.2010. The Minutes of the sitting are given in Appendix – I.

3. An analysis of the action taken by the Government on the recommendations contained in the 25<sup>th</sup> Report (2008-09) of the Committee is given in Appendix – II.

**New Delhi:**  
**12 February, 2010**  
**Phalgun, 1931(S)**

**V. KISHORE CHANDRA S. DEO**  
**Chairman,**  
**Committee on Public Undertakings.**

## CHAPTER I

### REPORT

This Report of the Committee deals with the action taken by the Government on the recommendations contained in the Twenty Fifth Report (Fourteenth Lok Sabha) of the Committee on Public Undertakings (2007-08) on “Performance of Engine Division of Bharat Earth Movers Limited based on C&AG Report No. 9 (Commercial) of 2007 which was presented to Lok Sabha on 5<sup>th</sup> March, 2008.

2. Action Taken notes have been received from Government in respect of all the recommendations contained in the Report. These have been categorized as follows:

- (i) Recommendations / observations which have been accepted by the Government (Chapter II)  
Sl. Nos.2,3 & 5 (Total 3 )
- (ii) Recommendations / observations which the Committee do not desire to pursue in view of the Government's replies (Chapter III)  
Sl. Nos.1 & 4 (Total 2)
- (iii) Recommendations / observations in respect of which replies of the Government have not been accepted by the Committee (Chapter IV)  
Nil
- (iv) Recommendations / observations to which the Government have furnished interim replies. (Chapter V)  
Nil

3. The Committee will now deal with the Action Taken by the Government on some of the recommendations in succeeding paragraphs.

#### **Recommendation No.1**

##### **“Non-achievement of objectives**

The Committee note that the BEML set up its own Engine Division in 1991 in order to meet the requirement of Engines for captive consumption for its Earth moving equipment. The said objective included manufacturing of engine suitable for mining and construction equipment, achievement of higher technological base besides avoiding use of the engines of the other make which were having problems like poor quality, poor performance, non-reliability, high-down time, non-availability of spares and poor after sales services etc. The other factors like vertical integration for maintaining the overall quality of the equipment, control from the Company side over the supplies of spares / engines and having a better after-sales service were also considered by the Company for establishment of its own Engine Division.

In the above context, the Committee note with concern that even after sixteen years of establishment of its own Engine Division, the Company has

failed to fully achieve the objectives mentioned above. The Company has continued to offer the equipment manufactured by them fitted with the engines of other make even during the period up to 2006-07 as pointed out by the audit in their latest findings. The Committee are not convinced with the justification advanced by the Company that business-wise it was not viable to manufacture the entire range of engines and secondly the customers of BEML equipment have preference for the engines of other make.

The Committee find the above stand taken by the Company contrary to the basic objectives which inspired it to establish its own Engine Division. The Committee fail to understand that even after lapse of 16 years the Company has not been able to produce, if not the entire range of engines at least the major varieties required for its own earth moving equipment. In the opinion of the Committee the very purpose for which the Company started its own Engine Division has been defeated to a great extent.

After going through the explanation / arguments given by the Company, the Committee find that it is a glaring example of lack of vision, poor planning and improper execution of their policy of establishment of its own Engine Division. While deprecating the failure on the part of the Engine Division in meeting its objectives, the Committee recommend that the Company must undertake a thorough examination about the lapses in the matter and come out with a proper review of the causes of failure to achieve the objectives and accordingly take corrective steps. The Committee further recommend that the persons responsible for such serious lapses be identified and accountability be fixed and the action taken thereon may be communicated to the committee.”

The Ministry in their action taken reply has submitted as under:-

“Though the very objective of establishment of Engine Division in BEML as a production center for captive consumption has been achieved, however, on account of the following facts, the full complement of the installed capacity which is estimated at 1500 Engines per annum (although the cylinder block machine capacity is restricted to 1100 per annum) could not be achieved:

- (a) The entire Infrastructure to be created for producing 2400 Engines per annum as projected in the Project Report, could not be installed for want of Capital Investment, on account of foreign exchange restrictions imposed by Government of India.
- (b) The capacity of Single FMS Machine used for producing Cylinder Blocks for all the 4-Series of Engines is restricted to 1100 Nos. and only with outsourcing of Engine block machining 1500 nos. can be achieved.
- (c) The Manpower of 288 is quite inadequate and the Assembly was running only in Single Shift.
- (d) The constraint of diversification of the Engine range beyond the 4-series Engine and restricted manufacture of Spares and Recon Engines.

2. Notwithstanding the above, BEML has taken the following initiatives in the last 5 years to improve the Engine Division performance:

- (a) Increased the no. of Engines from 215 in 2000-01 to 1040 with 483% increase over last seven years.
- (b) Increased the Manpower from 288 in 2001-02 to 338 in 2007-08 and started Engine Assembly production in 2 Shifts, using two bays out of the three Assembly bays established originally.
- (c) Changed the age old practice of treating all workmen as Indirect and made all direct workmen as directly responsible for the required level of Production / Standard Man Hours (SMH) and also introduced Direct incentive scheme during 2007-08 and thus the SMH has been increased to 199 SMH per workmen per month in 2007-08 as compared to 101 SMH in the past (2004-05).
- (d) Initiated Engine Diversification and fuel efficient 4-Cylinder Engine applicable to two Equipments (BE71 and BL9H) with potentially large quantity has been developed through in-house R&D. The same has already been produced and introduced.
- (e) Outsourced the Design & Development of High Power Density Diesel Engine (Gas convertible Engine) to ARAI, Pune and the same is under development and expected to be rolled out in November 2008. BEML has paid an amount of Rs. 60 Lakhs as Technical fees to ARAI, Pune.
- (f) In an effort to make the BEML Engine go Electronic and to convert BEML Engine to Electronic Engines, BEML has already engaged a Global Consulting firm M/s. Heinzman, Germany to develop Electronic FIP (Fuel Injection Pump) for 140 Series Engines at a cost of Rs. 1.4 Crores investment, to achieve Fuel Efficiency and to increase the Engine Demand. The Project is likely to be commissioned in the month of March, 2009 and later proposed to be extended to other series.
- (g) The original 4-Series Engines have been extended from 7 Models numbering 270 in 2001-02 to 25 Models numbering 922 in 2007-08.
- (h) BEML has signed an MoU for ToT with Licence Fee and Royalty for Tatra Engine with Euro-II and Euro-III compliance and already a Project Manager has been nominated to set-up the facility. The Engine is expected to be produced during 2008-09 for Indian market and probably exported later to parent company, as global outsource.

3. In addition to the above, BEML is also exploring the possibility of outsourcing the Cylinder Block Machining to increase the no. of Engines to be produced. With the above initiative and the current changes brought about in the Engine Division, BEML is quite confident of achieving 1500 Engines, including equivalent spares and recon engines during 2009-10.

4. With regard to fitting the other makes of Engine, it is respectfully submitted that BEML Engine with 105, 125, 140 and 170 mm bore size can meet the range of 100 HP to 750 HP and thus BEML's entire range of current Engine upto 750 HP covers only to the extent of 25 models of equipments out of the total range of 34 models, currently being produced and supplied. For the rest of the 9 models falling below and above our capacity Engines, BEML has to necessarily procure and source from outside, which is beyond their Technological capability to produce. They are thus, sourcing from outside after proper trial and evaluation, including the customer approval, on par with Global practice which includes Ashok Leyland, Kirloskar Oil Engines Limited, Cummins & MTU, which is essential and business necessity.

5. Concerning the Customer preference of the Engine, Some customers have shown preference to certain make of Engines and in fact, BEML has produced documentary evidence to the Committee to establish that in respect of Coal India Subsidiary, MCL (Mahanadi Coalfields Limited) a tender has clearly preferred the Cummins / Caterpillar Make Engine to be fitted on the equipment for the Dozers.

6. As regards the lack of Vision, Poor Planning and improper execution of the Engine Division, it is submitted that for the last five years BEML has been taking adequate and appropriate initiatives with long term perception to increase the volume of Engine production and also to increase the factory level profit, including the sale of spares with higher profits. As already stated above, BEML has taken adequate steps required to improve the Engine Production to 1500 level with corresponding manpower and outsourcing. Further for increasing the further volume of 2400 Engines, BEML is taking steps to diversify into manufacture of Tatra Engines and to increase the Engines Capacity through purchase of another FMS unit and related infrastructure with planned additional investment of about Rs.150 Crs, including increasing of Manpower and such steps when fructified would result in production of 2400 Engines, within another 4-5 years. However, it is respectfully submitted that the number of Engines to be produced, in-spite of having capacity, is directly linked to the market demand and thus Production cannot be linked to the capacity in a given year, but to the demand in the market, either for OEM application or for Spares to avoid piling up of stocks.

