

NATIONAL ALUMINIUM COMPANY LIMITED (NALCO)

MINISTRY OF MINES

COMMITTEE ON PUBLIC UNDERTAKINGS (2015-16)

TWELFTH REPORT

SIXTEENTH LOK SABHA



LOK SABHA SECRETARIAT
NEW DELHI

25 February, 2016/ 6 Phalguna, 1937(Saka)

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**COMMITTEE ON PUBLIC UNDERTAKINGS
(2015-16)**

(SIXTEENTH LOK SABHA)

NATIONAL ALUMINIUM COMPANY LIMITED (NALCO)

MINISTRY OF MINES

Presented to Lok Sabha on 25.02.2016
Laid in Rajya Sabha on 25.02.2016



LOK SABHA SECRETARIAT
NEW DELHI

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**COMPOSITION OF COMMITTEE ON PUBLIC UNDERTAKINGS
(2015-16)**

Shri Shanta Kumar -- Chairperson

Members

Lok Sabha

2. Sh. L.K. Advani
3. Sh. Ramesh Bais
4. Shri Pankaj Chaudhary
5. Shri Nand Kumar Singh Chauhan
6. Sh. Biren Singh Engti
7. Shri Feroze Varun Gandhi
8. Dr. Kambhampati Haribabu
9. Shri Baijayant Panda
10. Shri Prahlad Patel
11. Shri Rayapati Sambasiva Rao
12. Shri Ram Sinh Rathwa
13. Prof. Saugata Roy
14. Shri B. Senguttuvan
15. Shri Sushil Kumar Singh

Rajya Sabha

16. Shri Narendra Budania
17. Shri Muthukaruppan
18. Shri Praful Patel
19. Shri Rangasayee Ramakrishna
20. Shri C.M. Ramesh
21. Shri Tapan Kumar Sen
22. Shri Ramachandra Prasad Singh

SECRETARIAT

- | | | | |
|----|-------------------------|---|---------------------|
| 1. | Smt. Sudesh Luthra | - | Joint Secretary |
| 2. | Smt. Anita B. Panda | - | Director |
| 3. | Shri G.C. Prasad | - | Deputy Secretary |
| 4. | Shri Thanglengun Haokip | - | Committee Assistant |

INTRODUCTION

1. I, the Chairperson, Committee on Public Undertakings (2015-16) having been authorized by the Committee to submit the Report on their behalf, present this Twelfth Report on National Aluminium Company Limited (NALCO).
2. The Committee on Public Undertakings (2015-16) selected the above said subject for detailed examination.
3. The Committee on Public Undertakings (2015-16) took oral evidence of the representatives of NALCO on 9 September, 2015. Thereafter, the Committee (2015-16) took oral evidence of the representatives of the Ministry of Mines on 28 October, 2015.
4. The Committee considered and adopted the Report at their sitting held on 21 January, 2016.
5. The Committee wish to express their thanks to the representatives of NALCO and Ministry of Mines for tendering evidence before them and furnishing the requisite information to them in connection with examination of the subject.
6. For facility of reference and convenience, the Observations and Recommendations of the Committee have been printed in bold letters in Part-II of the Report.

**New Delhi;
24 February, 2016
05 Phalgun, 1937 (S)**

**SHANTA KUMAR
Chairperson
Committee on Public Undertakings**

ACRONYMS

AAQMS	- Ambient Air Quality Monitoring Stations
ALPSYS	- A product name of Aluminium Pechiney, France
ATH	- Alumina Tri Hydrate
BEML	- Bharat Earth Movers Limited
BoD	- Board of Directors
BSE	- Bombay Stock Exchange
CPP	- Captive Power Plant
CSR	- Corporate Social Responsibility
CUF	- Capacity Utilization Factor
DE	- Dust extraction System
DF	- De fluoridation
DISCOM	- Distribution Company
DPE	- Department of Public Enterprises
EC	- Environmental Clearance
ESP	- Electro Static Precipitators
FLDC	- Fixed Long Distance Conveyor
FSA	- Fuel Supply Agreement
FY	- Financial Year
GACL	- Gujarat Alkalies and Chemical Ltd.
GETs	- Graduate Engineer Trainee
GMDC	- Gujarat Mineral Development Corporation
GOI	- Government of India
GSI	- Geological Survey of India
IDCO	- Odisha Industrial Infrastructure Development Corporation
IEC	- Information Education Communication
JVC	- Joint Venture Company
KVA	- Kilo Volt Ampere
KWp	- Kilo Volt Peak
LHS	- Left Hand Side
LME	- London Metal Exchange
MCL	- Mahandi Coal fields Ltd.
MECL	- Mineral Exploration Corporation Ltd.
MEIS	- Merchandise Exports from India Scheme
MHRD	- Ministry of Human Resources Development
MHUs	- Mobile Health Units
MNRE	- Ministry of Natural and Renewable Energy
MoC	- Ministry of Coal
MoEF	- Ministry of Environment and Forest
MoU	- Memorandum of Understanding
MT	- Metric Tonnes

MTPA	- Metric Ton Per Annum
MW	- Megawatt
NALCO	- National Aluminum Company Limited
NDT	- Non Destructive Testing
NIRM	- National Institute of Rock Mechanics
NNE-SSW	- North North-East South South-West
NNPCL	- NPCIL NALCO Power Corporation Ltd.
NPCIL	- Nuclear Power Corporation of India Ltd.
NPS	- New Pension Scheme
NRTC	- Nalco Research and Technology Centre
O&M	- Operation and Maintenance
OEM	- Original Equipment Manufacturer
OHC	- Occupational Health Centre
OMS	- Output/Man/Stuff
OSPCB	- Odisha State Pollution Control Board
OVAT	- Orissa Value Added Tax
PAT	- Profit after Tax
PBT	- Profit before Tax
PLIS	- Production Linked Incentive Scheme
PLK	- Partially Lateritized Khondalite
PPE	- Personal Protective Equipment
R&D	- Research and Development
RPDACs	- Rehabilitation and Periphery Development Advisory Committees
RRVPL	- Rajasthan Rajya Vidyut Prasaran Nigam Limited
SAPs	- Substantially Affected Persons
SECI	- Solar Energy Corporation India
SEM	- Scanning Electron Microscope
SMCP	- Semi Mobile Crushing Plant
SPM	- Suspended particulate Matter
STP	- Sewage Treatment Plant
SUPTs	- Skill Upgradation Practical Trainees
TCA	- Tri Calcium Aluminate
TOE	- Tons of Oil Equipment
TPA	- Ton Per Annum
TTD	- Thickened Tailing Disposal
WEGs	- Wind Electric Genetator
XRD	- X-Ray Diffractometer

REPORT

PART- I

CHAPTER I

INTRODUCTORY

1.1 National Aluminium Company Limited (NALCO) is a Navratna Central Public Sector Enterprise (CPSE) under Ministry of Mines, Government of India. It was established on 7 January, 1981, with its registered office at Bhubaneswar, Odisha. The Company is a group 'A' CPSE having integrated and diversified operations in mining, metal and power. NALCO is the first Company in Aluminium sector in the Country to venture into International market in a big way with London Metal Exchange (LME) registration since May, 1989. The Company is listed at Bombay Stock Exchange (BSE) since 1992. Presently, Government of India holds 80.93% equity of NALCO.

I. Historical Background

1.2 The discovery of East Coast Bauxite in 1975 led to the possibility of setting up of India's largest Alumina-Aluminium complex. The Panchpatmali Bauxite deposit is located in the state of Odisha 30 km east of Koraput and 130KM north of port of Vishakhapatnam. The deposit runs 17 km in length in a NNE-SSW direction. Initial reserve was estimated at 310 million tonne and hailed as 7th largest deposit in the world having high grade low silica content suitable for low pressure energy efficient process for refining.

1.3 The initial exploration was carried out by Geological Survey of India (GSI) and Department of Mines, while the detailed exploration was carried out by Mineral Exploration Corporation Limited (MECL). The deposits were explored by conventional method of drilling mainly by dry drilling method using VOL-90 drill. The feasibility study was carried out by Aluminium Pechiney in 1979 following technical collaboration agreement with the global leader in Aluminium technology. After investment decision by Government of India in January 1980, the Company, NALCO was formed in January 1981. The then President of France along with the Prime minister of India laid the foundation stone in March 1981.

1.4 The original project cost of ₹ 2408 crore was part financed by 980 million Euro Dollar loan extended by a consortium of International Banks. Since the Aluminium smelter is a high power intensive unit, it was decided to have own captive thermal power unit at Angul. Thus, the multi-unit, multi locational Company was formed with Mines and Refinery at Damanjodi, in the vicinity of Panchpatmali Bauxite deposit and Smelter & Power at Angul nearby the Talcher coal fields. The project originally consisted of a 24 lakh TPA Bauxite Mine, 8 lakh TPA Alumina Refinery at Damanjodi, and 2.18 lakh TPA Smelter and a Captive Power plant of 720 MW at Angul in Odisha. With the emergence of NALCO on the Aluminium scene, there has been a quantum jump in Alumina and Aluminium production in the country. NALCO is the first public sector Company in the country to venture into international market in a big way.

1.5 The capacities of Production Units have been increased by two major expansions namely 1st Phase and 2nd Phase Expansion at investment of ₹3596 crore and ₹4247 crore respectively. The 1st Phase Expansion project was completed in 2004 and 2nd Phase in 2011. Mines and Refinery capacity has been further augmented through Upgradation Project.

Present Activities:

Bauxite Mines:

Nestled in the Panchpatmali hills of Koraput district in Odisha, a fully mechanised open-cast mine is in operation since 1985, serving feedstock to Alumina Refinery located on the foothills. The present capacity is 68.25 lakh TPA.

Alumina Refinery:

In operation since 1986, the Alumina Refinery is located in the picturesque valley of Damanjodi. The present capacity is 22.75 lakh TPA. There is a 4 x 18.5 MW power plant for co-generation of power from process steam.

Aluminium Smelter:

The Aluminium Smelter is located at Angul, Odisha having a rated capacity of 4.60 lakh TPA. The product profile are mainly Primary Aluminium in the form of Standard Ingot, Sow Ingot, Tee Ingot, Wire Rod, Billet and Rolled Products. The primary Aluminium is LME Registered.

Captive Power Plant:

Close to the Aluminium Smelter, Captive Power Plant of 1200 MW (10 X 120 MW) capacity has been established to feed the Smelter.

Wind Power Plants :

The 1st wind power plant of capacity 50.4 MW (2.1MW, 24 nos. WEGs) in Gandikota, Andhra Pradesh was commissioned in December 2012 and the 2nd wind power plant of capacity 47.6 MW (0.85 MW, 56 nos. WEGs) in Jaisalmer, Rajasthan was finally commissioned in January 2014. Both the plants are in operation.

Rooftop Solar System:

NALCO has commissioned 260 KWp Rooftop Solar Power plant at Corporate Office and NALCO Township at Bhubaneswar during the FY 2014-15.

Port Facility:

On the inner harbour of Vizag Port, on the Bay of Bengal, NALCO has mechanised storage and ship handling facilities for export of Alumina in bulk and import of caustic soda. Besides, NALCO is also utilizing Kolkata, Paradip and Vizag Ports for exporting Aluminium.

II. Organisational Set-up

1.6 The Corporate Office of NALCO is at Bhubaneswar, Odisha. The Company has 7 Regional/Branch Offices at Delhi, Mumbai, Chennai, Kolkata, Bengaluru, Paradip and Ahmedabad. It has a sanctioned strength of 16 Directors and 8799 Executives/Non-Executives.

1.7 Details of the Production Units, Port Facility and Stock Yards of the Company are furnished as follows :-

(i) Production Units

- (a) Bauxite Mines
Panchpatmali
Koraput, Odisha
Odisha
- (b) Alumina Refinery
Damanjodi, Koraput
- (c) Aluminium Smelter
Angul, Odisha
- (d) Captive Power Plant (CPP)
Angul, Odisha
- (e) Wind Power Plant-I
Gandikota, Andhra Pradesh

- (f) Wind Power Plant-II
Jaisalmer, Rajasthan

ii) Port facility

Visakhapatnam, Andhra Pradesh

iii) Stock yards

Jaipur, Bengaluru, Visakhapatnam, Chennai, Kolkata, Silvassa, Faridabad, Baddi, Bhiwandi, Vodadora and New Delhi.

III. Objectives and Obligations

1.8 The main objectives for which the Company was established are:

- (i) To carry on in India and elsewhere trades or business of metallurgists and miners including beneficiation of minerals, mineral dressing, concentration, smelting, refining and the extraction, manufacture and fabrication, purchase and sale of and generally dealing in all metals and their products and alloys and in particular to manufacture and/or produce and/or otherwise engage generally in the manufacture or production of/or dealing in Alumina, Aluminium products and byproducts and the sale, dealing or other disposition of Alumina, Aluminium and Aluminium products and by-products.
- (ii) To mine, quarry, beneficiate, dress, smelt, refine, manufacture, process, fabricate, purchase or otherwise acquire, sell or otherwise dispose of or deal in Bauxite and other Aluminium bearing ores, Alumina, Aluminium, Aluminium alloys and compounds, Aluminium goods, wares and., products of all kinds, chemicals, chemical compounds and metals, minerals or other materials of every kind needed for or resulting from the mining, production or processing of Bauxite or other Aluminium bearing ores, Alumina, Aluminium and Aluminium products or every kind.
- (iii) To act as an entrepreneur to identify new areas of economic investments and to undertake or help in the undertaking of such investments.

1.9 The Main functions of the Company are as follows:

- (i) Mining and transporting of Bauxite
- (ii) Refining of Alumina
- (iii) Smelting and Aluminium and manufacturing of various Aluminium products
- (iv) Generation of Thermal, Wind and Solar Power
- (v) Marketing of Alumina, Aluminium and allied products.

1.10 The Role of the Company has been described as:

Besides production of Alumina, Aluminium, Thermal, Wind and Solar Power, the Company is involved in playing a significant role in the socio-economic development of the areas where it operates. Rehabilitation of

displaced families, employment, income generation & health care for local people, development of infrastructure, care for environment and various humanitarian goodwill missions have earned NALCO a place of pride in the corporate world.

1.11 With the emergence of NALCO on the Aluminium scene, there has been a quantum jump in Alumina and Aluminium production in the Country which has made India self-sufficient in respect to requirement of the metal. Over 30 years of its operations, the Company has acquired capabilities to successfully operate facilities related to Aluminium production in a completely integrated manner encompassing mining, refining, smelting, power generation and marketing of Alumina and Aluminium. The Company has been working on various options to expand its business in order to take advantage of a growing market in mining and metal sectors in general and Alumina and Aluminium in particular.

IV. Board of Directors

1.12 The sanctioned strength of the Board of NALCO is as follows:

- (i) Six full time Directors including Chairman-cum-Managing Director,
- (ii) Two part time official Directors, basically nominee directors from Government of India, and ;
- (iii) Eight part time non-official (Independent) Directors who are appointed by the Government of India through a Search Committee.

1.13 The Company has informed that out of total 16 posts of Directors, the posts of 6 full-time Directors and 2 part-time official Directors are filled up. At present the posts of 8 part-time non-official (Independent) Directors are lying vacant.

1.14 When asked since when and for what period of duration the posts of non-official Directors are lying vacant, the Company replied as under :-

Date of vacancy	Period (as on 30.09.2015)	No. of vacancies
21.03.2014	18 months 9 days	2
15.09.2014	12 months 15 days	2
27.12.2014	9 months 3 days	2
10.07.2015	2 months 20 days	2
TOTAL		8

1.15 On being asked about efforts made by the Company for filling up the vacant posts, the Company stated as under:-:

"Being a Government Company, the power of appointment of Directors is vested with the Government of India vide article no. 63 of the Articles of Association of the Company. The matter has been taken up by the Company with the administrative ministry on a regular basis for filling up the vacancies of the post of non-official Director. The vacant positions are yet to be filled up."

1.16 When asked whether the vacancy of non-official Directors has affected NALCO's functioning in any manner and whether the posts lying vacant for a long time should be abolished, the Company replied as under :-

"Non-appointment of requisite number of non-official Directors is a violation of the Companies Act, 2013, Listing Agreement with Stock exchanges and DPE guidelines on Corporate Governance. Hence, it is not advisable to abolish the position. Presence of non-official (Independent) Directors enhances the decision making process and image of the Company globally."

1.17 As per the latest information furnished to the Committee, a proposal has been sent on 7 October 2015 for appointment of 5 candidates against the 8 vacancies of Independent Directors and the Ministry of Mines would be sending proposals for filling up the remaining 3 vacancies very soon. (In the mean time, 5 independent Directors have been appointed).