7. With regard to identifying the persons responsible for not achieving the desired level of production and fixing accountability, it is respectfully submitted that the Engine Division which was started in the year 1991-92 by the erstwhile BEML management in position, who, during 1988 to 1991 decided to go-ahead with the Project restricting it to 1500 Engines. Only 215 Nos. of Engines were produced in 2000-01 and the persons responsible for low level of Production and low volume of Business as compared to installed Capacity have already served the Company with the best of their abilities and demitted office. The reasons for not achieving the desired level and the then market demand, including acceptability of BEML equipments by the Indian Customers and probably to some extent abroad, cannot be ascertained and responsibility may not be able to be fixed at this point of time on them. Present BEML Management has taken initiative for improvement in performance of Engine Division resulting in 1040 Engines in 2007-08 including increasing spares business and Recon (with 473%

increase as compared to 214 nos. in 2000-01) and making Engine Division profitable at factory level on transfer cost basis.

(Ministry of Defence (Department of Defence Production) O.M. No.12(2)/2008-D(BEML) Dated 20.8.2008)

**Remarks of Office of C&AG on the Reply of the Government**

In response to the COPU recommendation, the Board in its 274<sup>th</sup> & 275<sup>th</sup> Board Meeting (25<sup>th</sup> Jan. 2008 & 18 Feb. 2008 respectively) deliberated on the recommendation of the Performance Audit report. The Board members also visited the plant on 25 January 2008 and concluded that with additional investment on infrastructure the rated capacity could be achieved. The management had decided to invest about Rs. 150 crore and gradually achieve rated and projected capacity. The capital expenditure proposal is yet to be placed before the Board for approval. Report of the examination of the lapses and review of the causes of failure has not been provided to audit.

2. With regard to the reply that the various initiatives taken by the company in the last 5 years increased the Production of the engines from 215 in 2000-01 to 1040 in 2007-08 with 483 percent increase over the last seven years, on verification of records it was found that the actual position was as under:

<u>Year</u>	<u>No. of engines produced</u>
2000-01	- 215
2001-02	- 270
2002-03	- 217 Does not include
2003-04	- 331 reconditioned engines
2004-05	- 481 (RECON)
2005-06	- 625
2006-07	- 708
2007-08	- 1040*

\*The production figure of 1040 engines stated in the reply includes incomplete engines and old reconditioned engines as detailed below:

Sl. No.	No. of Engines	Remarks
1	83	Engines not in complete shape as of 31 March 2008.
2	40	Old engines reconditioned.
3	17	Engines not manufactured but other jobs like gear box machining and drilling work of sister units offloaded to Engine Division, Mysore etc. considered as equivalent and to production of 17 engines.

3. Considering the comparable figures of regular production at 900 engines during 2007-08 the growth works out to 318% and not 483%. As per the internal production programme the division is planning to produce 1100 engines during 2008-09.

4. As regards the Committee's recommendation relating to fixing of personal responsibility / accountability, the company has not taken action and stated that "the persons responsible for low level of Production and low volume of Business as compared to installed capacity have demitted office after serving the company with the best of their abilities".

### **Reply of the Government**

The matter has been thoroughly examined and it was found that even though the land & building provided is sufficient for production of 2400 engines, the Engine Cylinder Block machining capacity was only for 1100 engines per annum. Even though the manpower requirement was projected at 1500, only 288 persons were deployed in line with the demand and actual production levels. In addition, the production of engines depends on the market demand and even if there is a demand, BEML has to restrict its production to the extent of its range covering 4 series of Engines namely 105,125,140 & 170 series.

2. Based on the above analysis following corrective steps have been taken by BEML :

- (i) Man power increased from 288 in 2001 to 338 in 2007-08.
- (ii) Engine production started in two shifts instead of single shift and third shift was also introduced where critical machines are operated. Also operating Assembly in 2 shifts basis from one shift with effect from 04.06.2007
- (iii) Direct incentive scheme was introduced for the direct work men on trial basis from 01-03-2005 wherein minimum SMH was 80 and subsequently the scheme was revised from 01-09-2007 to motivate the employees and to increase production level wherein minimum SMH was raised to 100. With this total SMH has increased from 10343 to 21413 per month, almost over 100%.
- (iv) Noting that the Engine Production could be increased by extending the applications to certain equipment models instead of sourcing from outside Engine manufacturers, the current Management from 2002 onwards has made all out efforts to continuously increase Engine Production. BEML engine application has been increased from 7 Models during 2001-02 to 25 Models in 2007-08. This has resulted in increased engine production from 215 Engines in 2000-01 to 1040 Engine during 2007-08. Thus, the utilization of existing infrastructure has been increased by 5 folds compared to 2000-01 and is almost closer to 100% of the installed capacity.

3. Out of 1040 Engines manufactured by the Division during 2007-08, 83 engines were reversed as advised by the auditors due to certain problems which had crept into the system during the implementation of ERP for the first time in the Company as certain parts of marginal and insignificant value were regularized later for drawals, contrary to earlier practice obtaining in many PSUs.

4. In fact, with regard to reversal of 83 Engines it is submitted that it is not a case that no Engines were produced and simply declared to boost up production without really building the Engine. But on the contrary this is a case where the Engines have been built before 31-03-2008. Due to certain problems which had crept into the system during the implementation of ERP for the first time in the Company, certain parts of marginal value were regularized later for drawls. Due to this, the Statutory Auditor declined to count them as production and therefore BEML agreed with the Auditor for reversal.

5. The building up of the old engine which comes for rehabilitation and over-haul requires complete dismantling, cleaning of parts, changing of parts and at times some machining and replacement with new Cylinder block. Then, these engines have to be rebuilt, assembled and tested with the same standards as applicable to new engines. This takes more SMH than required to produce a new engine. 101 old engines were rebuilt during 2007-08. Therefore, it has been reckoned to equate to new Engine which is a practice in the Engine Industry.

6. Further to 101 old Engines overhauled (worth of Rs 10 Crores), Engine Division also manufactures Dumper aggregates like Output Shafts and PTOs. Gear box housings for Tatra and BMP transmissions involving significant machining on FMS and other critical machines, are also manufactured by the division due to lack of facility at H&P division.

7. In order to capture lucrative spares business the division manufactures/supplies spare parts worth Rs.60 Crores and Rs. 15 crores of in-house spares produced equivalent to 25 engines which involves 5423 SMH.

8. For all these extra activities, 9269 SMH of available capacity of the Engine Division is consumed which when equated with the new engines works out to 42 Engines [excluding rebuilt of old engines]. All the above are efforts unsolicited initiative of Top Management to increase production of Engine Division.

9. The exclusion of 140 engines from 1040 engines stated produced in the vetting remarks of Audit does not significantly alter the growth rate even considering that such engines are not to be reckoned as produced. Further, the reconditioned engines involve substantially much more value addition and are essential to reduce warranty cost and capture repair market and avoid repowering of BEML engine with other engines. This also ensures customer satisfaction.

10. In addition to the above and in order to reach the optimum production level of 2400 engines, Capital expenditure proposal of Rs.150 Crores has been approved by the Board in its 279<sup>th</sup> Meeting held on 18.09.08.

11. As stated before, individual responsibility cannot be fixed for low level production and low volume of business as compared to installed capacity on account of various reasons beyond the control of the persons in authority who have demitted the office prior to 2002 after serving the company with the best of their abilities.

12. In view of the limited range of the applications of engines in the equipment basket of the company and the customers preference for the competitor engines have prevented the company and its officials from achieving significant volume of business as compared to installed capacity of 1100 nos. in the earlier years.

13. Further, the current management of the company took various initiatives and have achieved year to year growth from 2002-03 as confirmed by the audit in their vetting remarks. Hence, the question of fixing responsibility on the current Management also was not considered appropriate in the circumstances. Current Management having taken various initiatives to increase production progressively year after year as verified and confirmed in audit cannot also be made accountable for initiating action against the earlier Managements for accumulated lapses in achieving the installed capacity over the years."

(Ministry of Defence (Department of Defence Production) O.M. No.12(2)/2008-D(BEML) Dated 13.02.2009)

#### **Comments of the Committee**

**The Committee in their original report while observing that the Engine division of BEML had not been able to achieve the objectives it was required to achieve, had recommended that the Company must undertake a thorough examination about the lapses in the matter and the persons responsible for the lapses be identified and accountability be fixed and the action taken thereon be communicated to the Committee.**

**The Ministry in their action taken reply has submitted that due to certain factors like insufficient capital investment on account of foreign exchange restrictions imposed by Government of India, inadequate manpower etc. which existed during the earlier years of establishment of engine division were mainly responsible for its' below par performance prior to the year 2002. In this regard the Committee has now been informed that the BEML has taken a number of initiatives to overcome the lacunae of the past for increasing the production of engines by means of increased manpower and introduction of direct incentive scheme to boost up the workmen, introduction of three shift system instead of existing single shift, extending the applications of its engines to additional equipment instead of sourcing from outside etc. All these steps have resulted in increased engine production from 215 engines in 2000-01 to 1040 engines during 2007-08 which is almost closer to 100% of the installed capacity.**

**As regards identifying the persons responsible for not achieving the desired level of production and fixing responsibility, the Company has submitted that the persons responsible for low level of production prior to 2002 have already demitted the office and the reasons for not achieving the desired level could not be ascertained and as such at this point of time they are not able to fix responsibility. However, the present Management has taken the above mentioned initiatives for improvement in performance of Engine Division.**

**Taking a holistic view of the position explained above, the Committee feel that in accordance with the spirit of their recommendation,**

the Company have already taken number of steps for improving the performance of the Engine Division and the same has also been acknowledged by the C&AG in their comments on the action taken reply of the Ministry. The Committee appreciate the efforts of the present management for being able to improve upon the system to achieve maximum utilisation of the installed capacity and impress upon them the need for continuing with its efforts in accordance with sound business principles and prudent commercial practices. The Committee, however caution the management of the Company that while formulating the policy objectives, they should also simultaneously ensure that the action plan is executed without having any scope of mismatch between the two.

### **Recommendation No.5**

#### **Failure in the diversification activities**

The Committee note that in order to optimize the capacity utilization and also to normalize the cost of production, the Engine Division intended to extend the application of the Company's engines to other products and also to sell them independently as separate aggregate. Accordingly the Division took up the manufacture of engines for diesel generator (DG) set applications and K-300 engines for compressor applications to private customers. As per the audit findings, the diversification efforts made to manufacture and sell the Company's engine for use in Diesel Generator sets were not successful resulting in loss of Rs.2.49 crores. Besides, the Company was left holding an inventory of finished stock of Rs.3.14 crores.

In this regard, the Committee note that according to the Company, considering the huge demand for captive power generation through lower capacity DG sets, a decision was taken to enter the field of manufacturing DG sets. However, due to a large number of players both in organized and unorganized sectors in the market the Company could not make much head way in marketing the DG sets. So the Company made efforts to find out suitable distributors who can market the engines for DG sets. The Company entered into an agreement with a private party, namely M/s.Jeevan Diesels for marketing the engines and based on the indications given by them, the manufacture of DG engines was taken up. However, the envisaged objective could not materialize as the said party was reluctant to adhere to the agreement based on changed market requirements.

The Committee are not convinced with the performance of the Engine Division in the course of its diversification activities. The committee are constrained to note that the Company continued manufacturing DG sets for same party without any acceptable commercial terms and the production continued even though the concerned party had not lifted the first lot of 10 DG sets. The Company failed to safeguard its interest by not legally involving for the said private customer in case of backing out nor the Company formulated any guidelines for entering into marketing agreement with private customers to safeguard its interests, particularly when new \ products were being launched.

The Committee therefore strongly recommend that effective steps should

now be taken by the Company to diversify and capture markets for diesel engines, with the overall objective of improving capacity utilization of the plant and a better market share. The Committee further recommend that the Company should carefully draw the terms and conditions of agreements with the customers to fully safeguard its own interests. The Committee also recommend that responsibility be fixed on the persons concerned for drafting inappropriate terms and conditions in the agreement entered into with private party regarding marketing of DG sets thereby resulting in substantial loss to the Company and action taken thereon may be intimated.

### **Reply of the Government**

As regards foraying into Diesel Genset (DG Set) marketing, BEML has attempted to enter this market as part of diversification efforts by manufacturing 24 Nos. of Engines after the initial market study of Southern States, considering the fact that Engine Plant is located in the State of Karnataka and also the Logistic cost. The Engine was produced by BEML and the Alternator procured from outside firm to fit it on the Engine to make Diesel Genset. Accordingly, BEML had identified one of the existing Diesel Genset marketing & Distributing firm by name M/s. Jeevan Diesels, in order to do a pilot marketing and popularize the BEML Gensets. The arrangement made with M/s. Jeevan Diesels was that BEML to supply Engine and to allow them to fit the Alternator of specified make and to market BEML Diesel Gensets to popularize the brand, performance, etc. M/s. Jeevan Diesels, accordingly has attempted to fit the Alternator and distributed the Engines. However, they could not make a much headway, as compared to the existing players including Global players and thus, BEML discontinued their business with M/s. Jeevan Diesels for pilot marketing and popularize Gensets. Consequently the Engines produced for DG Sets have been used for captive use of Gensets and on their Earth Moving equipments for applicable range. This maiden attempt was only to diversify into Gensets Business for better utilization of the installed capacity, along with other attempts of improving the performance of Engine Division. The value of stock of engines, and other costs are part of overall business of Engine business and it would be appreciated that the company need to see the outcome of overall business performance of Engine division and not isolated efforts of business development and steps taken by the company was to enhance the performance level of Engine Division. As regards the Agreement made with M/s Jeevan Diesels for marketing of the engines, BEML has informed that the same was entered into after due vetting by the Legal Department of the Company. However, BEML has taken note of the recommendations of the Committee and the views of the Committee will be kept in mind for future guidance.

(Ministry of Defence (Department of Defence Production) O.M. No.12(2)/2008-D(BEML) Dated 20.8.2008)

### **Remarks of Office of C&AG on the Reply of the Government**

The Company has taken note of the recommendations of the committee for future guidance. The company was unable to initiate any legal action on M/s. Jeevan Diesels for non observance of agreement terms for marketing of the engines. Hence the company's reply that the agreement with M/s. Jeevan Diesels was entered after vetting with the legal department indicates clearly

failure on the part of the company to appreciate the legal implications of terms of the agreement.

The Government reply is silent with regard to fixing of responsibility on the persons for drafting inappropriate terms and conditions in the agreement entered into with private party regarding marketing of DG sets thereby resulting in substantial loss to the company.

### **Reply of the Government**

The Management of the Company has taken various initiatives to completely exploit the existing infrastructure of Engine Division which has helped us to increase the number of engines produced from 215 Nos. in 2000-01 to 1040 Nos. in 2007-08. The Management has also diversified into the following, to increase the demand for supply of Engines.

- (i) New applications have been developed with appropriate modifications of Engines.
- (ii) BEML have taken up designing of new Engine which can be converted as a Gas Engine considering the natural gas availability in the Country by investing Rs.60 Lakhs and the Engine is in final stage of completion.
- (iii) BEML have also chosen as global partner M/s.\_Heinzman, Germany for developing Fuel Injection Pump to make BEML Engine as Electronic Engines in line with Global trends with investment of Rs.1.4 crores and to improve the fuel consumption efficiency in the era of ever-increasing Oil / Diesel prices.

2. BEML, as a part of diversification and to increase the production of Engines, have developed Engine for Diesel Genset applications and produced a pilot batch to foray into Diesel Genset market. But, unfortunately the effort of diversification did not take-off, as the Genset makers offered much lower prices (below manufacturing cost) to BEML as they were using engines of other established makers with better brand image. They were demanding certain Warranties and Guarantees which would have further increased the expenditure. In view of the above, BEML had to practically withdraw from the effort of diversification into engines for Diesel Gensets.

3. It was a maiden attempt of the Management with development of business in mind and it is a well-known fact globally that all the diversification efforts will not yield 100% results and all the R&D products will not become saleable products. Further, all the Engines produced for this purpose has already been effectively converted and used for other applications in the Earth Moving machines and there is no loss caused to the Company in this connection as under:

- (i) 17 nos. were converted to engines applicable for PES100 Genset and supplied to Indian Army.
- (ii) Balance Genset engines were converted and used on regular models of EM equipment.

4. For reasons already stated in the various replies, agreement for marketing DG sets is a developmental effort on the part of both the parties to the agreement. The agreement was finalized after due consideration of the

circumstances and hence cannot be stated that the legal implications of the terms of agreement were not appreciated by the company. The change in the market requirement subsequent to the agreement is a force majeure situation which cannot be held against both parties notwithstanding the terms of the agreement. In view of the fact that the company has utilized the engines proposed in terms of the agreement, the company is not at loss on account of the same.

5. Further, the efforts of the Management yielding overall results of the Company should be looked at instead of the performance of individual division or branched-out business in isolation. BEML profit has increased from Rs.13 Crores in 2001-02 to Rs.348 Crores in 2007-08 with the Increase in Sales from Rs.1424 Crores in 2001-02 to Rs.2713 Crores in 2007-08. The profit has grown over 26 times and Dividend to 120% from traditional 20% and therefore, the appreciation or depreciation of action of Management should emanate from the overall results of the Company and not from an isolated incident.

6. Any action against officials despite their sincere efforts for diversification and expansion efforts may affect the morale of the officers and officers may not take any initiative henceforth in the Company to do any development work and non-routine nature, including calculated risk for business growth. With this sort of approach of action the Company will remain where it is and may not make any further progress at all. Overall efforts of the officers in exploring new opportunities should be appreciated and not to de-motivate the Executive community of the Company by taking action against them in case of variance in expected and actual results, so long as the overall sales, profits are achieved as targeted.