V. Manpower

1.18 As per information furnished to the Committee, the sanctioned strength and actual strength of NALCO is given below :-

Category	Sanctioned Strength	Actual Strength	Shortage	% age Shortage
Executive	2182	1850	332	15.2%
Non-Executive	6617	5396	1221	18.45%

1.19 When enquired about the reasons for the shortage / non-fulfillment of vacancies as against the sanctioned strength and measures being taken by the Company for filling up the vacant posts, the Company stated as follows:-

"To contain labour cost, the Board of Directors has advised to operate manpower at 90% of its sanctioned strength. Moreover, vacancies are also occurring due to superannuation of employees. Further, the Smelter and Power plants are operating at reduced capacity in view of the market condition. However, taking the retirements into consideration, the Board approved induction of 396 executives, GETs and other categories of executives, besides which 20 MTs are to be recruited as per the earlier approval. Recruitment of GETs and MTs are being done in a phased manner to fill up the vacancies. Besides, lateral entry in critical categories and doctors are being done. Keeping the labour cost in view, there has been recruitment in critical non-executive categories only. Further, non-executives are recruited mostly from the Substantially Affected Persons (SAP) as per the R&R policy of the Company. In line with this, the Company will provide employment in Mines & Refinery complex at Damanjodi to 235 affected families as per R&R policy of the Organization. Besides 32 SAPs in Angul Sector are already due for absorption in NALCO.

The measures being taken by the Company for filling up of the vacant posts are as under: i. Recruitment of 110 GETs & 20 MTs is in process. ii. Lateral recruitment of 27 vacancies in executive cadre are in process. iii. Recruitment of 17 doctors are in process. iv. Against the 235 land oustees; verification process of documents and SAP status is in progress and 32 SAPs can be inducted in non-executive cadre after the process is complete. v. 33 SAPs in Angul sector are in SUPT Training and would be absorbed in NALCO after completion of their SUPT training. vi. 5 nos. supervisors in Civil will be recruited and recruitment action is in progress. vii. Recruitment of 27 non-executives as SUPT trainees is in progress. viii. Special Drive for recruitment of persons with disability is in process. ix. Against the shortfall of 332, recruitment action is being taken for 174 executives and against shortfall of 1221 in non-executive categories, 97 non-executives will be taken. Accordingly the percentage of shortfall will be reduced to 7.24% in executive category and 16.98% in non-executive category."

1.20 When asked whether the shortage of manpower has affected the production of the Company, NALCO responded as under:-

"As our Smelter & CPP Plants are running in reduced capacities, the vacancy would not affect the production. The recruitment process is likely to be completed in nine months."

1.21 When asked the reason for appointing only employees as against the total shortfall of 1221, the Company further stated as follows:-

"Against the total sanction of 6617, Board's clearance is for operating 90% of the sanctioned vacancies. Since most of the non-executive positions are filled up by land displaced persons, filling up of vacancies are done as and

when settlement is reached with State Government and the displaced persons.”

Contract Employees

1.22 On the issue of engagement of contract labour, the Company has informed as under :-

"Except personnel in few specialized posts no contract labour is engaged by the Company directly.

Almost all Contract labour working for NALCO are engaged by the respective contractors and are contractor's workers. The jobs carried out are on job contract basis and payments are released based on the volume of jobs performed by the contractors.

i) Few specialized areas in which contractual personnel were engaged by the Company during the last 5 years are as indicated below:

Category of Personnel	Year				
	2010-11	2011-12	2012-13	2013-14	2014-15
Doctors	04	04	04	04	05
Nurses	07	05	05	04	-
Supervisors (Civil)	02	03	05	06	06
Security Consultant	-	01	01	01	01

ii) No. of Contract workers engaged by the contractors for Operation & Maintenance (O&M) areas during the last five years are as indicated below:

No. of contract workers	Year				
	2010-11	2011-12	2012-13	2013-14	2014-15
	9332	9403	9773	9877	9951

1.23 When asked to provide details on the percentage of labour cost in the Company's turnover in the last 3 years, NALCO informed as below:-

Year	Labour Cost (₹ Crore)	Turnover (₹ Crore)	Labour cost/Turnover (in %)
2014-15	1377.91	7262	18.97%
2013-14	1245.33	6649	18.73%
2012-13	1153.93	6809	16.95%

1.24 When asked to specify the details on the number of contract labour employed

in the Company during the last 3 years, NALCO stated as under:-

Year	Contract Labourer (Nos.)
2014-15 (As on Mar'15)	10,382
2013-14 (As on Mar'14)	10,393
2012-13 (As on Mar'13)	10,588

1.25 When asked on the expenditure incurred on engagement of contract labour in the last five years, the Company stated as follows:-

“(i) Expenditure in respect of few personnel as indicated above, directly engaged by NALCO are as indicated below:

	Year				
	2010-11	2011-12	2012-13	2013-14	2014-15
Expenditure (₹ in lakh)	16.58	24.68	27.40	24.20	28.70

(ii) Contract labours engaged by the contractors, are not paid directly by the Company. Job contracts are awarded to the qualified contractor who in turn engages labour as per the job requirements. Payments are made by the Company as per the volume of job performed by the respective contractors. The payment on job contract basis includes labour cost, materials cost, supervision cost, administrative cost and profit etc. as a composite package. Hence, segregating the expenditure towards the cost of labour may not be possible.”

1.26 On being asked about the extent of employees participation in management and steps taken to augment worker’s participation in management, the Company stated as under:-

“In order to encourage employees to be intimately involved in the production activities and in matter related to harmonious industrial relations, better work environment, a scheme for employees’ participation in management has been formulated. The basic objective of the scheme is to encourage and involve the employees’ participation in a responsible manner in production and related activities at the shop floor, unit level and at the Apex level at Corporate Office.

In a multi union scenario for keeping harmonious industrial relations, the Company has successfully implemented the scheme for structured meeting

with the Recognized Unions, SC/ST Employees Welfare Associations and Officers' Associations at unit level, complex level and corporate level including at the level of Chief Executive to have regular interaction on the matters of employees benefits related issues, production, productivity, future plans, cost control, waste reduction etc..

The periodic structured and informal meetings with the recognized unions have helped in keeping the industrial relations scenario in the Company by and large peaceful.

Besides the above, various committees like canteen managing committee, safety committee , sports committee , medical committee , welfare committee , house allotment advisory committee, grievance redressal committee, shop floor committee etc are functioning in plant sites having members both from management and employees for smooth functioning of respective areas.

Moreover, continuous efforts on building up the knowledge level and efficiency of the employees, encouragement of more suggestions on production/productivity related issues, fostering of communication channels, training like total quality movement have helped in increasing productivity in an environment of mutual cooperation & trust as well as harmonious atmosphere.

Training programmes for Trade Union members & leaders, like leadership development programmes, training on critical areas & issues and cross functional programmes are conducted at regular basis at unit and corporate level. Feedback received from the programmes are conveyed and this process is more effective in mitigating mutual mistrust, if any, than that of the formal bi-partite interactions."

CHAPTER II

PERFORMANCE

I. Financial Performance

2.1 The details of net sales, value added, profit before tax, profit after tax, etc. of NALCO during the last five years is given at **Annexure-I**.

2.2 It is observed from the Statement in Annexure-I that although the Net Sales during 2010-11 and 2013-14 had increased, the profits of the Company had declined. In 2014-15 however profits had increased.

2.3 When asked that despite increase in Net Sales, why the profits of the Company had declined, NALCO in their written reply submitted as under:-

“Turnover and Net profit of the Company depends amongst other things the realisation from domestic and export markets. The declining metal (LME) prices and the increase in operating cost have adversely affected the profitability of the Company over last few years The operating cost has gone up primarily on account of increase in the input prices, increase in employee benefit expenses, increased plant maintenance expenses, etc.”

2.4 When asked to furnish component-wise factors attributable to decline in profit during 2012-13 over 2011-12, the Company responded as under:-

a) Sales:

Net sales during the year 2012-13 have increased by ₹309 Crore which comprises of

- i. Price: On account of change in exchange rate from ₹47.95 to ₹54.37 per USD there is increase in sales by ₹794 crore, whereas due to decrease in price of Aluminium metal from USD 2,434 to USD 2,191, Alumina from USD 374 to USD 330 there is decrease in sales by ₹566 crore. Net increase on account of realisation is ₹226 crore
- ii. Volume: On account of higher volume of Alumina by about 1.42 lakh MT there is increase in sales by 250 crore and due to lower volume of metal by about 12,000MT, there is decrease in sales by ₹171 crore. Besides on account of wind power, sale has increased by ₹3 crore. On account of volume there is net increase in sales by ₹82 crore.

b) Other Income

Other income is less by ₹35 crore mostly due to lower Income from investment of surplus fund.

c) Expenditure:

Total expenditure is more by ₹567 crore which comprises of the following:

- i) Raw material expenditure increased by ₹ 137 crore
 - Price increase: There is increase in price of C T Pitch, Aluminium Flouride, Caustic soda & Lime which led increase in expenditure by ₹ 98 Crore.
 - Volume :Due to higher volume of Alumina production, the expenditure has increased by ₹ 37 crore
- ii) Expenditure on power & fuel has increased by ₹ 236 crore :
 - Price increase: Increase in coal price by about ₹154 PMT & increase in the price of fuel oil by about ₹ 4000 Per KL has led to increase in expenditure by ₹ 224 crore over the previous year on which the Company has no control.
 - Volume: On account of higher volume of production at Refinery the expenditure is more by ₹ 32crore.
 - Input efficiency: Due to improvement in specific consumption of coal & fuel oil at Refinery, the expenditure is less by ₹ 20 crore.
- iii) There is stock accretion by ₹ 67 crore
- iv) There is increase in employee benefit expenses by ₹119 crore primarily on account of additional contribution towards Pension Scheme (NPS) and increase in DA rates & normal annual increments.
- v) Other expenses have increased by ₹ 118 crore which comprises of
 - Increase in administrative expenses is about ₹ 70 crore due to increase in interest on disputed Electricity duty & water charges (₹37 crore) and increase in security expenses (₹9 crore). Besides an amount of ₹24 crore has been provided towards doubtful realization against Odisha Value Added Tax (OVAT).
 - The freight and forwarding expenses has increased by ₹ 48 crore due to hike in Railway freight and ocean freight by about 25%.
- vi) Depreciation is more by ₹39 crore due to addition of assets during the year.

Thus it may be seen that, though there is increase in sales, increase in expenditure mostly due to increase in input prices led to decrease in profit.”

2.5 When asked to furnish component-wise factors responsible for decline in profits during 2013-14 over 2011-12, the Company in their written replies stated as under:-

a) Sales:

Net sales during the year 2013-14 have decreased by ₹160 crore as compared to 2012-13 which comprises of :-

- i) Price: On account of increase in exchange rate from ₹54.37 to ₹60.42 per USD there is increase in sales by ₹637 crore whereas due to decrease in price of Aluminium metal from USD 2,191 to USD 2,037, Alumina from USD 330 to USD 313 there is decrease in sales by ₹446 crore. Net increase on account of realisation is ₹190 crore.
- ii) Volume: On account of higher volume of Alumina sales by about 3.58 lakh MT and wind power by 130 MU, there is increase in sales by ₹635 crore and ₹42 crore respectively. However, there is decrease in sales by ₹1028 crore due to lower volume of metal by about 83,000 MT. On account of volume there is net decrease in sales by ₹351 crore. It may be mentioned that producing metal through consumption of bought out power or generating additional power by using costly coal through import is not cost effective at the prevailing level of sales realisation. As a part of strategic decision, power generation has been restricted mostly to linkage coal only and accordingly smelter operation is curtailed and regulated.

b) Other Income

Other income is more by Rs 72 crore, which comprises of -

- i. Operating income is more by ₹25 crore on account of incentive on renewable energy.
- ii. Income from interest on investment of surplus fund is higher by ₹23 crore and other non-operating income by about ₹24 crore.

c) Expenditure

Total expenditure is less by ₹102 crore which comprises of the following:

- i) Raw material expenditure decreased by ₹105 crore primarily due to lower volume of production of Aluminium metal. Input prices remained more or less at last year level.
- ii) Expenditure on power & fuel has decreased by ₹415 crore :
- Price: The effective coal price at CPP has reduced due to change in coal composition, i.e. use of linkage and e-auction only. However, the effective coal price at refinery is higher due to use of more imported coal the net effect is lesser expenditure by ₹52 crore.
 - Volume: On account of lower volume of metal production and power generation, there is less expenditure by ₹313 crore which includes reduction in purchase of power by ₹149 crore.
 - Input efficiency: Due to improvement in efficiency of fuel oil primarily at CPP, the expenditure has decreased by ₹50 crore.
- iii) Compared to previous year, there is Stock depletion by ₹122 crore

- iv) There is increase in employee benefit expenses by ₹91 crore primarily on account of increase in DA rates with normal annual increments.
- v) Other expenses have increased by ₹142 crore which comprises of the following:
- Repair & Maintenance expenditure has increased by ₹89 crore due to major repair & replacements including TG, inter stage cooler, plate heat exchanger etc at Refinery, Pot Regulating System at Smelter, HEMM tyre at Mines etc. These are few major repairs essential for maintaining/ up-keeping plant and productivity.
 - Increase in administrative expenses is about ₹60 crore mainly due to increase in interest on disputed dues (₹34 crore) and other statutory provisions.
- vi) Depreciation is more by ₹19 crore due to commissioning of Wind Power Plants.
- vii) On revision of Production Linked Incentive Scheme (PLIS) for Non-executive employees and percentage contribution to pension scheme for all employees retrospectively, ₹ 49 crore relating to the past periods has been considered as exceptional item (expenditure).

It may thus be seen that further reduction in metal production and sales due to reasons explained at para - a(ii) above led to sustained lower profit even though expenditure marginally reduced. In spite of decrease in sales Company was able to post marginally higher profit during 2013-14 compared to previous year. It may also be mentioned that, PBT for the year 2014-15 has substantially increased to ₹ 2113 Crore."

2.6 When asked to draw a comparison of Net Sales and profits to the targets fixed for 2013-14, the Company responded as under:-

A. Net Sales Variation:

Net sales during the financial year 2013-14 were ₹6649 crore against target of ₹7342 crore. The reduction of net sales of about ₹693 crore (-9%) is on account of the following reasons:

- i. Price: Due to decrease in price of Aluminium metal from target of US\$2130 to actual of US\$ 2037, the metal sales was lower by ₹265 crore. Similarly due to lower Alumina export realization from target of US\$335 to actual of US\$313, the Alumina sales was lower by around ₹58 crore. However, on account of increased exchange rate from target of ₹54.38/US\$ to actual of ₹60.42/US\$, there is increase in sales by about ₹652 crore. The combined impact of exchange rate and realization led to increase in sales by ₹326 crore.

- ii. Volume: On account of lower actual sales of metal of 3.20 lakh MT as compared to target of 4.05 lakh MT, there is decline in sales of about ₹1011 crore. Similarly due to decrease in overall actual chemical sales of 13.43 lakh MT as against target of 13.57 lakh MT the sales was lower by around ₹44 crore. Besides due to increase in Wind power sales the power sale was higher by ₹35 crore. The combined impact of lower volume of chemicals and metal along with marginal higher power sales led to decrease in sales by about ₹1019 crore. It may be mentioned that reduction of metal production/ sale was a strategic decision as higher production by using imported coal or power from State grid was not profitable at the prevailing market price.

B. Profit Variation:

The profit before tax (PBT) during the financial year was ₹918 crore as against target of ₹972 crore which is lower by about ₹54 crore (-6%). The total actual expenses for the financial year 2013-14 was ₹6420 crore as against a target of ₹6936 crore. As can be seen, the total expenditure for the year 2013-14 was less by ₹516 crore compared to the target mainly on account of lower volume of production. However the profit before tax (PBT) was marginally lower by ₹54 crore primarily due to lower volume of sales as explained above.”

2.7 When asked to apprise them about steps taken by NALCO to redefine its Vision and Corporate Plan in order to align with the present day business environment particularly when at present the Company is facing reduced production and a dip in profits; NALCO, in a written note, stated as under:-

“The Company proposes to engage a Consultant of Global repute to help in redefining its Vision and Corporate / Strategic Plans, under the changed global business scenario, triggered by Global economic crisis of 2008 and the rise of China as the largest producer and consumer of Aluminium. The terms of reference (TOR) for the engagement has been prepared and is under final stage of reviewing.”

II. Exports

2.8 On being asked to furnish a note on the export performance of the Company indicating the volume and value of exports during each of the last 5 years and efforts made by the Company for augmenting the exports, the Company replied as under :-

- a) "The volume of exports, achieved by NALCO in the last 5 financial years is furnished below:

Financial Year	Volume of Exports (in metric tonnes)		Value of Exports (₹ in Crore)
	Calcined Alumina	Aluminium	
2014-15	11,84,595	60,752	33073011166
2013-14	13,09,473	1,01,243	37192707186
2012-13	9,44,117	1,44,161	34104863535
2011-12	7,92,552	98,399	25685959248
2010-11	6,39,855	98,201	20650998789

b) Initiatives have been taken regularly to augment the Company's exports by:

- (i) Registration of new overseas customers, on a continuous basis for sale of NALCO's products in the international market by promptly responding to prospective Customer enquiries.
- (ii) Periodic publication of notice(s) for Global Invitation for registration of International customers in various National & International journals/magazines /newspapers/ CPP portal, etc.
- (iii) Proactive interactions with new customers during various International conferences/seminars/exhibitions.