(Ministry of Defence (Department of Defence Production) O.M. No.12(2)/2008-D(BEML) Dated 13.02.2009)

#### **Comments of the Committee**

The Committee in their original report had expressed dissatisfaction over the failure in diversification activities undertaken by the Engine Division for improving its performance and recommended to take effective steps to diversify and capture market for diesel engines so as to improve the capacity utilisation of the plant and better market share besides fixing responsibility on the persons concerned for inappropriate business agreements leading to substantial loss to the Company. In this regard, the Committee note from the action taken reply of the Government that the Company has taken note of the recommendations of the committee for future guidance. On the aspect of fixing of responsibility on the persons concerned for drafting inappropriate terms and conditions in the agreement, it has been submitted by the Government that it was a maiden attempt of the Management with development of business in mind and any action against officials despite their sincere efforts for diversification and expansion efforts may affect the morale of the officers.

Taking note of the reply of the Government and observing that the Company has not suffered any loss by subsequently utilizing all the equipment manufactured during the course of its diversification activities

as well as the fact that the number of engines produced have increased from 215 in 2000-01 to 1040 in 2007-08, the Committee would not like to pursue the matter any further but at the same time they would like to emphasise the need to draft the agreement/ terms and conditions in a more professional manner leaving no scope for taking undue advantage by the private parties.

## CHAPTER II

### RECOMMENDATIONS / OBSERVATIONS WHICH HAVE BEEN ACCEPTED BY THE GOVERNMENT (CHAPTER II)

#### **Recommendation No.2**

##### **Poor production performance and under-utilization of installed capacity**

The Committee note that according to the Project Report, the Engine Division was expected to manufacture 2400 engines of varying bore size category per year with manpower of 1500 and with the plant working in three shifts. However, since the machining facility for cylinder blocks was not enhanced beyond 1500, the installed capacity was adopted as 1500 engines per year and subsequently re-assessed at 1100. According to audit, in terms of installed capacity of the Engine Division, the utilization ranged from 14 per cent in 2000-01 to 42 per cent in 2005-06. Further, the Company did not utilize its engines in all its equipment manufacture resulting in under utilization of the manufacturing capacity of engines. The Company had been purchasing Cummins engines and utilizing the same for fitment in the equipment manufactured by them. Except in 2004-05 the number of equipment fitted with the Company's engine was less than 50 per cent of the total number of equipment manufactured. In spite of the availability of capacity in the Engine Division, the Company did not use its engines in all its equipment manufactured. An audit analysis in this regard revealed that fitting of the Company's engines in the equipment supplied to the major customers viz. Coal India Limited and its subsidiaries ranged only between 15 and 45 per cent.

According to the justification furnished by the Company, due to severe foreign exchange constraints, the machining facility was not enhanced beyond 1500 with manpower of 263 people as against the projected requirement of 1500 employees. Further, since the engines manufactured are only for captive consumption in the earth moving equipment, the production was planned and achieved in accordance with the demand/market share of BEML which has not gone up to 1100. Regarding fitment of other make engines, the Company has come out with the reply that the manufacturing range of the Engine Division was in the range of 100 HP to 550 HP and the engines of other ranges were outsourced from Cummins.

The Committee are not convinced with the justification advanced by the Company towards poor production performance and under-utilization of the installed capacity. First of all, the Committee find that the projections made in the detailed project report for establishment of the Engine Division were projected on the higher side vis-a-vis the actual demand. Secondly, the Engine Division has failed to utilize even the re-assessed installed capacity of 1100 engines. Thirdly, as per the latest information furnished by the audit, even after sixteen years of its inception, the Company has continued to offer their equipment fitted with the engines of both BEML as well as that of other makes in contravention with the policy decision taken by the Board itself on 22nd January, 2003 to offer all equipment only with BEML engines w.e.f. 1st April, 2003 wherever engines manufactured were within the range of Engine Division. The Committee note

from Ministry's reply that performance rating of BEML engines is high and feed-back on customers satisfaction has revealed satisfactory results. The Committee however note with concern that despite this high performance rating, the percentage of equipment fitted with BEML engines sold to its major customers has actually declined. For Coal sector it has declined from 55% in 2002-03 to 44% in 2006-07 and for Cement sector from 80% in 2002-03 to 32% in 2006-07.

The Committee find the performance of the Engine Division appalling in terms of low productivity and under-utilization. For this purpose the Committee recommend that the Company may take all necessary steps like adoption of suitable marketing strategies, development of appropriate infrastructure, finding appropriate diversification activities for the purpose of extension of the product range for various types of applications, continuous work on research and development to improve the engines making them at par with international standards, and finally formulating strategies and programmes to increase the production of viable models of engines instead of production and stacking engines of unviable models.

### **Reply of the Government**

As regards the recommendation, covering Sourcing of Engine from outside and low Productivity and under-utilization of Engine Division, it is submitted that the approach with regard to application of Engine covering BEML range and outside BEML range has been explained in detail in reply to recommendation No.1. Sourcing some engines for BEML beyond range model may be required to be done as business necessity. While it is a fact that the Engine Division was producing quite a low volume of Engine prior to 2001-02 including spares and Recon Engine, however, the Engine Division production has been doubled, inclusive of Spares and Recon engines and produced 316 Nos. during the year 2001-02 and 1040 Nos. during 2007-08, which is reflective of the fact that production, productivity and capacity utilization have been increased and for better utilization of installed capacity of the Engine Plant has been achieved. It is further stated that with BEML plans for expansion and diversification, it may be possible to achieve 1500 Nos. (equivalent) Engines with existing installed capacity with outsourcing of components/facilities despite the fact that the FMS capacity is limited to 1100 in the year 2009-10. BEML has proposed to achieve the Projected / Planned capacity of 2400 with further CAPEX of Rs.150 Crores, including diversification and expansion of the volume of Tatra Engine in 4-5 years time. The recommendations of the Committee have been considered and action has been taken accordingly by BEML. BEML are proceeding on the similar lines to achieve installed capacity immediately in two years and the projected and intended capacity of 2400 within a period of 4-5 years.

(Ministry of Defence (Department of Defence Production) O.M. No.12(2)/2008-D(BEML) Dated 20.8.2008)

### **Remarks of Office of C&AG on the Reply of the Government**

The company has initiated action to increase the production capacity of its engines as clarified in the vetting remarks at Sl.No. 1

2. Presently, out of 34 viable models of engine required for captive use in manufacture of BEML equipment, the company has the capacity to manufacture and supply engines for 25 models (74%). They should not outsource Cummins engines for these 25 models. Only 6 models are not in the scope of BEML engine division as these are considered as below / above engine division range and 3 models are under development.

3. The company has initiated action based on COPU recommendations and are in the initial stages.

### **Reply of the Government**

In-spite of initiating various actions for increasing Engine production, actual engine production is also constrained by customer requirement.

2. In addition to producing engines with quality on par with that of competitors, the company is striving to reduce its cost of production through import substitution, vendor development, sub-contract /out sourcing with focus on major / minor assembly so as to increase the volume of production and revenue.

3. The initiatives of the company duly supplemented by proposed additional capital expenditure towards critical machineries like FMS, line balancing of the machines will show results in the days to come.

4. Diversification actions of the company particularly related to electronic engines will take more time for yielding results. In fact BEML had deployed an Independent National body IIPE to undertake a study to confirm the current capacity based on the infrastructure already built in Engine Division and the IIPE has already submitted a report and clearly stated as follows:

“Taking the above aspect into consideration, the team is of the opinion that the capacity for complete engine range from 650 to 750 per year”.

Copy of Executive Summary of the report is enclosed herewith.

(Ministry of Defence (Department of Defence Production) O.M. No.12(2)/2008-D(BEML) Dated 13.02..2009)

### **Recommendation No.3**

#### **High cost of production and Financial Performance**

The Committee note that since its inception, the Engine Division has incurred losses every year and its poor financial performance can be attributed broadly to the factors namely, high cost of raw materials and components; under-utilization of installed capacity; and dependence on single source supplies for raw materials and components.

In the above context, the Committee note that the Company had made efforts to introduce certain cost saving measures by outsourcing some conventional activities like turning, milling, drilling, boring, tapping, grinding and key-way slothing etc. which was 10% of total purchases made during last 6 years

in order to get the jobs done on economic rates. The Committee also note that the Company had made efforts to bring down the cost of production by earning profits through increased sale of spares and after sale service of engines. As regards dependence on single source supplies, the Company has advanced the justification that Engine Division is resorting to single tender on certain proprietary items which are critical functional items having bearing on the performance of the engines and also in those cases where the suppliers are specialized.

Having noted the fact that the losses of the Engine Division over the years are coming down gradually mainly because of increasing production level of engines, the Committee would like to emphasize the need for further speeding up of the production level instead of going for purchased engines of other makes. The Committee recommend that the various strategies proposed by the Company to achieve the targeted double turn over of the earthmoving equipments by 2013-14 as per their Corporate Plan be put in place expeditiously so that the demand for the engines is also enhanced accordingly. Further, the manpower utilization be matched with the installed capacity with a view to achieve optimum production. The Committee further recommend that the issues like exploring development of alternative source of supply to get competitive price in procuring raw materials components and requirement of capital expenditure towards procuring additional machinery and other overheads to improve production level of the engines be urgently addressed by the Board.

### **Reply of the Government**

With regard to the recommendation No.3, covering manpower utilization to be matched with installed capacity, outsourcing of some of the jobs, developing of alternative sources of purchase as against single source, procurement of additional machinery, etc., it is submitted that BEML has already taken various initiatives to outsource sizeable volume of work and the development of vendors and also to develop minimum two sources for a given component / part, excluding Proprietary and technology oriented parts. The Committee was appreciative of the fact that the losses of Engine Division are coming down on account of increased production and insisted implementation of BEML's Corporate Plan of 2013-14 in order to increase the volume of Engine Production. BEML has taken positive steps to increase the volume of production of engines.

As regard the Capital expenditure for building additional infrastructure to reach the projected and the intended level of Production of 2400, the proposal is being put-up to the Board by the BEML for approval to expand the capacity with additional investment.

(Ministry of Defence (Department of Defence Production) O.M.  
No.12(2)/2008-D(BEML) Dated 20.8.2008)

### **Remarks of Office of C&AG on the Reply of the Government**

The Board members of BEML visited the plant and concluded that with additional investment on infrastructure, the rated capacity could be achieved to invest about Rs.150 crore and gradually achieve rated and projected capacity.

2. The capital expenditure for building additional infrastructure to reach the projected and intended level of production of 2400 engines is yet to be put up before the Board by the BEML for approval to expand the capacity with additional investment.
3. The various up gradation and diversification plans proposed by the company are still under implementation stage.
4. Thus the implementation of the recommendation needs to be followed up.
5. The growth of manpower in the division is as follows :

2001-02 - 288  
 2002-03 - 286  
 2003-04 - 279  
 2004-05 - 270  
 2005-06 - 272  
 2006-07 - 299  
 2007-08 - 338

Further it was noted that the division is now working in two shifts after low productivity was pointed out in the Performance Audit.

- (1) Verification revealed that only one BE71 engine and 60 BL9H engines developed through in-house R&D were produced in 2007-08.
- (2) The Company outsourced the Design & Development of High Power Density Diesel Engine (Gas convertible Engine) to ARAI, Pune. The project was for 14 months and should have been completed by July 2007, however, same is in development stage. The company has paid only Rs. 27 lakh out of Rs. 60 lakh based on the progress made by TRAI, Pune. Even after expiry of the 14 month project completion period less than 50% progress has been achieved.
- (3) Target of 50 Tatra Euro II, Euro III engines targeted for March 2009 seems unlikely to materialize. BEML has signed a MoU for ToT with Licence Fee and Royalty for Tatra Engine with Euro-II and Euro-III compliance in February 2008.
- (4) In an effort to make the BEML Engine go Electronic the company engaged a Global Consulting firm M/s. Heinzman, Germany to develop Electronic FIP (Fuel Injection Pump) for 140 Series Engines at a cost of Rs.1.4 Crores investment, to achieve Fuel Efficiency and to increase the Engine Demand. The period of the project is 13 months and is to be completed by June 2009.

Thus the implementation of the recommendation needs to be followed up in respect of Sl. Nos (2), (3) & (4).

#### **Reply of the Government**

Capital expenditure of Rs.150 crores has been approved by the Board in its 279<sup>th</sup> Meeting held on 18<sup>th</sup> September 08 for building additional infrastructure

to reach the projected level of production of 2400 engines and further action to implement the same is under progress.

2. The company is phasing out capital expenditure plan of Rs. 150 crores over the years in order to ensure that investment will not remain idle for want of market requirement for BEML Engines though the growth in Mining and Construction equipment sector is promising in line with the company's plans to reach the turnover of Rs. 5,000 crores by 2013-14.

3. Further to various initiatives for increase in production the Management demanded minimum SMH of 100 pm for each direct worker from 80 SMH per month and implemented with effect from 01.09.2007. Further in order to increase VOP and Sales and cater to increase the order Book on Hand, Management introduced 3 shifts in all manufacturing plants in production areas and 2 shifts instead of single shift in Assembly with effect from 04-06-2007 and thus the statement by Audit, it was introduced in Engine Division after Audit report in Engine Division is factually incorrect. While the man power is being restricted more or less to the present level though it is not matching with the requirement to achieve the planned capacity of the division, Company cannot commit on the man power front immediately till additional capital investment is made to increase the infrastructure and Capacity.

4. Due to recession in global economy, the lower end products at BEML like BE 71, BL 9H which cater to construction segment are affected badly, which will also affect Engine production during 2008-09 and subsequently. It is expected that with turn around in economy, the production and off take of these engines will significantly go up during 2010-11.

5. As regard High Power Density Diesel Engine (Gas convertible Engine), ARAI is developing this Engine from scratch and not updating any of our existing engines. This involves designing of about 300 critical components of new generation by ARAI. Subsequently, castings and forgings have to be developed as per the new design. This is time consuming since it involves development of patterns, core boxes, dies etc., and also involves trial/errors during manufacturing but surely help increasing Engine production.

6. Regarding Tatra Euro II, Euro III engines, further progress on these projects is being monitored regularly and Engine will be (Euro II) rolled during 2009-10.

7. BEML have also chosen as global partner M/s. Heinzman, Germany for developing Fuel Injection Pump to make BEML Engine as Electronic Engines in line with Global trends with investment of Rs.1.4 crores and to improve the fuel consumption efficiency in the era of ever-increasing Oil / Diesel prices. Further progress on these projects is being monitored regularly and hopefully this Electronic engine will be fitted on BEML Equipment during 2009-10.

(Ministry of Defence (Department of Defence Production) O.M. No.12(2)/2008-  
D(BEML) Dated13.02.2009)

## **Recommendation No.5**

### **Failure in the diversification activities**

The Committee note that in order to optimize the capacity utilization and also to normalize the cost of production, the Engine Division intended to extend the application of the Company's engines to other products and also to sell them independently as separate aggregate. Accordingly the Division took up the manufacture of engines for diesel generator (DG) set applications and K-300 engines for compressor applications to private customers. As per the audit findings, the diversification efforts made to manufacture and sell the Company's engine for use in Diesel Generator sets were not successful resulting in loss of Rs.2.49 crores. Besides, the Company was left holding an inventory of finished stock of Rs.3.14 crores.

In this regard, the Committee note that according to the Company, considering the huge demand for captive power generation through lower capacity DG sets, a decision was taken to enter the field of manufacturing DG sets. However, due to a large number of players both in organized and unorganized sectors in the market the Company could not make much head way in marketing the DG sets. So the Company made efforts to find out suitable distributors who can market the engines for DG sets. The Company entered into an agreement with a private party, namely M/s.Jeevan Diesels for marketing the engines and based on the indications given by them, the manufacture of DG engines was taken up. However, the envisaged objective could not materialize as the said party was reluctant to adhere to the agreement based on changed market requirements.

The Committee are not convinced with the performance of the Engine Division in the course of its diversification activities. The committee are constrained to note that the Company continued manufacturing DG sets for same party without any acceptable commercial terms and the production continued even though the concerned party had not lifted the first lot of 10 DG sets. The Company failed to safeguard its interest by not legally involving for the said private customer in case of backing out nor the Company formulated any guidelines for entering into marketing agreement with private customers to safeguard its interests, particularly when new \ products were being launched.

The Committee therefore strongly recommend that effective steps should now be taken by the Company to diversify and capture markets for diesel engines, with the overall objective of improving capacity utilization of the plant and a better market share. The Committee further recommend that the Company should carefully draw the terms and conditions of agreements with the customers to fully safeguard its own interests. The Committee also recommend that responsibility be fixed on the persons concerned for drafting inappropriate terms and conditions in the agreement entered into with private party regarding marketing of DG sets thereby resulting in substantial loss to the Company and action taken thereon may be intimated.

### **Reply of the Government**

As regards foraying into Diesel Genset (DG Set) marketing, BEML has attempted to enter this market as part of diversification efforts by manufacturing 24 Nos. of Engines after the initial market study of Southern States, considering the fact that Engine Plant is located in the State of Karnataka and also the Logistic cost. The Engine was produced by BEML and the Alternator procured from outside firm to fit it on the Engine to make Diesel Genset. Accordingly, BEML had identified one of the existing Diesel Genset marketing & Distributing firm by name M/s. Jeevan Diesels, in order to do a pilot marketing and popularize the BEML Gensets. The arrangement made with M/s. Jeevan Diesels was that BEML to supply Engine and to allow them to fit the Alternator of specified make and to market BEML Diesel Gensets to popularize the brand, performance, etc. M/s. Jeevan Diesels, accordingly has attempted to fit the Alternator and distributed the Engines. However, they could not make a much headway, as compared to the existing players including Global players and thus, BEML discontinued their business with M/s. Jeevan Diesels for pilot marketing and popularize Gensets. Consequently the Engines produced for DG Sets have been used for captive use of Gensets and on their Earth Moving equipments for applicable range. This maiden attempt was only to diversify into Gensets Business for better utilization of the installed capacity, along with other attempts of improving the performance of Engine Division. The value of stock of engines, and other costs are part of overall business of Engine business and it would be appreciated that the company need to see the outcome of overall business performance of Engine division and not isolated efforts of business development and steps taken by the company was to enhance the performance level of Engine Division. As regards the Agreement made with M/s Jeevan Diesels for marketing of the engines, BEML has informed that the same was entered into after due vetting by the Legal Department of the Company. However, BEML has taken note of the recommendations of the Committee and the views of the Committee will be kept in mind for future guidance.