There is, thus, a consistent drive to expand our global customer base and explore new overseas destinations for export of our products."

Decline in exports

2.9 It is observed from the aforesaid statement that both the volume and the value of exports during 2014-15 over 2013-14 has declined.

2.10 On being asked the reasons for the decline in both volume and the value of exports during the year 2014-15, as compared to 2013-14, NALCO replied as under :-

- (a) "The decline in export volume and value in case of Alumina is attributable to lesser volume of production of Alumina during the Financial Year 2014-15 as compared to the Financial Year 2013-14, which in turn resulted in lesser availability of Alumina for export.
- (b) Reduction in export volume of Aluminium metal was mainly driven by higher net sales realization for the metal in the domestic market as compared to the overseas markets. This prompted NALCO to focus on sales in the Domestic market in order to optimize profitability."

2.11 On the issue, the Ministry of Mines similarly replied as under:-

"Exports of Aluminium metal have been declined on account of the following:

- a. Lower level of metal production
- b. Higher focus on sales of metal in the domestic market, where realisation is more."

III. Physical Performance

2.12 The details of installed capacity, actual production, target for capacity utilization, etc. of various products manufactured by NALCO during the last five years are given in **Annexure II**.

2.13 It is seen from the Annexure that none of the products could achieve the target set for capacity utilization. When asked the reasons for the shortfall in capacity utilisation of various products, NALCO stated as follows :-

"Financial Year 2014-15:

- (i) Bauxite: The production was affected badly due to several reasons including the cyclone 'Hudhud' in October 2014, restriction in area of mining imposed by MOEF for stage-I forest clearance, accelerated ageing of LHS wire rope of cable belt, unforeseen problems encountered during erection and commissioning of Fixed Long Distance Conveyor (FLDC) and Semi Mobile Crushing Plant (SMCP) etc.
- (ii) Alumina Hydrate: The shortfall is mostly due to shortage of Bauxite and impact of cyclone 'Hudhud' which affected rail movement and transport of raw materials to the plant and evacuation of Alumina.

Financial Year 2013-14:

- (i) Bauxite: capacity utilisation was less than target due to (a) incessant rain in the month of October, 2013 after cyclonic storm, (b) low net utilization of night shift on account of inclement weather, (c) belt snapping at discharge end, (iv) C&C System breakdown, Preventive maintenance of rope, belt and joints, (d) embargo on FLDC/ SMCP was there till last week of February, 2014. However, necessary permission from Department of Forest & Environment, Government of Odisha and PCCF, Odisha for creation of infrastructure facility in 4.819 Ha land in Central & North Block of Panchapatmali Bauxite Mines has been received on 25.02.2014.
- (ii) Alumina Hydrate: Capacity utilisation was less than target due to (a) changes in Bauxite mineralogy like higher reactive silica, lower ATH, high PLK content, high mud factor leading to higher caustic soda and Bauxite consumption, (b) problems related to handling of Bauxite due to monsoon, (c) receipt of poor quality of coal from MCL, supply of very less quantity of coal from Talcher due to labour problem in Talcher area of MCL,(d) failure and disturbances in power supply, (e) non-commissioning of the Upgradation of the Refinery complex.

- (iii) Aluminium Metal: Shortfall in cast metal is in line with the Management decision to restrict operating pots matching to the power generation with linkage coal availability in view of lower LME price. During the financial year 2013-14, on an average 650 pots were operational as against normal 930 pots. Further, the planned output from the 220KA Smelter upgradation could not be added as the project failed to take-off.
- (iv) Power: Net power generation was less due to the strategic decision as explained above for Aluminium metal. Further, the planned generation projected from the 2 x 250 MW Power plant could not be added as the project failed to take-off.

Financial Year 2012-13:

- (i) Bauxite: Capacity utilization is less due to (i) C-Shift operation in Mines stopped for more than 3 months after Naxalite attack on 18th April 2012, (ii) Mines was stopped for one month from 17th November 2012 to 16th December 2012 due to delay in receipt of Temporary Working Permission (TWP) /Forest clearance from MoEF. During the period replacement of 30 km long wire rope and overhauling of crusher conveyor & other associated jobs were carried out which under normal circumstances would have taken 25 days time. (iii) Further, construction work of Fixed Long Distance Conveyor and Semi Mobile Crushing Plant required for improving productivity is stopped by MoEF from 17th November 2012 as per TWP condition.
- (ii) Alumina Hydrate: Capacity utilization is less due to shortage of raw materials (Bauxite, coal and caustic soda), frequent failure in power supply from Gridco and process hick-up during stabilisation stage of newly commissioned 4th Stream of Alumina Refinery and premature failure of some critical equipment.
- (iii) Aluminium: Smelter achieved capacity utilization of almost 88%, due to reduction in pots in operation in view of low metal selling price & coal constraint. Average number of pots running in FY 12-13 was 842 nos in place of 863 in FY 11-12.
- (iv) Power: Capacity utilization is less than previous year as power generation was restricted to meet the Smelter and Refinery demand only in view low metal selling price. During the year coal supply has been affected due to several problems like frequent failure of conveying system at Bharatpur Mines of MCL besides supply of lower grade, high moisture and high ash coal by MCL.

Financial Year 2011-12:

- (i) Bauxite: Bauxite is produced as per requirement of Refinery only and not for sale. The requirement of Refinery was met in full.
- (ii) Alumina Hydrate: Although name plate capacity increased to 21 lakh TPA, the effective capacity is 18.375 lakh TPA for the year

2011-12. Further, Capacity utilization is less due to disturbances in power supply from Gridco and process hick-up during stabilisation stage of newly commissioned 4th Stream of Alumina Refinery.

- (iii) Aluminium: Smelter achieved capacity utilization of almost 90%, because 10% of pots were under shut down since September 2011 due to coal constraint and low metal prices.
- (iv) Power: Capacity utilization is less than previous year as power generation during the year has been affected due to several constraints in coal supply from MCL including lower grade, high moisture and high ash coal and due to restriction in generation to minimize ash disposal to ash pond in order to maximize life of ash pond.

Financial Year 2010-11:

- (i) Bauxite: Mines achieved capacity utilization of 100.5% from existing facility. However, Mines could not achieve the annual target due to delay in commissioning of additional stream in Alumina Refinery, since mines output is linked to demand of Bauxite from refinery.
- (ii) Alumina Hydrate: Alumina Refinery achieved 98.8% capacity utilisation of existing plant. The shortfall from installed capacity is due to shut down of plant for expansion project related hook up jobs and taking up pending maintenance jobs.
- (iii) Power: The targeted capacity utilisation could not be achieved, as power production during the year has been affected due to several constraints in coal supply from MCL including lower grade, high moisture and high ash coal."...

2.14 When asked to explain the reasons for low capacity utilisation during 2014-15, particularly for Wind Power I and II and Thermal Power, the Ministry of Mines stated as follows:-

"Thermal Power generation at NALCO is of Captive nature to fulfill the demands of Smelter and internal consumption. As our metal production was kept low in 2014-15 due to market condition, power generation got restricted matching to availability of linkage coal through fuel supply agreement with Coal India Limited.

Normally any Wind Power generating systems would have low capacity utilization factor (CUF) because of varying wind intensity. The rated Design CUF is only 22.14% for Wind Power-I & 21.3% for Wind Power-II for NALCO. During FY 2014-15 Wind power-I achieved 117.6% & Wind Power-II achieved 74.4% of the designed CUF.

Low CUF for Wind power-II during FY2014-15 is primarily due to evacuation restriction imposed by Rajasthan Rajya Vidyut Prasaran Nigam Limited (RRVPLN)."

2.15 The Committee further desired to be apprised of the capacity utilization during the financial year 2015-16 (till September 2015) for Thermal Power, Wind Power-I and Wind Power-II which are still comparatively low as against the targets set till September 2015 for Installed Capacity, NALCO stated as below:-

"As metal production target has been kept at 3.8 lakh MT for FY 2015-16 against capacity of 4.6 lakh MT the generation at Captive Power Plant has been contained. The achieved generation is 99% against the target for first half of FY2015-16.

Normally any Wind Power generating system would have low capacity utilization factor (CUF) because of varying wind intensity. The rated Design capacity is only 22.14% for Wind Power-I & 21.3% for Wind Power-II for NALCO. During FY 2015-16 till Sep'2015 we could achieve 87% in case of Wind Power-I & 97% in case of Wind Power-II against the target that is considered normal during high wind season."

2.16 On being asked whether there are measures envisaged to protect production capacity of NALCO in the wake of any natural / manmade disasters, the Company stated as follows:-

"Our system is designed to take care of a few days of interruption due to natural disaster/calamities. Impact of a disaster like earthquake is taken care while designing and engineering. But for disasters like Hud-Hud or heavy landslide disruptions on Rail & roads, bridges, no measures can be envisaged. As regard protection against manmade disasters within NALCO premises, proper security arrangement is in place."

2.17 When asked about the details of per capita consumption of Aluminium, Secretary, Ministry of Mines during the course of oral evidence submitted as under :-

"If we look at the figures of the past ten years, we see that per capita consumption has been increasing steadily. If we compare with the developed countries, India does not stand anywhere. Despite this, in 2015, the per capita consumption was around 2 kg which was 0.97 kg in 2005 which means that the per capita consumption has increased by 1 kg. Our total Aluminium requirement is fulfilled in two ways – one through import and the other through domestic production. In domestic production there are four main units – HINDALCO, VEDANTA, BALCO and NALCO. Apart from this primary metal and Aluminium scrap is also imported. Aluminium scrap of is imported more, because duty on scrap is 2.5 per cent. If we see the total consumption, then 55 per cent of it is met through Aluminium scrap and

45 per cent through primary Aluminium. Consumption basically matches with production and import. It is true that the capacity utilisation has to be increased now. But Aluminium sector depends on international prices. In the past few years Aluminium prices have fallen. Three four years ago from now Aluminium price was more. That time capacity was increased. But today the condition is such that capacity utilization of primary Aluminum producers is just 50 per cent. Today all Aluminium manufacturers are requesting to increase the import duty so that we import less. We have to maintain a balance. There is no use in increasing the capacity because today the drawback of increasing capacity is that after investment of 1.2 lakh crore, leave alone NALCO, the rest of the industry is running under loss. What ever calculation they are giving, as per that in comparison to production cost, import parity price is cheaper. Today primary Aluminium producers are demanding safeguard duty protection for Aluminium sector which may be given just as given to the steel sector. We had asked them the results of the first half and said that after the first half results we will recommend to the finance Ministry to enhance duty from 5 per cent to 7.5 or 10 per cent to protect this sector;

2.18 When asked whether they were pursuing this matter, Secretary, Ministry of Mines stated as under :-

"Yes Sir, the industry representatives have met the officials in the finance Ministry and also in the PMO, they are pursuing everywhere. But on the other side, Aluminium scrap sector is demanding for reducing the duty further below 2.5 per cent. We have seen the import figures of the first and the second quarter in which Aluminium scrap import has not increased much. We are watching this closely because BALCO is in a very bad financial condition.

"In this connection various media reports appeared in leading financial newspapers suggesting that Aluminium Companies are facing an alarming scenario, retrenching workers and taking various cost cutting measures to decrease their mounting losses, all due to cheap imports resulting from a low import duty as well as low LME metal prices over the last few years."

2.19 On the issue of power generation, the Secretary, Ministry of Mines during the course of oral evidence submitted as under :-

"Aluminium industries is power intensive; power constituting about 40 per cent of the cost of production. As of today, China and other countries are dumping here because power is cheap there and in India it is very costly. This is a reason why NALCO has established captive power plant. We are going in for solar and wind power because we have to fulfil green energy norms. Today more attention and encouragement is being paid towards non-conventional sources of energy. we are not able to operate the smelter and the captive power plants at full capacity due to shortfall in coal linkage. The coal linkage is about 47 lakh metric tonnes while its requirement is 70 lakh metric tonnes. Now Utkal D&E blocks have been allotted by the coal

Ministry. From this not only the capacity utilization will increase but also Aluminium production will increase and Alumina export is very profitable.”

IV. Machinery and Equipment

2.20 When enquired whether the Company uses latest State-of-Art machinery for its mining operations, and if not, whether the Company have any programme for inducting latest state-of-art of machinery and equipment for mining purposes, the Company stated as under:-

"Yes. NALCO mines use latest state of art machineries from reputed manufacturers like BEML, KOMATSHU, CATERPILLAR and TATA-HITACHI with modern safety features and advanced technology for optimal operational safety and higher productivity.

From time to time mine machineries are closely monitored for their performance and up-gradation is taken up considering the condition of existing ones, Company's requirement to enhance capacity/productivity and availability of any advanced & better technology.

Presently mining machinery of following companies are being used at mines:-

- (i) Dumpers—BEML of 50T/55T.
- (ii) Loaders-----KOMATSHU of 8.7 cum bucket.
- (iii) Ripper Dozers---KOMATSHU of 510HP/850 HP.
- (iv) Bucket Excavators—TATA-Hitachi of 6.1 Cum bucket.

Presently, up-gradation of 55T Dumpers to 100T Dumpers and 8.7 Cum bucket Wheel Loaders to 13.0 Cum bucket wheel loaders are in active consideration of the management."

2.21 On being asked whether NALCO has made assessment of the performance including shortcomings of the various equipment for mining purposes, and if so, to enumerate those shortcomings and steps taken to overcome them, the Company replied as below:-

"The various mining equipment being used at mines are being monitored for its performance against the desired availability. All the repair and maintenance activities are being done in-house departmentally except major repairs like engine and transmission overhauling. The workshop facilities does not have adequate infrastructure for undertaking such major repair/overhauling works and the required expertise is also not available as this not a routine repair job. So, overhauling of engine and transmission is being outsourced to Original Equipment Manufacturer (OEM) or their authorized agencies, as and when required."

2.22 In a written note furnished to the Committee by NALCO, it was seen that accelerated ageing of LHS wire of cable belt was cited as one of the reasons for the

decline in Bauxite production. When asked as to what extent the decline in production was attributed to this factor, the Company stated as under:-

"During FY2014-15, there was a shortfall of 8,80,800 MT(13.3%) against target of 66.2 Lakh MT out of which 1,63,323MT(2.4%) is attributed to ageing of LHS wire rope.

However, other major factors which contributed towards the loss of production were:

- a) Restriction imposed by MoEF&CC,GOI as stipulated in the Stage-I forest clearance conditions. It may be noted that Lease of Central & North Block of Panchpatmali Bauxite Mines, which expired on 16/11/2012, was operating with the strength of Temporary Working Permit(TWP) & Stage-I clearance till Oct'2014. As per the condition stipulated in TWP & Stage-I, NALCO had to restrict its mining operations over 128 Ha of already broken up land from the date of expiry i.e. 16/11/2012. With the passage of time the availability of land for mining got constricted gradually and compelled us to carryout Mining in narrow patch, which posed problems in maintaining required quality avoiding dilution issues. Also production was affected due to frequent occurrence of Non-Ore & High-Floor zones within that restricted area.
- b) Devastating Cyclone Hud-Hud that struck in Oct'14, paralysed the power transmission line in Mines.
- c) Increase of "Lead Distance" from mines face to conveying point and teething problems encountered during erection & commissioning of new Fixed Long Distance Conveyor (FLDC)-Semi Mobile Crushing Plant (SMCP) also affected production severely.

For the reasons cited above production could not be stepped-up to have sufficient Bauxite stock at Refinery, to take care of the planned shut-down in Nov'14 for changing of wire-rope.

Although we did receive the new Wire Rope from UK in Sep'14 as planned for replacement of the ageing LHS rope during Nov'14, we had no other option but to postpone its changing in order to avoid further shortfall in production. This decision helped us in building enough stock by end of Mar'2015 to change this LHS rope in April 2015."

2.23 When queried about the Company's policy regarding inspection of equipment and its replacement, it was stated as under:-

"There is a well-documented plan of inspection and maintenance of all major equipment throughout the organisation. We have Preventive Maintenance Planning System(PMPS) and Condition Based Maintenance System(CBMS) through which maintenance activities are being planned and executed periodically. In our mines, for the cable belt wire rope, the same policy/system is followed. Further, inspection by a third competent

agency for NDT(Non Destructive Testing) once in every year is also being carried out.

The agency National Institute of Rock Mechanics (NIRM), under Ministry of Mines, Government of India did the inspection of Wire-Rope on Dt. 20/2/2013, 23/7/2014 & 1/7/2015. Based on our routine (daily/weekly/monthly) physical check-ups and the report of NIRM, the replacement plan was made and material was procured for replacement in Nov-14 as mentioned above."