(Ministry of Defence (Department of Defence Production) O.M. No.12(2)/2008-D(BEML) Dated 20.8.2008)

### **Remarks of Office of C&AG on the Reply of the Government**

The Company has taken note of the recommendations of the committee for future guidance. The company was unable to initiate any legal action on M/s. Jeevan Diesels for non observance of agreement terms for marketing of the engines. Hence the company's reply that the agreement with M/s. Jeevan Diesels was entered after vetting with the legal department indicates clearly failure on the part of the company to appreciate the legal implications of terms of the agreement.

The Government reply is silent with regard to fixing of responsibility on the persons for drafting inappropriate terms and conditions in the agreement entered into with private party regarding marketing of DG sets thereby resulting in substantial loss to the company.

### **Reply of the Government**

The Management of the Company has taken various initiatives to completely exploit the existing infrastructure of Engine Division which has helped us to increase the number of engines produced from 215 Nos. in 2000-01 to 1040 Nos. in 2007-08. The Management has also diversified into the following, to increase the demand for supply of Engines.

- (i) New applications have been developed with appropriate modifications of Engines.
- (ii) BEML have taken up designing of new Engine which can be converted as a Gas Engine considering the natural gas availability in the Country by investing Rs.60 Lakhs and the Engine is in final stage of completion.
- (iii) BEML have also chosen as global partner M/s.\_Heinzman, Germany for developing Fuel Injection Pump to make BEML Engine as Electronic Engines in line with Global trends with investment of Rs.1.4 crores and to improve the fuel consumption efficiency in the era of ever-increasing Oil / Diesel prices.

2. BEML, as a part of diversification and to increase the production of Engines, have developed Engine for Diesel Genset applications and produced a pilot batch to foray into Diesel Genset market. But, unfortunately the effort of diversification did not take-off, as the Genset makers offered much lower prices (below manufacturing cost) to BEML as they were using engines of other established makers with better brand image. They were demanding certain Warranties and Guarantees which would have further increased the expenditure. In view of the above, BEML had to practically withdraw from the effort of diversification into engines for Diesel Gensets.

3. It was a maiden attempt of the Management with development of business in mind and it is a well-known fact globally that all the diversification efforts will not yield 100% results and all the R&D products will not become saleable products. Further, all the Engines produced for this purpose has already been effectively converted and used for other applications in the Earth Moving machines and there is no loss caused to the Company in this connection as under:

- (i) 17 nos. were converted to engines applicable for PES100 Genset and supplied to Indian Army.
- (ii) Balance Genset engines were converted and used on regular models of EM equipment.

4. For reasons already stated in the various replies, agreement for marketing DG sets is a developmental effort on the part of both the parties to the agreement. The agreement was finalized after due consideration of the circumstances and hence cannot be stated that the legal implications of the terms of agreement were not appreciated by the company. The change in the market requirement subsequent to the agreement is a force majeure situation which cannot be held against both parties notwithstanding the terms of the agreement. In view of the fact that the company has utilized the engines proposed in terms of the agreement, the company is not at loss on account of the same.

5. Further, the efforts of the Management yielding overall results of the Company should be looked at instead of the performance of individual division or branched-out business in isolation. BEML profit has increased from Rs.13 Crores in 2001-02 to Rs.348 Crores in 2007-08 with the Increase in Sales from Rs.1424 Crores in 2001-02 to Rs.2713 Crores in 2007-08. The profit has grown over 26 times and Dividend to 120% from traditional 20% and therefore, the appreciation or depreciation of action of Management should emanate from the overall results of the Company and not from an isolated incident.

6. Any action against officials despite their sincere efforts for diversification and expansion efforts may affect the morale of the officers and officers may not take any initiative henceforth in the Company to do any development work and non-routine nature, including calculated risk for business growth. With this sort of approach of action the Company will remain where it is and may not make any further progress at all. Overall efforts of the officers in exploring new opportunities should be appreciated and not to de-motivate the Executive community of the Company by taking action against them in case of variance in expected and actual results, so long as the overall sales, profits are achieved as targeted.

(Ministry of Defence (Department of Defence Production) O.M. No.12(2)/2008-D(BEML) Dated 13.02.2009)

**(please see Chapter –I for comments)**

## CHAPTER III

### **RECOMMENDATIONS/OBSERVATIONS WHICH THE COMMITTEE DO NOT DESIRE TO PURSUE IN VIEW OF THE GOVERNMENT'S REPLIES**

#### **Recommendation No.1**

##### **“Non-achievement of objectives**

The Committee note that the BEML set up its own Engine Division in 1991 in order to meet the requirement of Engines for captive consumption for its Earth moving equipment. The said objective included manufacturing of engine suitable for mining and construction equipment, achievement of higher technological base besides avoiding use of the engines of the other make which were having problems like poor quality, poor performance, non-reliability, high-down time, non-availability of spares and poor after sales services etc. The other factors like vertical integration for maintaining the overall quality of the equipment, control from the Company side over the supplies of spares / engines and having a better after-sales service were also considered by the Company for establishment of its own Engine Division.

In the above context, the Committee note with concern that even after sixteen years of establishment of its own Engine Division, the Company has failed to fully achieve the objectives mentioned above. The Company has continued to offer the equipment manufactured by them fitted with the engines of other make even during the period up to 2006-07 as pointed out by the audit in their latest findings. The Committee are not convinced with the justification advanced by the Company that business-wise it was not viable to manufacture the entire range of engines and secondly the customers of BEML equipment have preference for the engines of other make.

The Committee find the above stand taken by the Company contrary to the basic objectives which inspired it to establish its own Engine Division. The Committee fail to understand that even after lapse of 16 years the Company has not been able to produce, if not the entire range of engines at least the major varieties required for its own earth moving equipment. In the opinion of the Committee the very purpose for which the Company started its own Engine Division has been defeated to a great extent.

After going through the explanation / arguments given by the Company, the Committee find that it is a glaring example of lack of vision, poor planning and improper execution of their policy of establishment of its own Engine Division. While deprecating the failure on the part of the Engine Division in meeting its objectives, the Committee recommend that the Company must undertake a thorough examination about the lapses in the matter and come out with a proper review of the causes of failure to achieve the objectives and accordingly take corrective steps. The Committee further recommend that the persons responsible for such serious lapses be identified and accountability be fixed and the action taken thereon may be communicated to the committee.”

The Ministry in their action taken reply has submitted as under:-

"Though the very objective of establishment of Engine Division in BEML as a production center for captive consumption has been achieved, however, on account of the following facts, the full complement of the installed capacity which is estimated at 1500 Engines per annum (although the cylinder block machine capacity is restricted to 1100 per annum) could not be achieved:

(e) The entire Infrastructure to be created for producing 2400 Engines per annum as projected in the Project Report, could not be installed for want of Capital Investment, on account of foreign exchange restrictions imposed by Government of India.

(f) The capacity of Single FMS Machine used for producing Cylinder Blocks for all the 4-Series of Engines is restricted to 1100 Nos. and only with outsourcing of Engine block machining 1500 nos. can be achieved.

(g) The Manpower of 288 is quite inadequate and the Assembly was running only in Single Shift.

(h) The constraint of diversification of the Engine range beyond the 4-series Engine and restricted manufacture of Spares and Recon Engines.

2. Notwithstanding the above, BEML has taken the following initiatives in the last 5 years to improve the Engine Division performance:

(i) Increased the no. of Engines from 215 in 2000-01 to 1040 with 483% increase over last seven years.

(j) Increased the Manpower from 288 in 2001-02 to 338 in 2007-08 and started Engine Assembly production in 2 Shifts, using two bays out of the three Assembly bays established originally.

(k) Changed the age old practice of treating all workmen as Indirect and made all direct workmen as directly responsible for the required level of Production / Standard Man Hours (SMH) and also introduced Direct incentive scheme during 2007-08 and thus the SMH has been increased to 199 SMH per workmen per month in 2007-08 as compared to 101 SMH in the past (2004-05).

(l) Initiated Engine Diversification and fuel efficient 4-Cylinder Engine applicable to two Equipments (BE71 and BL9H) with potentially large quantity has been developed through in-house R&D. The same has already been produced and introduced.

(m) Outsourced the Design & Development of High Power Density Diesel Engine (Gas convertible Engine) to ARAI, Pune and the same is under development and expected to be rolled out in November 2008. BEML has paid an amount of Rs. 60 Lakhs as Technical fees to ARAI, Pune.