2.24 Replying to the query that the condition of critical equipment should have been anticipated / monitored well in advance, so as to obviate the problem of break-down and if so, why was it not done and whether any responsibility has been fixed on the matter on the maintenance supervisory officer/staff, NALCO as under :-

"As explained, the condition of the critical wire rope was monitored well in advance and plan was made accordingly for replacement during November 2014. However due to the cited reasons, we had no other choice but to operate the cable belt to sustain the operation of Alumina plant and to avoid major stoppage in downstream.

The concerned Operation & Maintenance (O&M) personnel looking after the Cable belt systems were on high alert to keep the system running till next planned shut-down. As a result Alumina Refinery did not suffer for want of Bauxite."

2.25 It is observed from the material furnished to the Committee that although new wire had been received, replacement of LHS wire rope was postponed. Explaining the same, NALCO stated as under:-

"NALCO did plan the replacement in November 2014. Normally these plans are made keeping adequate Bauxite stock at Refinery. During the month of October 2014 there was devastating Hud-hud Cyclone which affected production of Bauxite. Enough stock of Bauxite could not be built up at Refinery to facilitate shutdown planned in November 2014. Hence the LHS wire rope replacement was postponed to April 2015."

2.26 When asked whether the capacity utilisation for Bauxite has become 100% since the change of wire rope in April 2015, the Company replied as under:-

"It is planned to achieve 100% Bauxite production during the current year."

2.27 When enquired whether inspection by NDT (Non Destructive Testing), which is done only once in a year, is helpful and satisfactory, the Company stated as under:-

"Yes. It is indeed the inspection that predicts and gives us confidence on the system. Based on this major replacement plan was made."

2.28 As regards equipment available in NALCO's R&D facilities, the Committee was informed as under :

"Both the R&D centres at Refinery & Smelter are recognised by Department of Scientific & Industrial Research (DSIR), Govt of India and have adequate facilities and equipped with several equipments to take care of plant level improvement. The executives of R&D department at sites and corporate office take up various in-house & collaborative R&D projects. Some of the major equipments available are as below.

1. X-Ray Diffractometer (XRD).
2. Scanning Electron Microscope (SEM).
3. BET Analyser.
4. Ultraviolet-Visible Spectrophotometer.
5. TG/DTA/DSC analyser
6. Sedigraph.
7. Potentiometer.
8. Air Jet collision mill.
9. Constant Voltage Transformer.
10. Blaine apparatus.
11. Bench Scale Anode Baking.
12. Anode Testing Equipments.
13. Slot cutting machine."

The Company is in the process of establishing a corporate level research & development centre named Nalco Research & Technology Centre (NRTC) at Bhubaneswar at an investment of Rs 88 crores, which is its advanced stage of completion."

V. Cost-cutting measures

2.29 When queried whether NALCO has undertaken any cost-cutting measures in terms of lower power/ fuel consumption etc., so as to improve its bottom line, the Ministry of Mines replied as under :-

"Yes indeed, NALCO has undertaken various cost cutting measures across its units to lower the specific consumption parameters In fact the parameters are monitored at various levels of management functioning and in addition at Board level a Technology Committee reviews the various specific consumption parameters periodically and fixes the Norms. There are many projects taken up to for better efficiency in power & fuel consumption. Some are listed below :-

a) Bauxite Mines

- Load sharing (temporary merging) of capacities of the existing three nos. of 33/0.433 KV, 1250 KVA transformers at MRS sub-station, in order to have an optimum loading of two nos. of transformers while keeping one switched off alternatively, in a period of ten days. This led to an annual energy savings of approx. 15,020 KWhr (1.3 TOE).
- Modification of sump height of sprinkling pump house for haul roads is completed. On an average, savings of approx. 2100 KWhr (0.18 TOE) during the year is realised, based on the no. of operation of the pumps for sprinkling purpose.
- Installation of 10 nos. of 36 W LED based solar street light poles is completed. The same has been installed at water distribution pump house area new sub-stations and CISF barrack area. The new system has replaced the use of conventional street light system with 250 W HPSV street light luminaries with a control gear losses upto 50 W working on mains electrical supply. This resulted in energy savings of 8,140 KWhr (0.7 TOE), during the year.

b) Alumina Refinery

- Automatic control system to maintain Seal Air DP across Coal mills in old Boilers i.e. in Boiler-1, 2 & 3, by application of VFD system, thereby avoiding throttling of manual valve and thus saving energy to the tune of 269 TOE.
- Optimisation of Gland Steam Condenser operation of TG by optimising the steam ejectors in service, thereby saving energy to the tune of 8951 TOE.

c) Smelter Plant

- The specific DC energy consumption in Smelter Plant has reduced to 13395 KWhr/MT of Hot metal during the FY2014-15 against the target of 13500 KWhr/MT. This could be achieved by using ALPSYS Pot regulation system in all Pot Lines, reducing anodic problems, reducing wedge drop and stem beam drops, use of graphitized cathode blocks, use of slotted anodes and increasing Anode stub hole & pin length in running pots. All these activities resulted in total annual energy savings of 11,071.5 TOE.
- The Specific fuel oil consumption achieved is 59 Lt/MT of cast metal during FY 2014-15 against specific fuel oil consumption target i.e. 60 Lt/MT of cast metal. This could be achieved by adopting best operational practices, optimising the furnace operation with availability of hot metal and planning of production as per market demand, thereby reducing furnace idling time. Other factors such as semi-automatic firing with PID controller for optimum firing in furnaces, ensuring proper atomisation and combustion in the furnaces etc. also significantly contributed to the results. This resulted in total oil savings of 317.257 TOE.

d) Captive Power Plant

- Three nos. of Regenerative Feed Water Heater were replaced in Unit-5, 6 & 7. This has resulted in temperature gain of Feed Water by 5-60C &

helped in arresting heat loss of feed water, resulting in energy savings of 6,019 TOE.

- Fuel oil consumption has reduced from 5084 KL in 2013-14 to 2993 KL during the year by implementing improved operation and maintenance practices, resulting in energy savings of 2028 TOE.
- In the lighting system 948 nos. of 40W TL copper choke were replaced with Electronic choke, 469 nos. of 2x40W tube lights with 2x28W T5 fitting and 1656 nos. of 125W HPMW lamps with 70W HPSV ones, with energy savings of 14 TOE."

VI. Pricing mechanism

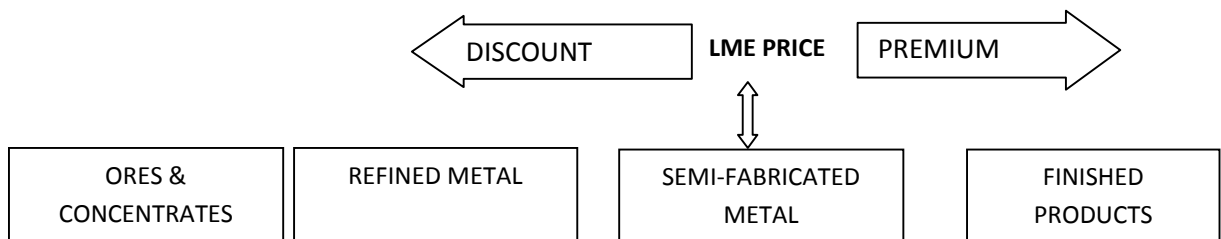
2.30 Furnishing a brief note to the Committee on the pricing mechanism of Aluminium, NALCO stated the following information:-

"The London Metal Exchange (LME) located at 56 Leadenhall Street in the City of London is the futures commodity exchange with the world's largest market in options and futures contracts on base metals. LME offers contracts with daily expiry dates of up to (03) three months from trade date, weekly contracts to six months, and monthly contracts up to months. It also allows for cash trading.

The LME publishes a set of daily reference prices that are used by industrial and financial participants for referencing, hedging, physical settlement, contract negotiations, margining and portfolio evaluations. Prices are derived from the most liquid periods of trading; the short open-outcry ring trading sessions are most representative of industry supply and demand. The LME Official and Settlement, Unofficial and Closing Prices are based largely on trading activity on the Ring. Official Ring Trading Times are from 11:40 — 17:00 Hrs GMT, where the "Open-Outcry" is the oldest way of trading and is central to the process of price discovery at the LME. The official settlement price, on which contracts are settled, is determined by the last offer price before the bell is sounded to mark the end of the official ring.

IMPACT ON NALCO & OTHER PRIMARY PRODUCERS

The LME price is not the price that consumers pay for physical Aluminium, rather the value of a warrant for delivery to the cheapest warehouse anywhere in the world duty un-paid. The prices discovered on LME trading platforms are global reference prices. These are vitally important to miners, smelters, refiners and consumers as they use these prices when negotiating physical deals, either at a 'discount' to the LME price, or at a 'premium'.



Since the LME allows price convergence, they license warehouses to provide a market of last resort and to ensure the LME price stays in line with the physical/spot price. NALCO Ingots, T-Ingots, Sows are registered in the LME which makes NALCO products deliverable in LME warehouses across the globe thereby increasing its acceptability in Global markets.

In the domestic market NALCO pricing is done on the basis of LME reference prices, trends and demand/supply scenario. LME prices are considered as reference prices while framing pricing policies for domestic markets.

Some of the Primary producers also use LME platform and prices for hedging their price risk due to volatility in the LME prices."

2.31 On the issue of pricing of Aluminium, the CMD, (NALCO) during the course of oral evidence further *inter alia* submitted as under:-

"...tendering is done by the empanelled Companies. They compete in tender. The tender is on LME prices in Aluminium and who will give how much money above the premium. Whoever will quote more in the competition, it is given to him; that's why it is done through tender. The price of Alumina is not fixed by LME but it fixes the prices for Aluminium. How much percent can be given on the Aluminium price is done by tender. There is standing ongoing UAI, whoever applies for the panel is taken in the panel. There is no registration, it is an open panel and anyone can participate in it."

2.32 On being asked to verify the process involved in the selling of Aluminium and who decides the rate and the period for which agreement/agreements is /are signed between NALCO & marketing companies, it was stated as under:-

Domestic Market

"NALCO's products in the domestic market are open for purchase by any domestic customer. Domestic customers interested in buying material from the Company have to make financial arrangement and provide the required documents before dispatches may be effected from our Smelter Plant, Angul or any Stockyards. To encourage domestic customers for consistent buying MOUs are entered with the customers MOU customers are eligible for additional discounts and priority in dispatch as per approved MOU terms and conditions or any other facilities decided by NALCO from time to time. MOU agreements with domestic customers are for a period of one year.

Domestic prices, discounts etc. are periodically reviewed by the Pricing Committee (Domestic) who recommend changes in prices/ discount structure etc. based on market trends, demand-supply scenario, inventory level, competitors pricing etc."

Export Market

"NALCO exports its products through tenders floated to its overseas registered customers. Registration of customers is an on-going process and any buyers desirous of purchasing from NALCO and meets the eligibility criteria can approach NALCO for registration. The registration process is available in the Company website. In order to further broaden the customer base, once in a year a global advertisement is also published in leading national newspapers, Indian Trade Journal, Metal Bulletin etc. inviting overseas buyers interested for registration, to visit Nalco's website for details of eligibility criteria for registration. The details of the tenders are also published in CPP Portal.

The duration of export contracts are usually from 3-months to one year. The prices are determined based on H1 bid received against the tenders"

VII. Overall Position vis-a-vis Global Standards & Competitors

2.33 According to NALCO, demand for primary Aluminium is likely to grow with increased off-take by large consumer sectors in electrical, transportation and construction fields. In view of this, Indian primary Aluminium producers have been expanding their smelting capacities in order to cater to the additional demand.

2.34 The proposed plans of NALCO for Brownfield expansions and Greenfield ventures of Indian primary producers (Aluminium Smelters) are as follows:

Company	Location	Aluminium (Lakh MT)
HINDALCO	Jharkhand	3.59 (greenfield)
VEDANTA Ltd	Odisha	6.25 (brownfield)
NALCO	Odisha	5.00 (greenfield) 5.00(greenfield/ Overseas)
Total		19.84

2.35 NALCO is at number 3 position in the overall ranking among the Indian Aluminium producing Companies. On being asked reasons for the same, and the production capabilities vis-a-vis the other two top Companies, it was stated as under:-

"Despite higher capacity utilisation than the other two private producers in Aluminium sector, NALCO is no.3 as the installed capacity of VEDANTA & HINDALCO are much higher than that of NALCO as noted hereunder.

(Figures in Lakh MT)

Company	Installed capacity	Production of Aluminium in 2014-15	Capacity utilisation in 14-15 (%)
NALCO	4.60	3.27	71%
HINDALCO	13.54	8.36	62%
VEDANTA Ltd.*	23.15	8.84	38%
Country Total	41.29	20.26	49%

(Source: Industry/ Market data)

(* including BALCO)

The private producers have expanded their capacities very aggressively during the last few years. Coal India has also not provided linkage for the entire requirement of coal.

However, the Company is actively pursuing its expansion plans in the Aluminium sector, for setting up of two greenfield smelters (of capacity 5 Lakh MT each) at Indian and overseas locations to take advantage of possible market opportunities in future. The refinery at Koraput (Damanjodi) is also planned for expansion."

2.36 When asked to state the Company's position in global context among the Aluminium producing Companies and its main competitors in India and whether the Company have made a comparative study of it's competitors' performance before preparing their vision document, 2009, the Ministry of Mines stated as below:-

"NALCO contributes about 2% of world Alumina production and only 0.6% of global Aluminium production, whereas VEDANTA & HINDALCO contribute about 1.6% & 1.5% in Aluminium and 0.9% & 2% in Alumina respectively.

M/s HINDALCO is largely an Aluminium based Company, though they have business interest in copper & auto segments & M/s VEDANTA is having business interest in zinc, oil& gas, copper, iron ore including Aluminium and derives larger profit from other segments.

A comparative study of our competitors' performance like that of HINDALCO and VEDANTA was made before preparing the vision document, 2009. The production capacities of domestic players and their expansion plans were taken into account. Also a comparison was made with its peers by considering the actual production, sales, product portfolio and technology adopted."

2.37 When enquired whether there are any benchmarks w.r.t production targets, capacity utilisation, man-days etc., are set by the administrative Ministry for NALCO, the Ministry of Mines replied as under:-

"High Power Committee constituted by Dept of Public Enterprises, Govt of India in consultation with Ministry of Mines fixes annual MoU targets, based on the past performance of the Company in areas of production, productivity, capacity utilization, financial achievements and performance in other areas like R&D, Projects, CAPEX, HRM etc. In addition other factors like Coal availability, LME Prices, Realization are also considered while fixing the target & the Company signs an MOU with the Ministry of Mines before the beginning of the Financial Year. The performance of the Company is reviewed against the DPE targets."

2.38 When asked whether NALCO operates its own coal & Bauxite mines like HINDALCO, the Ministry of Mines stated as under:-

"NALCO operates its own captive Bauxite Mines. It does not operate any Coal Mines. Bauxite mines situated at Panchpatmali of Koraput District in State of Odisha is an open cast mechanized mine. NALCO transports Bauxite to Refinery through cable belt Conveyor. The present mining capacity is 68.25 lakh MT per annum."

2.39 When queried whether the Company units / products are ISO certified, the Company replied as below:-

"Yes. All the manufacturing units are ISO certified."

2.40 On being asked whether the Ministry of Mines are satisfied with NALCO's performance and what more can be done to enable it reach the position of a global leader, the Ministry replied as under :-

"NALCO enjoys comparative advantage due to captive Bauxite Mines and coal linkage from Coal India Limited. Though NALCO's performance has been satisfactory as per the MoU signed with the Ministry, it can do much better by striving to achieve global benchmarks.

It should focus on manufacturing more value added products. NALCO has also to be more focused on R&D and on seeking newer markets."

2.41 In this connection, NALCO submitted the following suggestions to make them globally competitive :-

"The need for making the public sector enterprises (PSEs) globally competitive is imperative for efficient resource utilization, cost-efficiency, faster implementation of projects and better management of public money at large, PSEs need certain level playing field to compete with both domestic as well as foreign enterprises to survive and excel. An enabling competitive environment in the PSEs can be achieved by giving public sector firms greater functional autonomy and freeing them from bureaucratic control.

Some of the issues that could enable the PSEs to compete and perform efficiently in an open economic environment:

- i) Long term stakes are missing in Public sector enterprises since the individuals holding management positions and individuals holding the responsibility in the administrative ministries are engaged for fixed small tenures. Thus, continuity of policies, plans and priorities for PSEs is affected.
- ii) PSU functions are subject to multiple scrutinies by different agencies to establish the system of checks and balances in management of public assets and finances. This leads to delays in decision making and lack of will to take risks. Therefore, provision should be made for seeking time bound advice from scrutinizing agencies such as CVC, CAG etc, if deemed fit and if intention is not malafide, a wrongdoer should not be punished for a procedural mistake.
- iii) The audit approach needs transformation. Focus should be more on system audit instead of transaction audit and emphasis may be on pre-audit rather than post audit.
- iv) PSEs may need to partner with both Public as well as Private sector companies to take up projects in JV in order to have access to better technology, to ensure mineral resources, to spread the risk of investment etc. Although it appears noble to select such partners through invitation of Expression of Interest (EOI) to establish a transparent process, the process is lengthy and cumbersome. Board should be given power for selection of JV partner on nomination basis with justification.
- v) Inorganic growth is an oft adopted route by private sector enterprises to scale up capacity and become globally competitive. PSEs normally fail to grow inorganically through mergers and acquisitions primarily in absence faster decision making process.
- vi) Investment opportunities in many sectors like power generation, mineral acquisitions etc. are gradually shifting to bidding regime, in which PSEs have an inherent disadvantage. PSEs in general do not enter into aggressive bidding like their private counterparts to avoid post bidding scrutiny. Hence, PSEs need to be treated separately by providing such facilities through Government dispensation route.
- vii) Many occasions CPSEs under the administrative control of different Ministries intend to form consortium to participate in bidding for various projects or to form JV among themselves to take up some projects. As per the present policy, the consortium members/ JV partners are

required to seek approval from respective Ministries if the investment amount is higher than the power vested with respective Boards. Since the bidding window is usually short, time available for complying with the procedural requirements for obtaining approval from Government of India might be insufficient. Hence, full powers may be vested with the Boards of CPSEs for formation of JV Company or consortium among themselves.

VIII. Performance Review

2.42 Performance appraisal meetings are held by the Ministry of Mines on regular basis to review the performance of NALCO.

2.43 When asked about performance appraisal meetings held in the Ministry in respect of NALCO during each of the last three years and specific steps taken or directions given to the Company arising out of such meetings to improve their working, it was informed as under :-

"Details of performance review held in Ministry during past three years are as under:

- a. Annual review for the year 2011-12 by Secretary, Ministry of Mines was held on 15 June 2012.
- b. Half yearly performance review for the year 2012-13 by Secretary, Ministry of Mines was held on 26 December 2012.
- c. Half yearly performance review for the year 2014-15 by Secretary, Ministry of Mines was held on 19 November 2014.

Besides above, performance of the Company is reviewed almost every quarter at Board level by two part-time official Directors (in the rank of Joint Secretary & above) from Ministry of Mines, Government of India.

During the period, Ministry has worked closely with NALCO and has provided necessary support and guidance to resolve the issues faced by the Organisation."

2.44 Asked since when NALCO has been signing MOU with the Administrative Ministry and what was the MOU rating obtained by the Company during last three years and also to furnish details indicating MOU targets and the achievements made thereagainst in each of the years during last three years, the following information was submitted :-

"NALCO has been signing MOU with Ministry of Mines since 1992-93.

MOU score and ratings obtained by NALCO during last three financial year:

Year	Score	Rating
2012-13	1.50	Excellent
2013-14	1.56	Very Good
2014-15	1.26 (provisional)	Excellent (provisional)

2.45 When asked whether NALCO has signed any MOUs with the international organisations / institutions during the last three years, the Company replied in negative.

CHAPTER III

EXPANSION AND DIVERSIFICATION

I. Expansion & Diversification plans

3.1 In a written note furnished to the Committee, NALCO informed about failure of its vision document of 2009 and plans for future as under:-

"The Company has prepared a vision document in 2009. It addressed the course of operation to reach new markets abroad, specifically in Indonesia & Iran. Feasibility study has also been carried out for a 0.5 million tonne smelter in two phases along with a captive power plant of 1250 MW at an estimated cost of ₹ 16,500 crore. However, this plan could not take off due to delay in the coal mining project identified by NALCO for sourcing coal. Due to geo-political reasons Iran project also could not materialize.

However, in the volatile market conditions and continued slump in the market for Aluminium, the Company is revisiting the options to establish Smelting operations in regions with cheap source of energy. Besides in view of the recent developments as regards Iran, there is renewed interest to explore business opportunities in the country. Besides Iran and Indonesia, the Company has shortlisted Oman as a potential destination for investment in Aluminium Smelting. Studies are in progress to ascertain economic feasibility and business environments in these countries.

There have also been considerable changes in the business environment in the country factoring increased awareness on environmental impact of industrial and mining activity, difficulties in land acquisition, growing gap between coal requirements and availability, legislative changes in Land acquisition and R&R, the Companies Act etc. Accordingly, the Company is in the process of re-defining its Vision and Corporate Plan to align with present day business environment and to leverage its strengths in the business of Aluminium making and Power Generation."

3.2 When enquired whether NALCO have any plan for setting up fully Integrated Aluminum plant with both forward and backward linkages / integration, it was stated as follows:-

"As of now, the Company is not pursuing any proposal to set up an integrated Aluminium plant covering Bauxite mining to metal production. However, the following project is being explored in Alumina sector.

NALCO has become the sole bidder for development of a 1 MTPA Alumina refinery project in Kutch, Gujarat based on supply of Bauxite by

Gujarat Mineral Development Corporation (GMDC) for which a Detailed Project Report has already been prepared. However, it is presently examining the possibility of scaling down the project as the available Bauxite in Kutch may not support a 1 MTPA Alumina refinery project for useful plant life of about 30-40 years"

3.3 It is seen from the information furnished to the Committee that NALCO has diversification plans and is going into power generation too. When asked how the Company will sustain pace both in its core area of operations and diversified operations and whether the Company gave plans to set up a subsidiary Company, NALCO stated as under :-

"NALCO is foraying into various power generation projects based on its vision to become a global leader in metal & energy sector, leveraging its core strength of operating a power station of 1200MW.

As such, the diversification to wind & solar has become a necessity due to the Green Energy Regulations making it mandatory to produce a minimum percentage of power consumed from wind & solar, notwithstanding the fact that these are good business ventures.

These diversification to power sector are in line with our core business of making Aluminium, which itself is a power intensive industry.

The plan to set up a subsidiary Company will depend on future developments & operational requirements."

3.4 On being enquired about efforts that have been made to capture new markets particularly in Africa, Australia, US etc. where the Company has no presence and any constraints faced by the Company in this regard, it was stated as under:-

"Presently, NALCO is not exporting its products to Africa, Australia, US etc. since exports to these countries are not competitive mainly due to very high freight rates from India. Besides Africa, Australia and America are net exporter of Aluminium metal. In case of Alumina, it may be mentioned that Atlantic Alumina is generally sold at a discount; hence, our realization is better when sold to countries like China and Middle East.

Production & consumption details of Aluminium in these countries in 2014 are given below :-

		(in '000MT)
Country	Production	Consumption
Australia	2042	329
Africa	1746	634
North America	4576	6190
South America	1543	1438

Australia is net exporter of Alumina. It is mainly exporting to China, USA, Canada, South Africa and Indonesia. It is one of the largest producers of Alumina, however their consumption is very less.

Africa does not produce Alumina. Their consumption is very less and their requirement is met by export from Australia. Further the business environment in Africa is not good.

Production of Alumina in US is less as compared to their consumption. Their consumption is mainly met by export from Australia, Brazil & Surinam.

Production & consumption details of Alumina in these countries in 2014 are given below:

		(in '000MT)
Country	Production	Consumption
Australia	20216	3954
Africa	0	3380
North America	5167	8859
South America	13475	2987

Under recently launched MEIS (Merchandise Exports from India Scheme) under FTP 2015-20, US & Australia are not in the list of countries which are eligible for export benefits."

As per a written note furnished to the Committee, NALCO is participating in Nuclear Power Projects with the help of Nuclear Power Corporation and that NALCO has an agreement with Nuclear Power Corporation to produce energy for its plant as Aluminium requires high-intensity energy.

3.5 When asked if NALCO has any specific advantage in participating in such projects by way of equity, it was stated as under:-

"NALCO is exploring various possibilities to diversify into energy sectors like thermal, nuclear, wind, solar etc. in line with vision of the Company. Nuclear fuel is considered to be the future source of power. With depleting fossil fuel resources and hardening environmental concerns, the nuclear power in coming years is going to be one of preferred alternative for sizeable power generation. NPCIL is a reputed PSU and is profit making.

The project returns are healthy. Hence the Company is participating in nuclear projects with NPCIL."

3.6 When enquired about the progress made with regard to NALCO's agreement with Nuclear Power Corporation, it was stated as under:-

"JV Company NPCIL-NALCO Power Company Ltd "NNPCL" was incorporated in March, 2012. Kakrapar Atomic Power Project (3&4) has been selected as the first project of the JVC.

NALCO Board has approved initial equity investment of 26% (₹ 894crore). Equity participation will be enhanced to 49% upon approval of Government of India. Equity infusion would be made after allotment of the project to the JVC by Government of India."

3.7 When asked, why NALCO is not competing in its core area and going for diversification in the field of Wind, Solar and Power projects, the CMD, NALCO during the course of oral evidence submitted as under:-

"Alluminium is a highly energy intensive industry, that's why we had to make captive power plant. We have a 1200 MW captive power plant which is coal fired. The Government has brought a regulation that if you are using fossil fuel for generating power then as per the re-purchase obligation you have to generate green power. As per this provision, we are venturing into solar and wind power. This is an obligation which we have to do."

Secondly, from the commercial angle it is profitable because the Gandikota Plant in Andhra Pradesh is giving us 16 percent return. If we deposit this money in bank, then we get 1 percent. By this we are generating green power and also commercially viable. In Rajasthan, sometimes we are incapable to take grid, but it is still more than the capital charge. These are two reasons why we have ventured into solar and wind energy. When Aluminium is produced in nuclear power, its competency is taken in power production. We are competent in power production because the 1200 MW has to be run in full capacity for which skill is required. To utilize our core competency, we are participating in nuclear power. In this the IRR, that is International Rate of Return is very high, that's why it is good from the commercial angle."

II. Allocation of Bauxite Mine & Coal Blocks

3.8 On asked to furnish the present position in getting the mining lease of Pottangi Bauxite deposits in Odisha, the Company replied as under :-

"As per recent media report of October 2015, Government of Odisha has decided to allocate the Pottangi Bauxite deposits in favour of NALCO.

However, formal letter in this regard is awaited. Linked to the deposit, the Company has already started project work of 1 million tonne Alumina refinery at Damanjodi having project out lay of ₹ 5540 crore. Also, the Company has agreed to make additional CSR expenses of about ₹300 crore in the adjoining areas."

3.9 When asked about efforts taken by the Company / Ministry for allocation of Utkal coal blocks, the Company replied as under :-

"As a result of continuous efforts of Ministry of Mines , Government of India including kind support by Hon'ble Minister of Steel & Mines, Government of India; Ministry of Coal vide office memorandum dated 11 September 2015 has communicated to nominated authority for allotment of Utkal- D&E coal block in favour of NALCO under *Coal Mines (Special Provisions) Rules 2014*. However, formal letter in this regard is awaited."

3.10 When again enquired later on the status regarding allocation of Pottangi Bauxite deposits and Utkal- D&E coal blocks to NALCO in Odisha, the Ministry of Mines stated as below :-

"Pottangi:

It is learnt that in September 2015, Government of Odisha have recommended for allotment of Pottangi Bauxite Mines in favour of NALCO.

Utkal D & E:

Government of India, on 11 September 2015 has directed the Nominated Authority under MoC to execute an allotment order in favour of NALCO for Utkal 'D' & 'E' block with an estimated reserve of 200 million tonnes (apprx.). The allotment letter is expected shortly."

3.11 On being asked to elaborate upon the efforts of NALCO to source additional coal through E-auction route, the Ministry of Mines stated as under:-

"Based on E-auction notification by MCL and observing the mode of transportation (Rail/Road), NALCO participates in auction for necessary procurement. In line with production plan of 3.80 lakh MT Metal, plans have been made for procurement of 180 rakes for CPP & 88 rakes for Refinery through E-auction made during FY2015-16. The Company is keeping a close watch on the decisions being taken by Ministry of Coal in policy framework for non power sector and shall take appropriate measures to secure coal."

III. Value Addition

3.12 NALCO appears to have remained content with being a Bulk Producer of Aluminium metal, with little or no value addition. When queried about the efforts /plans conceptualised by the Company to climb up the value chain so as to improve its margins and profitability, it was stated as under:-

"In line with its expansion, Nalco did envisage the demand of metal both in domestic as well as global market and accordingly planned its downstream. Over the years apart from regular standard ingots, NALCO added various value added products like Wire rods, Billets, Strip Castings and Roll Products at Smelter & Special Grade hydrate at Alumina Refinery.

The volume of production for various value added products for last five years is given below.

Product	2010-11	2011-12	2012-13	2013-14	2014-15
WIRE ROD (MT)	76544	72076	79532	87991	96070
BILLET (MT)	27072	21256	14950	4015	15471
ROLLED PRODUCT (MT)	21352	20746	15891	4157	8824
SPECIAL HYDRATE (MT)	10662	15071	15744	12214	9840

Further, NALCO in JV with IDCO, Government of Odisha has taken further initiative to boost the downstream in Aluminium by setting up an Aluminium Park at Angul, and agreed to provide 50,000MT of Hot liquid Metal."

3.13 When asked how the Company would sustain and maintain on the demand and supply in the core areas, it was stated as below:-

"For Aluminium, the Company is operating about 80% of its capacity due to sluggish demand and depressed market. As the demand improves and prices pick up, the Company will be able to utilise balance capacity.

In the areas of Alumina and Aluminium NALCO has presence in domestic & overseas markets. Depending on the demand for these products, augmentation in production depending on requirement is done to maximize the supply and the profitability. New avenues are studied for expanding the capacities to cater to the future demand. In this line, plans are being made to set up Aluminium smelters in overseas countries such as Iran/Oman/

Indonesia etc apart from setting up of 0.5 million tones smelters in Sundergarh district of Odisha. Further, 1 million tonne expansion of Alumina capacity is underway at Damanjodi which is linked to allotment of new Bauxite block at Pottangi. The Mining Lease of Pottangi Deposit needs to be given in Company's favour in expeditious manner.

Aluminium finds usage in a number of key application areas. NALCO's product-mix has been aimed to cater to a large and diverse customer base and is in line with ever-changing market dynamics. NALCO has been catering to these core sectors:

- (a) Electrical sector: Wire Rod sales from NALCO have witnessed increase in the domestic market e.g. our WR sales increased from 87,969 MT in 2013-14 to 96,070 MT in 2014-15 i.e. a jump of about 9% y-o-y, on account of higher offtake from the electrical sector.
- (b) Transport sector: NALCO has been continually supplying Rolled sheets, Chequered plates, alloy ingots etc. to meet the rising demands of the automotive/ transport industry.
- (c) Building and Construction sector: NALCO supplies billets to meet the requirements of the building and construction industry.

Thus, NALCO has been making consistent and concerted efforts so as to meet domestic demand in the above core areas. NALCO's domestic MOU scheme has enabled the Company to have better order booking position and also achieve higher sales in the domestic market

3.14 When asked how NALCO adjusts its production and sale in periods of recession and to explain with facts pertaining to the recent world recession episode, the Company stated as below:-

"Due to continuing recession, benchmark Aluminium price (LME) has reduced significantly affecting all metal producer across the globe. The Company has curtailed and adjusted its metal production based on realization and availability of energy since FY2011-12. In FY14-15, the Company operated its Aluminium smelter at 71% of rated capacity to optimize its profit. The sales have been adjusted commensurate to production without any inventory built up.

Due to recession, Aluminium production has been curtailed by about 6 million tonne globally excluding China upto 2014 and by about 1.5 million tonne in China alone, upto July 2015."

The volume of production for various value added products for last five years is given below:

Product	2010-11	2011-12	20 12-13	2013-14	2014-15
WIRE ROD (MT)	76544	72076	79532	87991	96070
BILLET (MT)	27072	21256	14950	4015	15471
ROLLED PRODUCT (MT)	21352	20746	15891	4157	8824
SPECIAL HYDRATE (MT)	10662	15071	15744	12214	9840

3.15 When asked about the reasons for the decline in volume of production for its value added products like billet and rolled products in 2013-14, the Ministry of Mines stated as below :

"Observing price trend in LME, limited availability of linkage coal, Management decided to restrict the smelter metal capacity limiting to power generation through use of linkage FSA coal only. During the month of May-June'2013, as per the decision by Management, 198 Electrolytic pots were taken out of service which impacted the cast metal production. During 2013-14 we produced 3.16 lakh MT against target of 4.05lakh MT. Accordingly volume of various value added products was reduced keeping eye on realization from individual product."