(n) In an effort to make the BEML Engine go Electronic and to convert BEML Engine to Electronic Engines, BEML has already engaged a Global Consulting firm M/s. Heinzman, Germany to develop Electronic FIP (Fuel Injection Pump) for 140 Series Engines at a cost of Rs. 1.4 Crores investment, to achieve Fuel Efficiency and to increase the Engine Demand. The Project is likely to be commissioned in the month of March, 2009 and later proposed to be extended to other series.

(o) The original 4-Series Engines have been extended from 7 Models numbering 270 in 2001-02 to 25 Models numbering 922 in 2007-08.

(p) BEML has signed an MoU for ToT with Licence Fee and Royalty for Tatra Engine with Euro-II and Euro-III compliance and already a Project Manager has been nominated to set-up the facility. The Engine is expected to be produced during 2008-09 for Indian market and probably exported later to parent company, as global outsource.

3. In addition to the above, BEML is also exploring the possibility of outsourcing the Cylinder Block Machining to increase the no. of Engines to be produced. With the above initiative and the current changes brought about in the Engine Division, BEML is quite confident of achieving 1500 Engines, including equivalent spares and recon engines during 2009-10.

4. With regard to fitting the other makes of Engine, it is respectfully submitted that BEML Engine with 105, 125, 140 and 170 mm bore size can meet the range of 100 HP to 750 HP and thus BEML's entire range of current Engine upto 750 HP covers only to the extent of 25 models of equipments out of the total range of 34 models, currently being produced and supplied. For the rest of the 9 models falling below and above our capacity Engines, BEML has to necessarily procure and source from outside, which is beyond their Technological capability to produce. They are thus, sourcing from outside after proper trial and evaluation, including the customer approval, on par with Global practice which includes Ashok Leyland, Kirloskar Oil Engines Limited, Cummins & MTU, which is essential and business necessity.

5. Concerning the Customer preference of the Engine, Some customers have shown preference to certain make of Engines and in fact, BEML has produced documentary evidence to the Committee to establish that in respect of Coal India Subsidiary, MCL (Mahanadi Coalfields Limited) a tender has clearly preferred the Cummins / Caterpillar Make Engine to be fitted on the equipment for the Dozers.

6. As regards the lack of Vision, Poor Planning and improper execution of the Engine Division, it is submitted that for the last five years BEML has been taking adequate and appropriate initiatives with long term perception to increase the volume of Engine production and also to increase the factory level profit, including the sale of spares with higher profits. As already stated above, BEML has taken adequate steps required to improve the Engine Production to 1500 level with corresponding manpower and outsourcing. Further for increasing the further volume of 2400 Engines, BEML is taking steps to diversify into manufacture of Tatra Engines and to increase the Engines Capacity through

purchase of another FMS unit and related infrastructure with planned additional investment of about Rs.150 Crs, including increasing of Manpower and such steps when fructified would result in production of 2400 Engines, within another 4-5 years. However, it is respectfully submitted that the number of Engines to be produced, in-spite of having capacity, is directly linked to the market demand and thus Production cannot be linked to the capacity in a given year, but to the demand in the market, either for OEM application or for Spares to avoid piling up of stocks.

7. With regard to identifying the persons responsible for not achieving the desired level of production and fixing accountability, it is respectfully submitted that the Engine Division which was started in the year 1991-92 by the erstwhile BEML management in position, who, during 1988 to 1991 decided to go-ahead with the Project restricting it to 1500 Engines. Only 215 Nos. of Engines were produced in 2000-01 and the persons responsible for low level of Production and low volume of Business as compared to installed Capacity have already served the Company with the best of their abilities and demitted office. The reasons for not achieving the desired level and the then market demand, including acceptability of BEML equipments by the Indian Customers and probably to some extent abroad, cannot be ascertained and responsibility may not be able to be fixed at this point of time on them. Present BEML Management has taken initiative for improvement in performance of Engine Division resulting in 1040 Engines in 2007-08 including increasing spares business and Recon (with 473% increase as compared to 214 nos. in 2000-01) and making Engine Division profitable at factory level on transfer cost basis.

(Ministry of Defence (Department of Defence Production) O.M. No.12(2)/2008-D(BEML) Dated 20.8.2008)

#### **Remarks of Office of C&AG on the Reply of the Government**

In response to the COPU recommendation, the Board in its 274<sup>th</sup> & 275<sup>th</sup> Board Meeting (25<sup>th</sup> Jan. 2008 & 18 Feb. 2008 respectively) deliberated on the recommendation of the Performance Audit report. The Board members also visited the plant on 25 January 2008 and concluded that with additional investment on infrastructure the rated capacity could be achieved. The management had decided to invest about Rs. 150 crore and gradually achieve rated and projected capacity. The capital expenditure proposal is yet to be placed before the Board for approval. Report of the examination of the lapses and review of the causes of failure has not been provided to audit.

2. With regard to the reply that the various initiatives taken by the company in the last 5 years increased the Production of the engines from 215 in 2000-01 to 1040 in 2007-08 with 483 percent increase over the last seven years, on verification of records it was found that the actual position was as under:

<u>Year</u>	<u>No. of engines produced</u>
2000-01	- 215
2001-02	- 270
2002-03	- 217 Does not include
2003-04	- 331 reconditioned engines
2004-05	- 481 (RECON)

2005-06 - 625  
 2006-07 - 708  
 2007-08 - 1040\*

\*The production figure of 1040 engines stated in the reply includes incomplete engines and old reconditioned engines as detailed below:

Sl. No.	No. of Engines	Remarks
1	83	Engines not in complete shape as of 31 March 2008.
2	40	Old engines reconditioned.
3	17	Engines not manufactured but other jobs like gear box machining and drilling work of sister units offloaded to Engine Division, Mysore etc. considered as equivalent and to production of 17 engines.

3. Considering the comparable figures of regular production at 900 engines during 2007-08 the growth works out to 318% and not 483%. As per the internal production programme the division is planning to produce 1100 engines during 2008-09.

4. As regards the Committee's recommendation relating to fixing of personal responsibility / accountability, the company has not taken action and stated that "the persons responsible for low level of Production and low volume of Business as compared to installed capacity have demitted office after serving the company with the best of their abilities".

#### **Reply of the Government**

The matter has been thoroughly examined and it was found that even though the land & building provided is sufficient for production of 2400 engines, the Engine Cylinder Block machining capacity was only for 1100 engines per annum. Even though the manpower requirement was projected at 1500, only 288 persons were deployed in line with the demand and actual production levels. In addition, the production of engines depends on the market demand and even if there is a demand, BEML has to restrict its production to the extent of its range covering 4 series of Engines namely 105,125,140 & 170 series.

2. Based on the above analysis following corrective steps have been taken by BEML :

- (i) Man power increased from 288 in 2001 to 338 in 2007-08.
- (ii) Engine production started in two shifts instead of single shift and third shift was also introduced where critical machines are operated. Also operating Assembly in 2 shifts basis from one shift with effect from 04.06.2007
- (iii) Direct incentive scheme was introduced for the direct work men on trial basis from 01-03-2005 wherein minimum SMH was 80 and

subsequently the scheme was revised from 01-09-2007 to motivate the employees and to increase production level wherein minimum SMH was raised to 100. With this total SMH has increased from 10343 to 21413 per month, almost over 100%.

(iv) Noting that the Engine Production could be increased by extending the applications to certain equipment models instead of sourcing from outside Engine manufacturers, the current Management from 2002 onwards has made all out efforts to continuously increase Engine Production. BEML engine application has been increased from 7 Models during 2001-02 to 25 Models in 2007-08. This has resulted in increased engine production from 215 Engines in 2000-01 to 1040 Engine during 2007-08. Thus, the utilization of existing infrastructure has been increased by 5 folds compared to 2000-01 and is almost closer to 100% of the installed capacity.

3. Out of 1040 Engines manufactured by the Division during 2007-08, 83 engines were reversed as advised by the auditors due to certain problems which had crept into the system during the implementation of ERP for the first time in the Company as certain parts of marginal and insignificant value were regularized later for drawals, contrary to earlier practice obtaining in many PSUs.

4. In fact, with regard to reversal of 83 Engines it is submitted that it is not a case that no Engines were produced and simply declared to boost up production without really building the Engine. But on the contrary this is a case where the Engines have been built before 31-03-2008. Due to certain problems which had crept into the system during the implementation of ERP for the first time in the Company, certain parts of marginal value were regularized later for drawls. Due to this, the Statutory Auditor declined to count them as production and therefore BEML agreed with the Auditor for reversal.

5. The building up of the old engine which comes for rehabilitation and over-haul requires complete dismantling, cleaning of parts, changing of parts and at times some machining and replacement with new Cylinder block. Then, these engines have to be rebuilt, assembled and tested with the same standards as applicable to new engines. This takes more SMH than required to produce a new engine. 101 old engines were rebuilt during 2007-08. Therefore, it has been reckoned to equate to new Engine which is a practice in the Engine Industry.