3.16 On being asked about the measures that can be taken by NALCO/ to develop value added products for exports or utilization in the domestic market, the Company stated as follows:-

"Apart from catering to the primary metal demand of the domestic customers, few value added products are being sold in the market such as Wire Rods, Rolled products, Billets etc. During 2014-15 the total production of these value added products was 37% of the total Aluminium production of NALCO. The development of value added products is an ongoing process and the various grades, alloys and products are developed based on the demand and specific requirements of the customers. Some of the value added products for which development activities are on are as below:

- i) Rolled products for specific application such as foil stock, fan blade stocks, roofing sheets, chequered sheets with various alloys etc.
- ii) Alloy ingots for specialty application in the areas of automobiles, defense, space applications etc.
- iii) Billets for specialty extrusion application using different alloys.
- iv) Specialty Alumina for specialty application in high voltage insulators, fused Alumina etc.

Further NALCO in JV with IDCO, Government of Odisha has taken initiative to boost the downstream in Aluminium by setting up an Aluminium Park at Angul. Measures can be taken up for value addition in the field of Aluminium alloys and rolled products with increase in capacity utilisation and availability of linkage coal. However, the type of product can be decided only after the finalisation of industries in Angul Aluminium Park."

IV. Solar Power and Wind Power

3.17 When asked to furnish details on the progress made so far in the Solar and Windmill Projects of the Company, it was stated as under:-

"NALCO has commissioned 50.4 MW Wind Power Project at Gandikota, Andhra Pradesh in December 2012 at an investment of ₹ 274 crore and 47.6 MW Wind Power Project at Jaisalmer, Rajasthan in 2013-14 at an investment of ₹ 284 crore. The Company is seeking Board approval for award of work for another 100 MW wind power project at an investment of ₹700 crore. NALCO also proposes to set up 14 MW wind power project in mined out area of its mines in Damanjodi.

NALCO has commissioned 260 kWp rooftop solar power project at its Corporate Office and township buildings at Bhubaneswar. Installation of 50 kWp rooftop solar power project at Nalco Research and Technology Centre (NRTC) buildings is also being taken up."

3.18 On the issue of cost effectiveness of wind power, solar power and thermal power, Secretary, Ministry of Mines during the course of oral evidence submitted as under :-

"Sir, the wind power capital cost is around ₹7 crore per MW. Actually, we will be making a submission on this. There is a different reason why we have gone into wind power and the solar power. It is a compulsion. Those who produce thermal power, as per energy regulation they have to either purchase the Receivable Energy Certificate (REC) otherwise they themselves have to generate. NALCO is using 1200 MW. That's why we have to take up wind power or we have to purchase it. In wind power we are getting good returns. This is a good business proposition and it is also a compliance of energy regulation."

3.19 On the same issue, Secretary, Ministry of Mines stated as under :-

"Yes Sir we are getting a post-tax return of around 15 per cent to 16 per cent. If we keep in bank we will get up to 8 to 9 per cent. This is a good business proposition."

V. Project Planning

3.20 When asked to furnish a note on the Original schedule, revised schedule, actual / expected date of commissioning of each completed project, and the projects in execution thereby giving the reasons for the time over runs in commissioning of projects(if any) and also the extent of the delays which were responsible for escalation in costs; the Company furnished the following information:-

Projects Completed

Sl. No	Project Description	Original schedule of completion	Actual date of commissioning	Original Project cost (₹ in Crore)	Actual Capital expenditure incurred (₹ in Crore)	Reasons for Cost / time overrun
01	2 nd Phase Expansion	Dec'2008 (50 months from the date of Government of India approval)	<u>Smelter</u> Commissioning of pot line started in Dec'2008 & completed in Dec'2009 <u>CPP</u> Unit#9 Commissioned in Aug'2009 & Unit#10 commissioned in Sept'2010 <u>Mines & Refinery</u> Commissioning completed in Sept'2011	4091.51 (at July'2003 price level) Revised estimate – 4401.76 (at Nov'2008 price level)	4246.57	Commissioning of Smelter & CPP expansion achieved more or less in original schedule time of completion. Major time overrun in completion of project in Mines & Refinery expansion was mainly due to the following: <ul style="list-style-type: none"> • Naxalite attack in Nalco Mines causing fear psychosis amongst contracto₹ • Poor response of vendors because of remote location and poor law & order situation. • Certain site-specific issues like poor communication to Damanjodi site, excessive rains, local strike & other labour related issues etc. • Delay in getting basic engineering documents from the process licensor. • Vertical integration of

Sl. No	Project Description	Original schedule of completion	Actual date of commissioning	Original Project cost (₹ in Crore)	Actual Capital expenditure incurred (₹ in Crore)	Reasons for Cost / time overrun
						expansion within the existing running plant, lack of space, lack of construction accessibility etc. drastically slowing down the project execution activities. Cost overrun was mainly due to some additional facilities in comparison to original project. However, there is saving in comparison to revised cost estimate.
02	4 th stream up-gradation of Mines & Refinery	30/06/2010	31/03/2014 (Commissioning started in Dec'2012 & completed in March'2014)	409.07	343.33	Time overrun in completion of project was mainly due to delay in obtaining various statutory pre-project clearances and inadequate resource deployment by agencies. There is no cost overrun.
03	Wind Power Project - I at Gandikota, AP	01/02/2011	31/12/2012	274.13	273.69	Commissioning of project was delayed due to delay in obtaining Stage-II forest clearance. There is no cost overrun.
04	Wind Power Project - II at Jaisalm	27/08/2013	29/01/2015	283.78	283.78	Due to land related issues as per State Government notification, some WEG (Wind Electric

Sl. No	Project Description	Original schedule of completion	Actual date of commissioning	Original Project cost (₹ in Crore)	Actual Capital expenditure incurred (₹ in Crore)	Reasons for Cost / time overrun
	er, RJ					Generator) locations were changed and thus, overall commissioning of project was delayed. There is no cost overrun.
05	Rooftop Solar Power Project at Nalco Corporate Office	19/05/2014	17/05/2014	1.24	1.24 (Subsidy for an amount of 0.38 granted by SECI (Solar Energy Corporation of India) as per MNRE policy)	There is no time & cost overrun.
06	Rooftop Solar Power Project at Nalco Nagar Township	13/08/2014	21/05/2015	0.78	0.78 (Subsidy for an amount of 0.24 granted by SECI (Solar Energy Corporation of India) as per MNRE policy)	The solar power plant was synchronized with Grid since 26/09/2014 and started generation since then. However, due to delay in installation of solar generation meters by local DISCOM authority, the overall project commissioning was delayed. There is no cost overrun.

Projects in Execution

Sl. No.	Project Description	Original schedule of completion	Expected date of Commissioning	Original Project Cost (₹ in Crore)	Expected Cost escalation (₹ in Crore)	Reasons for Cost / time overrun
01	5 th Stream Expansion	31.07.2020 (48 months from the zero date i.e. 01.08.2016, the expected date of obtaining EC (Environmental Clearance) for the project)	Expected to be completed by the original schedule of completion subject to obtaining EC by 01/08/2016.	5540.00 (at July'2013 price level)	Expected to be completed within the original project cost	The process of obtaining various pre-project clearances like Environmental Clearance from MoEF & CC, Consent to Establish from OSPCB (Odisha State pollution Control Board) etc., is in progress.
02	Utkal-E Coal Mine Project	27.02.2008 (04 years from the date of allocation i.e. 27.08.2004)	Uncertain	337.61 (at May'2011 price level)	Expected to be completed within the original project cost	<ul style="list-style-type: none"> - Utkal-E Coal block was de- allocated as per Supreme Court order dated 24/09/2014. - Nalco is pursuing the matter with Ministry of coal for re-allocation of Coal Block through Government dispensation route. - Nalco has already spent more than ₹ 120 Crore for development of Utkal-E Coal Block since allocation in August'2004.

CHAPTER-IV

ALLIED ISSUES

I. Research and Development

4.1 NALCO in a written note furnished the following information about its achievements in the field of Research and Development and key initiatives taken by it in the field of R&D during the last three years as under:-

"Completed Projects with benefits:

- (1) The 1st phase for extraction of alumina from Fly ash/Partially Lateritized Khondalite(PLK) using nitric acid with CSIRO, Australia. Under optimum condition >90% efficiency has been achieved.
- (2) Up gradation of Alumina in NALCO Fly ash through bio leaching of silica and subsequent recovery of Alumina through piro/hydrometallurgical routes- continuing. Results obtained so far are promising.
- (3) Process developed for separation of vanadium sludge, a by product from plant liquor. Around 6 Ton of Vanadium sludge has been extracted using the existing facility at Alumina Refinery for test marketing.
- (4) Flocculants trial was taken up to identify better quality flocculants suitable for washers to phase out natural flocculants wheat bran, presently used in washers.
- (5) Collaborative R&D project with on Infra Red Thermography studies has helped to locate hot spots in furnaces and electrical Switchyard equipments in Alumina Refinery, to control breakdown of equipments.
- (6) Tri Calcium Aluminate(TCA) has been introduced as filter aid during filtration for improvement of flow and specific filtration rate to improve productivity.
- (7) Hydrate Seed grinder has been introduced to maintain the nucleation in precipitators. The action has reduced increased liquor productivity and reduced product alumina soda to the tune of about 200 ppm, to improve quality.
- (8) Bench scale studies completed for Development of Glass Ceramics from Red mud for utilization of red mud-a waste material.
- (9) A collaborative project for "Development and Pilot scale demonstration of process for removal of fluoride from effluent water generated in Smelter Plant using Emrion Technology" has been taken up and the same is in progress.

- (10) Project completed to find out various reasons of melt loss at Smelter for its implementation in order to reduce loss of metal and study taken up for implementation of vacuum transfer of metal for reduction of melt loss.
- (11) Collaborative R&D Project with JNARDDC titled "Bench scale studies on utilization of carbon value of spent pot lining and recovery of valuables" is completed for full utilization of spent pot lines carbon portion (SPL) and commercialized to two parties.
- (12) Use of slotted anodes and anodes with higher stub hole depth in potlines have given a benefit of approx 1 crore/month due to reduction in DC energy consumption by 100-150 KWH/T metal. The project has been successfully implemented in the plant.
- (13) With R&D input, good quality coke has been used in carbon plant. Financial benefit derived in year 13-14 is approx Rs 25-30 lakh/month compared to previous year, due to reduction in consumption of coal tar pitch and calcined petroleum coke.
- (14) Implementation of higher grain to sand ratio in Green Anode Plant 2 has resulted in improvement in anode density by 0.005 to 0.01 gm/cc.
- (15) A Probe has been developed for liquidus temperature determination of Electrolytic bath to monitor the data for further implementation in process.
- (16) Till now 26 patents were filed by NALCO. Out of the filed application 8 patents were granted to NALCO and rest are in the process of examination/publication. Till now 5 R&D process/patents have been commercialised.

Ongoing projects:

- (1) Industrial scale investigation for the fabrication of wear resistant ceramic tiles using NALCO Coal ash.
- (2) Development of a quicker and easy method for the analysis of Impurities (Fe, Si, Ca, etc) in Alumina and Aluminate Liquor using hand held spectrometer continuing.
- (3) Studies on Reduction of reactive silica in NALCO Bauxite through beneficiation methods has been continuing with encouraging results obtained so far.
- (4) Use of red mud as a Geo- polymer for construction application.
- (5) Development of ceramic proppant from Partially Lateritized Khondalite(PLK)and Fly ash-continuing with preparation of green pellets completed successfully so far.
- (6) Extraction of rare earth element from Red mud.
- (7) Extraction of aluminium from Bauxite by thermal and non thermal plasma."

II. Corporate Social Responsibility

4.2 In a brief note furnished to the Committee regarding its CSR policy, major achievements in various CSR scheme/projects and the budget allotted for CSR vis-a-vis actual amount spent on CSR activities during the last five years, NALCO have informed as under:-

"Corporate Social Responsibility (CSR) in NALCO has been an ethos to be imbibed and a commitment to be adhered to. NALCO, as a Social Responsible Business Enterprise, has always contributed towards development of its stakeholders more particularly residing in the peripheries of its plants and operational areas and also has given utmost importance to the protection of environment in which it operates. Since inception, NALCO has shown its obligation and accountability to all its stakeholders in all its operations and activities with the aim of achieving sustainable development not only in the economic dimension but also in the social and environmental dimension. This has been possible through implementation of its sound and ethical policies on CSR and environmental protection. For NALCO let all be happy is the guiding spirit (Sarve Vabantu Sukhina)."

CSR Policy:

So far as National Aluminium Company Limited is concerned, as a policy, the Company has been allocating 1% of the net profit every year since 2002-2003 for CSR activities which was enhanced to 2% of the net profit from the F.Y. 2010-11. Out of this allocable amount, 1% is spent for Peripheral Development activities as per the projects approved by Rehabilitation & Periphery Development Advisory Committees (RPDACs) chaired by the respective Revenue Divisional Commissioner for S&P Complex & M&R Complex and for others, Corporate level CSR activities. The balance 1% is spent for CSR activities through Nalco Foundation - the CSR arm of the Company upto F.Y. 2013-14.

As per provisions of Companies Act, 2013 from 2014-15 onwards, the Company is mandated to spend 2% of its average net profit during the three immediately preceding financial years to be spent under different heads stipulated under Schedule VII of the Companies Act, 2013 and NALCO is taking action to spend the 2% CSR allocated fund through Nalco Foundation and some projects directly by NALCO.

CSR Schemes / Projects:

The CSR activities of the Company encompass the following thrust areas:

- To play a catalytic role for improving the living standard and quality of life of the community through upliftment of economic status & community care

- To develop the infrastructural facility to cater to the social and economic need in vicinity of the community
- To provide better health care & health education
- To promote education & literacy
- Pollution control and environmental measures
- Promotion of sports & games, arts, crafts & culture
- To minimise (making it zero) the negative & social environment impact resulting from its economic activities
- To generate a responsible public image

Some important CSR interventions are highlighted as under:

- For bringing the tribal students to the mainstream of education, as an important CSR initiatives, 655 students from 16 periphery villages of Damanjodi sector have been sponsored for formal education in 3 residential schools viz. (i) Kalinga Institute of Social Sciences, Bhubaneswar, (ii) Koraput Development Foundation, Koraput & (iii) Bikash Vidyalaya, Koraput. Nalco Foundation has taken the responsibility for funding the total cost related to study, lodging and boarding of those students till they complete schooling.
- Four Mobile Health Units (MHUs) are being operated in collaboration with Wockhardt Foundation in periphery villages of M&R Complex, Damanjodi. Similarly, three Mobile Health Units (MHUs) are operating in Angul Sector with the help of Lions Club, Angul. Each MHU provides primary health services to the villagers include free medicines, diagnostics and awareness building through Information Education Communication (IEC) activities. From April, 2014 to March, 2015, total 2254 nos. of Health Camps (including 01 at Corporate level) have been conducted and total 106272 patients from periphery villages have been treated free of cost.
- Besides, an OPD Centre meant for Out Patient Treatment of people of periphery villages in Angul sector has started operating since July, 2014 in the S&P Complex. The Centre is functioning with a qualified Doctor, para-medical staff and free medicines provided to the patients of periphery villages. Till March, 2015, total 1425 no. of patients have availed the services.
- As regards Swachh Vidyalaya Abhiyan, NALCO has blocked 202 Schools of Angul, Koraput Districts of Odisha and Visakhapatnam District of Andhara Pradesh in MHRD website for construction of 354 toilets. Construction activities of all the Toilets have been completed.

Allocation & utilization of Funds:

Funds allocated and utilized for CSR activities through Rehabilitation & Periphery Development Advisory Committee (RPDAC) constituted as per Government of Odisha and Nalco Foundation for the last 05 years i.e. 2010-11 to 2014-15 are as under:

(Rupees in Crore)

Sl. No.	Year	Funds allocated for CSR and (% of PAT)	Funds utilized / expenditure made for CSR including expenditure on education for Peripheral village school students
01	2010-11	16.28 (2% of PAT)	16.65
02	2011-12	21.38 (2% of PAT)	34.22
03	2012-13	16.99 (2 % of PAT)	30.99
04	2013-14	11.86 (2 % of PAT)	29.00
05	2014-15	20.14 *	19.09

N.B. : * As per provisions of Companies Act, 2013, from the F.Y. 2014-15 onwards, for CSR expenditure, the Company is mandated to spend 2% of its average of net profit during the three immediately preceding financial years

PART – II**OBSERVATIONS/ RECOMMENDATIONS OF THE COMMITTEE****1. Improving the Company's ranking amongst the Indian Aluminium producing countries**

The Committee appreciate the fact that NALCO, a Navratna CPSE operating in the field of Alumina and Aluminium production, mining and power for the last 34 years, has since made India self-sufficient in respect to requirement of Aluminium and Alumina. As regards its research and development activities, the Committee are further happy to note the Company's achievements in earning five patents and in activities like extraction of alumina from fly ash, development of glass ceramics from red mud (a waste material), reduction in D/C energy consumption etc., which are eco-friendly, as well as the fact that a Corporate level R&D centre of the Company at Bhubaneswar, Odisha is in advanced stage of completion. The Committee find that NALCO has two major competitors in the domestic market i.e HINDALCO Industries Ltd. and M/s. VEDANTA Ltd. with NALCO ranking at number three. NALCO contributes about 2 percent of world alumina production and only 0.6 percent of global Aluminium production, while VEDANTA and HINDALCO contribute about 1.6 percent and 1.5 percent in Aluminium and 0.9 percent and 2 percent in Alumina respectively. It is unfortunate to note that despite being in an advantageous position and having access to the best mineral resources, NALCO falls behind its competitor domestic Aluminium producing Companies. Therefore, the Committee exhort NALCO to make all out efforts so as to reach a leading position in the market.

The Committee have been apprised that the Government of Odisha have recommended for allotment of Pottangi Bauxite Mines in favour of NALCO and the Company has already started project work of 1 million tonne at alumina refinery at Damanjodi, Odisha having project outlay of ₹ 5640 crore. The Government has also allocated Utkal 'D' & 'E' coal block mines to NALCO which has an estimated reserve of 200 million tonnes. NALCO has plans for setting up two Greenfield smelters of 5 lakh MT each at Indian and overseas locations. Notwithstanding the fact that HINDALCO is having business interest in copper & auto segments and VEDANTA has business interest in zinc, oil & gas, copper, iron ore and Aluminium from where the two companies derive more profit and in view of NALCO's ambitious plans in Greenfield ventures, allotments in Bauxite and coal mining operations and availability of proper coal linkage to them now, the Committee hope that NALCO would emerge in a much better position globally and achieve leading position domestically. At the same time, the Committee have been apprised of certain thought provoking suggestions from NALCO to facilitate faster implementation of its ambitious growth plans, for instance more powers to be vested with their Board to select a JV partner or to form a JV Company or consortium among CPSEs, etc. The Committee desire that the Ministry of Mines should apprise the Department of Public Enterprises (DPE) of these suggestions and pursue it further. The Committee, in fact, are of the strong opinion that all CPSEs including NALCO must be supported suitably so as to provide level-playing field to withstand competition from the much aggressive private sector enterprises domestically and become

globally competitive. The Committee desire to be apprised of the action taken by the administrative Ministry of NALCO on the matter.

2. Import Duty on Aluminium and Aluminium Scrap

The Committee note with serious concern that the import duties on Aluminium and Aluminium scrap are having an adverse impact on the profitability of NALCO's production business. As deposed by the Secretary (Mines), out of total Aluminium consumption in the country, 55 percent is met from Aluminium scrap and 45 percent through Aluminium, on which the import duties are 2.5 percent and 5 percent respectively, resulting in cheap imports from countries like China. Overall the price of Aluminium as per London Metal Exchange rates has also fallen in the last few years. These factors have led to NALCO and other domestic players running in loss as well as losing the drive to increase their capacity utilization since the investments on the same is not likely to lead to profits. As a result, the Companies including NALCO are going for cost-cutting measures as well as retrenchments and laying-off workers to survive. The Committee feel that apart from survival of Aluminium industry, this is an alarming scenario for factory workers too, and hence an urgent action from the Government is warranted. They have been given to understand that the Ministry of Mines has already been pursuing the matter to increase import duty to 10 percent on both Aluminium and Aluminium scrap with the Ministry of Finance as well as the Prime Ministers Office, on the basis of the argument that duty on all other non-ferrous metal scrap like Copper, Nickel, Lead, Tin and Zinc is at par with the prime metal. The Committee agree with the move in the interest of

Aluminium Companies like NALCO since their domestic market must not be dominated by cheap metal and metal scrap imports. The Committee desire the Ministry of Mines to convey their recommendation to the Ministry of Finance and PMO. The Committee desire to be apprised of the progress on the matter in due course.

3. Filling up of vacant posts in the Board of Directors

The Committee note that out of the 16 posts of Board of Directors in NALCO, eight posts of part-time non-official (Independent) Directors are lying vacant. The persons to fill these posts are to be appointed by the Government of India through a Search Committee. Although, the Ministry is well aware of the clear-cut guidelines of the Department of Public Enterprises (DPE) for initiating the process well in advance for filling up of vacant posts, ironically, the Committee note that four posts of Directors in the Board have been lying vacant for more than a year. Since non-appointment of requisite number of non-official Directors is violation of the Companies Act 2013, the listing agreement with Stock Exchanges and DPE Guidelines on Corporate Governance, there appears to be an evident neglect and delay on the part of the Government in filling up the vacant posts. The Committee opine that key positions in NALCO should not be left vacant for a long time as it may jeopardise not only the decision making process but also the image of the Company globally and consequently will have adverse impact on the performance of the Company. The Committee were later informed that the Government has since sent a proposal for appointment of five candidates out of the current eight vacancies. The Committee emphasise that all the vacant posts in the Board of the Company be filled up immediately and that the Government should take advance action to fill up the

anticipated vacancies in the Board so that new incumbents are ready to take up the positions as soon as the vacancies arise.

4. Manpower Shortage

The Committee are disappointed to note that despite being given the operational freedom as per their Navratna status, NALCO has allowed a substantial number of vacancies in both executive and non-executive categories to continue. The Committee find that in NALCO there is around 15.2 percent shortage of manpower in the Executive category and 18.45 percent shortage in the non-executive category. One of the reasons stated by the Company for the same is the decision of its Board to operate at 90 percent of its sanctioned strength so as to contain the labour cost. Even going by this parameter, the vacancies should have been kept at 10 percent of the total strength, which is not the case presently. The Committee note the measures being taken by the Company for filling up the vacancies which include initiating action for recruitment of 110 Graduate Engineer Trainees (GETs) & 20 Management Trainees (MTs), recruitment of 27 vacancies in Executive Cadre, 17 doctors, etc. NALCO is further taking action to engage 235 land oustees out of Substantially Affected Persons (SAP). The Committee are of the view that delay in filling of the vacancies would not only adversely affect the production output of the Company, but also the aspirations of the local tribal population as they feel that there might be resentment amongst the local community due to delay in filling up the vacancies from SAPs. In the light of the above, the Committee desire that action for filling up of the vacant positions, especially in operational areas, must be expedited.

5. Improving Financial and Physical performance

The Committee note that although the Net Sales of the Company have constantly increased since 2010-11, except in 2013-14, when the decrease in the price of Aluminium metal impacted its sale, the profits of the Company have not increased commensurately. Interestingly, the Company has been able to achieve profit of ₹ 2118 crore in 2014-15 which is nearly three times higher than the target of ₹ 791 crore. In this connection, the Committee have been apprised that the profits of NALCO are not solely dependent on their Net Sales. Amongst other things, the turnover and Net Profit of the Company is also dependent on realization from domestic and export sales, prices of the metal at London Metal Exchange (LME), operating costs, input prices, expenses on maintenance and other administrative expenses of the Company. It has been argued that while NALCO is purely an Aluminium metal based Company, its competitors HINDALCO and VEDANTA are having business interest in zinc, oil & gas, copper, iron ore, etc., which attributes to larger profits in these segments for these Companies. The Committee also note that NALCO took a conscious strategic decision to reduce metal production/ sale through coal-fired power generation as it was run through imported coal which was not cost effective. Various cost-cutting measures introduced by NALCO to increase its profits have been noted by the Committee. They further note that although there has been a constant increase in the volume of exports of Calcined Alumina and Aluminium, since 2010-11, there was a sudden decline in exports during 2014-15, resulting from lesser production of Alumina & Aluminium metal and the Company's higher focus on sale of metal in domestic market, where realization is more. The Committee also note that though the MoU rating of the

Company in 2013-14 declined to 'Very Good' from 'Excellent' in 2012-13, NALCO is expecting to achieve 'Excellent' rating in 2014-15, with regular and effective monitoring by the administrative Ministry, linkage of Coal, active pursuing of its expansion plans in the Aluminium sector, diversification in the field of wind power, solar power, nuclear power, caustic soda projects, etc. as well as by setting up of two Greenfield smelters at Indian and overseas locations to take advantage of possible market opportunities. In this background, the Committee hope that NALCO would now be in a position to be able to improve its performance substantially. They desire to be apprised of the financial performance of the Company at the action taken stage, resulting from these plans. They would also like to be apprised of the outcome of NALCO's proposal to engage a globally reputed consultant to help in redefining its vision and corporate plan under the changed business scenario, and the targets fixed, if any, accordingly in future.

6. Enhancing Capacity Utilisation

From the details of the targets of capacity utilization and actual production from 2010-11 till date, the Committee note that none of the products of NALCO could achieve the target capacity utilization in any year. Among the factors cited by NALCO for the low capacity utilization were the Hud-hud cyclone, incessant rains during monsoon, restriction in area of mining imposed by the Ministry of Environment & Forests for Stage-I forest clearance, receipt of poor quality of coal, labour problems, disturbances in power supply due to cyclone/rains, etc. which were stated to be beyond the control of the

Company. The Committee feel that NALCO could have achieved higher capacity utilization had they taken measures within their control for instance timely maintenance of its machine parts. The Secretary, Ministry of Mines, however, apprised the Committee during evidence that the capacity utilization of the Company was deliberately kept low at 71 percent to optimize realization keeping in view the sluggish demand for the metal, depressed market situation, etc. This stand was supported further by citing the fact that the two major competitors of NALCO in Aluminium market viz. HINDALCO and VEDANTA could utilize only 62 percent and 38 percent respectively of their installed capacity. Nonetheless, the Committee observe that one factor for the two competitors remaining on top could be that these companies have expanded their installed capacities aggressively in the last few years. The installed capacity of HINDALCO is 13.54 lakh MT and that of VEDANTA is 23.15 lakh MT while that of NALCO is only 4.60 lakh MT. In this backdrop, the Committee feel that there is a pressing need for the Company to increase its capacity. They have been informed that in order to expand their capacity, NALCO is actively pursuing its expansion plans in Aluminium sector by setting up two Greenfield smelters of the capacity of 5 lakh MT one each at an Indian and one overseas location, to take advantage of possible market opportunities in future. The refinery at Koraput (Damanjodi) is also planned for expansion. Further, the Government has allocated Utkal 'D' & 'E' coal blocks and NALCO has also obtained the mining lease of Pottangi Bauxite deposits in Odisha. With these positive developments, the Committee expect that the capacity utilization of the Company would be enhanced substantially in the near future.

They would like to be apprised of the enhancements of capacity of NALCO envisaged in the next five years.

7. Delays leading to production loss

The Committee observe that the Company has a well documented plan for inspection and maintenance of all its major equipment. They also have a Preventive Maintenance Planning System (PMPS) and Condition Based Maintenance System (CBS) through which maintenance activities are being planned and executed periodically. There is also an inspection by a third competent agency for Non Destructive Testing (NDT) every year. However, despite so many mechanisms in place, the Company could not take up the replacement of ageing LHS wire of cable belt in time, which was scheduled for November 2014 following the regular inspections since 2013 by the National Institute of Rock Mechanics (NIRM), a Government agency. The Company also failed to build up enough Bauxite stock at the Refinery which could have been used during the planned shut-down in November 2014 to replace the LHS wire. This resulted in 2.4 percent production loss out of total shortfall of 13.3 percent against the targeted production in FY 2014-15. The Committee note that the shut-down for replacement had to be delayed for five months i.e. upto April 2015 to build up sufficient Bauxite stock to run the refinery. NALCO, however, attributed the delay and loss principally to the Hud-hud Cyclone that struck in October 2014 paralysing the power transmission lines in the Mines. The Committee are not convinced with the reasons put-forth by the Company as the replacement of LHS wire was planned well in advance on the basis of

report of NIRM which had inspected the LHS wire regularly since 2013. The Committee, therefore, advise that in future proper inspection and maintenance of machinery and equipment should be done at regular intervals and necessary arrangements for replacement or planned shut down should be carried out in time to mitigate avoidable losses to the Company. Further, the Committee are also unhappy to note the delay by NALCO in renewing the mining lease of North Block of Panchpatmali Bauxite Mines, which had expired in November 2012, as well as for its failure to get the requisite clearances from the Ministry of Environment & Forest in time. While the Prime Ministers Office is already been seized of the matter concerning speedier forest clearances, the Committee feel that timely action is required both by the Centre and State Governments to pursue the matter of having a 'deemed' extension of mine lease in favour of Companies like NALCO which are lease holders of a mine for a long period of time so that the production could be continued till the necessary procedural formalities are completed and the lease is renewed. The Committee desire the Ministry to examine the matter and report back.

8. Value addition

The Committee note that in line with its expansion plans, over the years, apart from regular ingots, NALCO has added various value-added products like wire rods, billets, strip castings and rolled products at smelter and special grade hydrate at its Alumina refinery. During 2014-15, the total production of the value added products was 37 percent of the total Aluminium production of NALCO. The

Committee have been informed that development of value added products is an ongoing process and the various grades alloys and products are developed based on the demand and specific requirements of the customers. The Committee, however, note that the Company after observing the price trend in London Metal Exchange (LME), limited availability of linkage coal, decided to restrict the smelter metal capacity limiting to power generation through use of linkage Fuel Supply Agreement (FSA) coal only. As a result, during the month of May-June 2013, 198 Electrolytic pots were taken out of service which impacted the cast metal production and accordingly the volume of various value-added products was reduced keeping eye on realization from individual products. During their oral evidence, the Secretary (Mines) informed the Committee that NALCO can do much better to achieve global benchmarks by focusing on more value added products, among other things. The Committee have been informed that NALCO has formed a joint venture with Odisha Industrial Infrastructure Development Corporation (IDCO) to boost its downstream in Aluminium by setting up an Aluminium Park at Angul, Odisha. The Committee hope that with the formation of joint venture with IDCO and setting up of an Aluminium Park, the Company would enhance its value addition in the field of Aluminium alloys and rolled products and would like to be apprised about the developments in this regard.

9. Diversification of activities

As Aluminium production is a high energy intensive activity, NALCO has ventured into power generation. In this context, the Company has

already commissioned a 50.4 MW Wind Power project at Gankota, Andhra Pradesh, a 47.6 MW Wind Power project at Jaisalmer, Rajasthan and a 260 KWP rooftop solar power project in Bhubaneswar, Odisha. Further, the Committee note that NALCO has future plans for diversification of its operations in Wind Power, Solar Power, Nuclear Power etc. As per the plan, the Company is due to set up a 100 MW Wind Power project at the cost of ₹700 crore, at suitable locations in India. Since nuclear power will be the best source of energy in future, the Company is also forming Joint Venture with Nuclear Power Corporation of India Limited (NPCIL) for development of nuclear power projects, and Kakrapar Atomic Power Project has been selected as the first Joint Venture project of the NALCO. However, NALCO has not been able to contribute its equity portion as the project is yet to be allotted to the JVC by the Government of India. In the Caustic Soda Project, the Company has planned to set up 2.7 LPA Caustic Soda plant including a 100 MW captive power plant at Dahej in Gujarat in Joint Venture with Gujarat Alkalies & Chemical Ltd. (GACL) and agreement has already been signed with GACL in June 2015.

The Committee, have been apprised that diversification in wind power is a compulsion due to the Green Energy Regulation. As per the Regulation, energy has either to be produced or purchased by the Company. Since, production of power is comparatively cheaper, NALCO has diversified most of its activities in power which are stated to be providing good returns of 15 - 16 percent too. Further, the thermal power project which is being used for captive purpose will supplement the power needs of the Company. With the fast depleting coal and other mineral resources, the Committee opine that the

Company's diversification plans in the power sector, which are profitable too have become necessary for its own survival. They desire to be provided with the progress on the envisaged projects of NALCO at the action taken stage.

10. Redefining the Company's Vision Document

The Committee note that NALCO had prepared a Vision Document plan in 2009, which addressed the course of operation to reach new markets abroad specifically in Indonesia & Iran. Feasibility study was also carried out for a 0.5 Million Tonne smelter in two phases alongwith a captive power plant of 1250 MW at an estimated cost of ₹ 16,500 crore. However, the plan could not materialize due to delay in coal mining project identified by NALCO for sourcing coal. Further, due to geo-political reasons, the project with Iran got shelved too. The volatile market conditions and continued slump in the market for Aluminium compelled NALCO to revisit the options to establish smelting operations in regions with cheap source of energy. With positive developments in Iran, NALCO has stated to have renewed its interest in Iran, including Indonesia and have also shortlisted Oman as a potential destination for which studies to ascertain the economic feasibility are underway. In the given scenario, the Committee are glad to learn that NALCO has decided to redefine its Vision Document plan to align with present day business environment and to leverage its strengths in the business of Aluminium production and power generation. As has been brought in an earlier observation, NALCO is

mulling over engaging an expert of global repute for the same. The Committee agree that due to new challenges faced in the wake of considerable changes in the business environment in the country and impact of industrial activity, difficulties in land acquisition, growing gap between coal requirements and availability, legislative changes in land acquisition and R&R, the changed Companies Act, etc; the Corporate Plan of NALCO needs to be revisited so that potential markets both within the Country and abroad are not lost. The Committee, therefore, desire that an analytical comparative study on performance of its major competitors *viz.* HINDALCO and VEDANTA should be undertaken before revisiting and finalizing the Vision Document plan.