6. Further to 101 old Engines overhauled (worth of Rs 10 Crores), Engine Division also manufactures Dumper aggregates like Output Shafts and PTOs. Gear box housings for Tatra and BMP transmissions involving significant machining on FMS and other critical machines, are also manufactured by the division due to lack of facility at H&P division.

7. In order to capture lucrative spares business the division manufactures/ supplies spare parts worth Rs.60 Crores and Rs. 15 crores of in-house spares produced equivalent to 25 engines which involves 5423 SMH.

8. For all these extra activities, 9269 SMH of available capacity of the Engine Division is consumed which when equated with the new engines works out to 42

Engines [excluding rebuilt of old engines]. All the above are efforts unsolicited initiative of Top Management to increase production of Engine Division.

9. The exclusion of 140 engines from 1040 engines stated produced in the vetting remarks of Audit does not significantly alter the growth rate even considering that such engines are not to be reckoned as produced. Further, the reconditioned engines involve substantially much more value addition and are essential to reduce warranty cost and capture repair market and avoid repowering of BEML engine with other engines. This also ensures customer satisfaction.

10. In addition to the above and in order to reach the optimum production level of 2400 engines, Capital expenditure proposal of Rs.150 Crores has been approved by the Board in its 279<sup>th</sup> Meeting held on 18.09.08.

11. As stated before, individual responsibility cannot be fixed for low level production and low volume of business as compared to installed capacity on account of various reasons beyond the control of the persons in authority who have demitted the office prior to 2002 after serving the company with the best of their abilities.

12. In view of the limited range of the applications of engines in the equipment basket of the company and the customers preference for the competitor engines have prevented the company and its officials from achieving significant volume of business as compared to installed capacity of 1100 nos. in the earlier years.

13. Further, the current management of the company took various initiatives and have achieved year to year growth from 2002-03 as confirmed by the audit in their vetting remarks. Hence, the question of fixing responsibility on the current Management also was not considered appropriate in the circumstances. Current Management having taken various initiatives to increase production progressively year after year as verified and confirmed in audit cannot also be made accountable for initiating action against the earlier Managements for accumulated lapses in achieving the installed capacity over the years."

(Ministry of Defence (Department of Defence Production) O.M. No.12(2)/2008-D(BEML) Dated 13.02.2009)

(Please see Chapter I for comments)

#### **Recommendation No.4**

#### **Monitoring role of the Ministry**

The Committee note that the Government of India accorded approval for establishment of Engine Division in 1988 and thereafter the Engine Division was established by BEML in 1991 for manufacture of engines for captive consumption. The main factor which was considered by the government in granting such approval to BEML was that the engines which were being used by the BEML in the equipment manufactured by them were suffering from many shortcomings. In addition to this, some other factors like increased value addition

to BEML if own engine is used in the equipment, saving foreign exchange, redeployment of surplus manpower from other divisions, improving bottom line for the Company as a whole, full control over spares and after sales service, and increased profit margin in spares market were also taken into consideration by the Government.

The Committee note that as per the audit findings, the Engine Division has not fully achieved its objectives in rectifying the shortcomings faced by it prior to its establishment. The Committee do not subscribe to the view of the Ministry that BEML is a Board managed Company and its performance is reviewed by the Board periodically. The Committee feel that there has been lack of constant monitoring on the part of the Board. The Committee are of the view that the concerned Ministry cannot absolve itself of its responsibility by coming out with such an irresponsible reply because the representative of the Ministry serves as an important link between the Company and the Government. As such, there is a need for strengthening the monitoring mechanism which would definitely improve the performance of the Engine Division.

### **Reply of the Government**

As has been explained in the foregoing replies, it has been submitted that BEML has taken several initiatives to reach the installed capacity and also to move towards the Projected and intended capacity with additional infrastructure with further CAPEX. As regards the Monitoring of the performance of BEML, it is further submitted that Periodical Board Meetings are held 4 to 8 times in a year, where the entire Business of the Company including the Engine Division, performance is reviewed. Two directors on the Board are from the MoD. BEML also make periodical presentations on the performance of each division to the Board and during the year 2006-07, BEML made a specific presentation on Engine Division. In addition Business performance presentations to the Senior Functionaries of the Ministry, including the Additional Secretary, the Secretary and the Ministers during their visit to the Company are presented by BEML. This also covers the performance of the Engine Division, and thus monitoring of performance of a high level is being done in a continuous manner. Further performance reviews and monitoring are done by the Ministry, including at the level of the Secretary and an annual review of Defence Public Sector Undertakings is being done at the level of Hon'ble Raksha Mantri.

(Ministry of Defence (Department of Defence Production) O.M. No.12(2)/2008-D(BEML) Dated 20.8.2008)

### **Remarks of Office of C&AG on the Reply of the Government**

The Board specifically reviewed the performance and future plan of Engine Division in January and February 2008 in its 274<sup>th</sup> & 275<sup>th</sup> Board Meeting held. No subsequent review had taken place after February 2008 till end of September 2008.

2. Thus the implementation of the recommendation needs to be followed up.

**Reply of the Government**

The Engine Division performance is being reviewed monthly by CMD and all the Functional Directors in the Engine Division. During the 274<sup>th</sup> Board meeting held at Mysore on 25-01-2008, all Board members visited Engine Division and witnessed the Business progress & production.

2. The Board is also being apprised of the progress and the constraints as part of progress reports. Specific presentations are made to the Senior Functionaries of the Ministry during their visit to the Company. Further performance reviews and monitoring are done by the Ministry including at the level of Secretary. An annual review of DPSU is being done at the level of Hon'ble Raksha Mantri.

(Ministry of Defence (Department of Defence Production) O.M.  
No.12(2)/2008-D(BEML) Dated 13.02.2009)

## CHAPTER IV

### **RECOMMENDATIONS / OBSERVATIONS IN RESPECT OF WHICH REPLIES OF THE GOVERNMENT HAVE NOT BEEN ACCEPTED BY THE COMMITTEE**

**-NIL-**

## CHAPTER V

### RECOMMENDATIONS / OBSERVATIONS IN RESPECT OF WHICH FINAL REPLIES OF THE GOVERNMENT ARE STILL AWAITED.

---NIL---

New Delhi:  
12 February, 2010  
Phalgun, 1931(S)

V. KISHORE CHANDRA S. DEO  
Chairman,  
Committee on Public Undertakings.

**MINUTES OF THE 15<sup>th</sup> SITTING OF THE COMMITTEE ON  
PUBLIC UNDERTAKINGS (2009-10) HELD ON 12<sup>th</sup> FEBRUARY 2010**

The Committee sat from 1300 hrs to 1315 hrs.

**PRESENT**

**Chairman**

**Shri V. Kishore Chandra S. Deo**

**Members, Lok Sabha**

- 2 Shri Sukhdev Singh Libra
- 3 Shri Nama Nageswara Rao
- 4 Shri Bhisma Shankar alias Kushal Tiwari

**Members, Rajya Sabha**

- 5 Shri Bharatkumar Raut
- 6 Ms. Mabel Rebello
- 7 Shri Tapan Kumar Sen

**Secretariat**

1. Shri J.P. Sharma	Joint Secretary
2. Shri Rajeev Sharma	Director
3. Shri Ravinder Garimella	Additional Director
4. Shri Ajay Kumar Garg	Additional Director
5. Shri Paolienlal Haokip	Under Secretary

**Office of the Comptroller & Auditor General of India**

- 1. Shri Sunil Verma Chairman, Audit Board
- 2. Shri K.P. Sasidharan Director General (Commercial)
- 2. XXXXX XXXXX XXXXX
- 3. Thereafter, the Committee considered the Draft Action Taken Report on (Action Taken by the Government on the recommendations contained in the Twenty-Fifth Report (14<sup>th</sup> Lok Sabha) on Performance of Engine Division of Bharat Earth Movers Limited based on C&AG Report No. 9 (Commercial) of 2007) and adopted the same without any modification.
- 4. The Committee authorised the Chairman to finalize the Reports for presentation.
- 5. *The Committee then adjourned.*

**APPENDIX II***(Vide para 3 of the Introduction)*

**Analysis of the Action Taken by Government on the recommendations/ observations contained in the Twenty Fifth Report of the Committee on Public Undertakings (Fourteenth Lok Sabha) on “Performance of Engine Division of Bharat Earth Movers Limited based on C&AG Report No. 9 (Commercial) of 2007”.**

I	Total number of recommendations	5
II	Recommendations that have been accepted/ partially accepted by the Government [vide recommendations at Sl. Nos. [2, 3 & 5]]  Percentage of total	3 60%
III	Recommendation which the Committee do not desire to pursue in view of Government's replies [vide recommendation at Sl. Nos. 1 & 4]  Percentage of total	2 40%
IV	Recommendations in respect of which replies of the Government have not been accepted by the Committee. Percentage of total	Nil
V	Recommendations in respect of which final replies of Government are still awaited	Nil