11. Corporate Social Responsibility

The Committee note that funds allocated for CSR by the Company are spent through the NALCO Foundation. Some CSR projects are taken up directly by the Company too. They however, observe from the Expenditure Statement submitted to them that NALCO has been spending more than the CSR allocations on its CSR activities every year since 2010-11. It is not clear as to how CSR expenditure is over and above the CSR allocations. The Committee require a clarification on the same. They further note that the CSR activities have been mostly carried out in the local area of operation of NALCO. Also the Company has spent CSR funds on activities such as promotion of sports & games, arts, crafts & culture etc. which do not seem to be in line with spirit of CSR activities, that is, is to help the poorest among the poor, particularly those in the remotest areas where the

Government's reach is minimal. The Committee also observe that the CSR activities are being carried out in the local area, mainly for peripheral development activities on projects approved by the Rehabilitation & Periphery Development Advisory Committees (RPDACs). They have been informed that with the allocation of Pottangi Bauxite Mine to NALCO and subsequent starting of IMT Alumina refinery at Damanjodi, Odisha, NALCO would be spending additional ₹300 crore under CSR in the adjoining areas. In view of the fact that NALCO is a Navratna Company with its products being sold in domestic market all over India, the Committee opine the CSR activities of NALCO should not be confined to the local area alone. The Committee, therefore, desire that the Company may also carry out its CSR activities in other parts of the country where it does not have its presence. Further, CSR activities should be carefully selected so as to give priority to the poorest of the poor and the most backward areas of the country.

New Delhi
25 February, 2016
6 Phalguna, 1937 (S)

SHRI SHANTA KUMAR
Chairperson,
Committee on Public Undertakings

**STATEMENT SHOWING THE DETAILS OF NET SALES, VALUE ADDED, PROFIT BEFORE TAX,
PROFIT AFTER TAX, ETC. OF NALCO DURING THE LAST 5 YEARS (2010-11 TO 2014-15)**

(Rupees in Crore)

Financial Year	Net Sales			Value Added*			Profit Before Tax			Profit After Tax		
	Target	Actual	Variation (%age)	Target	Actual	Variation (%age)	Target	Actual	Variation (%age)	Target	Actual	Variation (%age)
2014-15	6780	7262	7	3772	4568	21	791	2113	167	557	1322	137
2013-14	7342	6649	9	3786	3766	1	972	918	6	657	642	2
2012-13	6739	6809	1	3479	3442	1	937	905	3	633	593	6
2011-12	6224	6500	4	3514	3556	1	1367	1198	12	913	850	7
2010-11	6048	5959	1	3815	3625	5	1680	1524	9	1111	1069	4

* Value added = Net sales less material cost (Raw material, coal & fuel oil) and adjustment for accretion/ depletion of Finished Goods, Semi finished goods and in process stock.

**STATEMENT SHOWING THE DETAIL OF INSTALLED CAPACITY, ACTUAL PRODUCTION , TARGET CAPACITY UTILIZATION, ETC OF
VARIOUS PRODUCTS MANUFACTURED BY NALCO DURING THE LAST FIVE YEARS (2010-11 TO 2014-15)**

(in Metric Tonnes)

Name of the Product/ Year	BAUXITE				ALUMINA HYDRATE				ALUMINUM			
	Installed Capacity	Target for Capacity Utilization (in%)	Actual Production	Capacity Utilization (Product/Service) (in%)	Installed Capacity	Target for Capacity Utilization (in%)	Actual Production	Capacity Utilization (Product/Service) (in%)	Installed Capacity	Target for Capacity Utilization (in%)	Actual Production	Capacity Utilization (Product/Service) (in%)
1	2	3	4	5	6	7	8	9	10	11	12	13
2015-16 (Sept 2015)	68,25,000	85.00	28,38,660	83.20	22,75,000	88.00	9,20,600	81.00	4,60,000	99.00	1,79,874	78.2
2014-15	68,25,000	97.00	57,39,120	84.09	22,75,000	94.95	18,51,000	81.36	4,60,000	68.13	3,27,070	71.1
2013-14	63,00,000	102.38	62,92,677	99.88	21,00,000	102.38	19,25,000	91.67	4,60,000	88.04	3,16,492	68.80
2012-13	63,00,000	97.62	54,19,391	86.02	21,00,000	97.62	18,02,000	85.81	4,60,000	93.48	4,03,384	87.69
2011-12	63,00,000#	95.24	50,02,626	90.14	21,00,000##	95.24	16,87,000	91.81	4,60,000	95.22	4,13,089	89.80
2010-11	48,00,000	103.75	48,23,908	100.50	15,75,000	104.44	15,56,000	98.79	4,60,000	94.57	4,43,597	96.43

(in Million Units)

Name of the Product/ Year	THERMAL POWER				WIND POWER I				WIND POWER II			
	Installed Capacity (in Mega Watt)	Target for Capacity Utilization (in%)	Actual Production	Capacity Utilization (Product/Service) (in%)	Installed Capacity (in Mega Watt)	Target for Capacity Utilization (in%)	Actual Production	Capacity Utilization (Product/Service) (in%)	Installed Capacity	Target for Capacity Utilization (in%)	Actual Production	Capacity Utilization (Product/Service) (in%)
	14	15	16	17	18	19	20	21	22	23	24	25
2015-16 (Sept 2015)	1,200	99.00	2,843	54.00	50.4	87.00	66.99	30.38	47.6	97.00	46.54	23.28
2014-15	1,200	63.88	5,131	64.36	50.4	22.65	114.92	26.03	47.6	15.59	66.04	15.84
2013-14	1,200	81.74	4,989	62.06	50.4	20.38	115.64	26.19	47.6**	8.31	34.33**	14.26**
2012-13	1,200	84.30	6,076	78.81	50.4*	-	15.35*	13.8*	-	-	-	-
2011-12	1,200	92.29	6,200	79.83	-	-	-	-	-	-	-	-
2010-11	1,200	96.87	6,608	91.73	-	-	-	-	-	-	-	-

Capacity of Mines has been increased from 48.0 to 63.0 lakh TPY in August, 2011. Further, Fixed Long Distance Conveyor and Semi Mobile Crushing Plant are under commissioning. ## Capacity of Refinery has been increased from 15.75 to 21.0 lakh TPY in September, 2011.*Commissioned in December, 2012. **Fully Commissioned in January, 2014 (partly commissioned in May-June, 2013).

MT- Metric Tonne, MU- Million Unit, MW Mega Watt.

COMMITTEE ON PUBLIC UNDERTAKINGS
(2015-16)

MINUTES OF THE SEVENTH SITTING OF THE COMMITTEE

The Committee sat on Wednesday, the 9th September 2015 from 1100 hrs to 1230 hrs in Committee Room '139', First Floor, Parliament House Annexe, New Delhi.

PRESENT

Shri Shanta Kumar - Chairperson

MEMBERS

Lok Sabha

2. Shri Lal Krishna Advani
3. Shri Ramesh Bais
4. Dr. Kambhampati Haribabu
5. Shri Prahlad Patel
6. Prof. Saugata Roy
7. Shri Sushil Kumar Singh

Rajya Sabha

8. Shri Narendra Budania
9. Shri Praful Patel
10. Shri Rangasayee Ramakrishna
11. Shri C.M. Ramesh

SECRETARIAT

1. Shri M.C. Sharma Joint Secretary
2. Shri G.C. Prasad Deputy Secretary

WITNESSES

NATIONAL ALUMINIUM COMPANY LIMITED

1. Shri T.K. Chand CMD
2. Shri N. R. Mohanty Director (P&T)
3. Shri S.C. Padhy Director (HR)
4. Shri K.C. Samal Director (Finance)
5. Shri V Balasubramanyam Director (P)
6. Ms. Soma Mondal Director (Commercial)

2. At the outset, the Chairperson welcomed the representatives of National Aluminium Company Limited (NALCO) to the sitting. He then drew the attention of the representatives to direction 55(1) of the Directions by the Speaker regarding confidentiality of proceedings of the Committee during deposition before the Parliamentary Committees.

3. Thereafter, the CMD, NALCO outlined in detail the activities and achievements of the Company through power point presentation. The presentation highlighted various aspects of the functioning of the Company, viz., the organizational structure of NALCO, various indicators vis-à-vis physical and financial performance initiatives being taken by the Company to ensure production and supply of alumina and aluminum, initiatives being taken by the Company with respect to modernization and technological upgradation, mining of bauxite, commissioning of captive power plants, CSR expenditure etc.

4. After the presentation, the members raised queries on a wide range of issues pertaining to the functioning of the Company which include NALCO's consistent failure to achieve production targets, prospects of increasing production in future, lower expenditure on CSR, etc. The representatives of NALCO responded to most of the queries. In respect of points for which information was not readily available with them, the witnesses assured the Committee that written replies in respect of those points will be furnished at the earliest.

The representatives of NALCO then withdrew.

A verbatim record of the proceedings has been kept separately.

The Committee then adjourned.

COMMITTEE ON PUBLIC UNDERTAKINGS
(2015-16)

MINUTES OF THE TWELFTH SITTING OF THE COMMITTEE

The Committee sat on Wednesday, the 28th October 2015 from 1100 hrs to 1330 hrs in Committee Room '62', First Floor, Parliament House, New Delhi.

PRESENT

Shri Shanta Kumar - Chairperson

MEMBERS

Lok Sabha

2. Shri Lal Krishna Advani
3. Shri Biren Singh Engti
4. Dr. Kambhampati Haribabu
5. Shri Ram Sinh Rathwa
6. Shri Rayapati Sambasiva Rao
7. Prof. Saugata Roy
8. Shri Sushil Kumar Singh

Rajya Sabha

9. Shri Narendra Budania
10. Shri Rangasayee Ramakrishna
11. Shri C.M. Ramesh
12. Shri Tapan Kumar Sen

SECRETARIAT

- | | | |
|----|---------------------|------------------|
| 1. | Smt. Sudesh Luthra | Joint Secretary |
| 2. | Smt. Anita B. Panda | Director |
| 3. | Shri G.C. Prasad | Deputy Secretary |

WITNESSES

Representatives of the Ministry of Corporate Affairs

- | | | |
|----|-------------------|----------------------|
| 1. | Shri Tapan Ray | Secretary |
| 2. | Shri Pritam Singh | Additional Secretary |

**Representatives of the Ministry of Heavy Industries & Public Enterprises
(Department of Public Enterprises)**

- | | | |
|----|-----------------------|----------------------|
| 1. | Shri Ameising Luikham | Secretary |
| 2. | Dr. Madhukar Gupta | Additional Secretary |

Representatives of the Ministry of Mines

- | | | |
|----|--------------------------|----------------------|
| 1. | Shri Balvinder Kumar | Secretary |
| 2. | Shri R. Sridharan | Additional Secretary |
| 3. | Shri Nikunja Bihari Dhal | Joint Secretary |
| 4. | Shri T.K. Chand | CMD, NALCO |

- | | | | | |
|----|------|-------|------|------|
| 2. | **** | ***** | **** | **** |
| 3. | **** | ***** | **** | **** |

(The representatives of DPE and MCA then withdrew.)

The representatives of the Ministry of Mines were then called in.

4. The Chairperson welcomed the representatives of the Ministry of Mines to the sitting and drew their attention to Direction 55(1) of the Directions by the Speaker regarding confidentiality of evidence before the Parliamentary Committees.

5. The representatives of the Ministry of Mines then made a power point presentation with respect to various activities being undertaken by NALCO. Highlights of the presentation were production of Bauxite, Alumina and Aluminium, diversification into production of renewable energy like Wind Power and Solar Power as per guidelines given by the Government, financial performance, capacity utilization, marketing and expansion, position of import/export, etc.

6. The Members raised queries on a wide range of issues pertaining to the functioning of the Company which include NALCO's failure to achieve production targets, low capacity utilization performance of NALCO vis-a-vis private Companies, shortage of manpower etc. The representatives of NALCO responded to the queries. In respect of points for which information was not readily available with them, the witnesses were asked to furnish the written replies to the Secretariat.

(The witnesses then withdrew)

A verbatim record of the proceedings has been kept separately.

The Committee then adjourned.

COMMITTEE ON PUBLIC UNDERTAKINGS
(2015-2016)

MINUTES OF THE SEVENTIETH SITTING OF THE COMMITTEE

The Committee sat on Thursday, the 21st January 2016 from 1500 hrs to 1620 hrs in Committee Room "C", Ground Floor, Parliament House Annexe, New Delhi.

PRESENT

Prof. Saugata Roy - Acting Chairperson

MEMBERS

Lok Sabha

2. Shri Lal Krishna Advani
3. Shri Baijayant Panda
4. Shri Ram Sinh Rathwa
5. Shri B. Senguttuvan

Rajya Sabha

6. Shri Narendra Budania
7. Shri Rangasayee Ramakrishna
8. Shri Tapan Kumar Sen

SECRETARIAT

1. Smt. Sudesh Luthra - Joint Secretary
2. Smt. Anita B. Panda - Director
3. Shri G.C. Prasad - Deputy Secretary

LIST OF WITNESSES

1. Shri S. Girish Kumar - Chairman cum Managing Director, HPFMCL
2. Shri M. Ramesh - Unit Head
3. Shri S. Kanagaraju - Deputy Manager (HRD)

2. In the absence of the Hon'ble Chairperson, the Committee chose Prof. Saugata Roy, Member of the Committee to chair the sitting in term of rule 258(3) of the Rule of Procedure & Conduct of Business in Lok Sabha.

3. At the outset, the Hon'ble Chairperson welcomed the Members to the sitting of the Committee. The Committee then took for consideration and adoption draft Report on the subject National Aluminium Company Limited (NALCO). The Committee adopted the Report with few modifications at Para 1 & 4 of Part II of the Report as given at Appendix.

***(The representatives of Hindustan Photo Films Mfg. Co. Ltd.
were then ushered in)***

4.	****	*****	****	****
5.	****	*****	****	****
6.	****	*****	****	****

(The witnesses then withdrew).

***A verbatim record of the proceedings has been kept separately.
The Committee then adjourned.***

**** not related to the Report

Appendix

(See para 2 of the Minutes dated 21.01.2016)

Sl. No.	Page No.	Recommendation Para No.	Modifications
(i)	(ii)	(iii)	(iv)
1	53	1	<p><i>For "While the Committee expect NALCO to continue scaling new heights, it is unfortunate to note that despite being in an advantageous position and having access to the best mineral resources, NALCO falls behind its competitor domestic Aluminium producing Companies. NALCO has still to reach the no. 1 position among its competitor Indian Aluminium producing Companies in the country. Therefore, the Committee desire that NALCO should make an all out effort to reach a leading position in the matter.</i></p> <p><i>The Committee find that NALCO has two major competitors in the domestic market i.e HINDALCO Industries Ltd. and M/s. VEDANTA Ltd. with NALCO ranking at number three. NALCO contributes about 2 percent of world alumina production and only 0.6 percent of global Aluminium production, while VEDANTA and HINDALCO contribute about 1.6 percent and 1.5 percent in Aluminium and 0.9 percent and 2 percent in Alumina respectively."</i></p> <p><i>Read "The Committee find that NALCO has two major competitors in the domestic market i.e HINDALCO Industries Ltd. and M/s. VEDANTA Ltd. with NALCO ranking at number three. NALCO contributes about 2 percent of world alumina production and only 0.6 percent of global Aluminium production, while VEDANTA and HINDALCO contribute about 1.6 percent and 1.5 percent in Aluminium and 0.9 percent and 2 percent in Alumina respectively. It is unfortunate to note that despite being in an advantageous position and having access to the best mineral resources, NALCO falls behind its competitor domestic Aluminium producing Companies. Therefore, the Committee exhort NALCO to make all out efforts so as to reach a leading position in the market."</i></p>
2	57	4	<p><i>Add the following in the first line</i></p> <p><i>'The Committee are disappointed to note that despite being given the operational freedom as per their Navratna status, NALCO has allowed a substantial number of vacancies in both executive and non-executive categories to continue.'</i></p> <p><i>Delete the last five lines in the para and Add</i></p> <p><i>'The Committee are of the view that delay in filling of the vacancies would not only adversely affect the production output of the Company, but also the aspirations of the local tribal population as they feel that there might be resentment amongst the local community due to delay in filling up the vacancies from SAPs. In the light of the above, the Committee desire that action for filling up of the vacant positions, especially in operational areas, must be expedited.'</i></p>