



**National Aluminium Company Limited**

(A Government of India Enterprise)

Regd. Office : NALCO BHAWAN, Plot No. P/1,  
Nayapalli, Bhubaneswar - 751 013 (Orissa)

**NOTICE**

Notice is hereby given that the 22nd Annual General Meeting of the Company will be held on Monday, the 29th September, 2003 at 11.00 A.M. at NALCO BHAWAN, Plot No. P/1, Nayapalli, Bhubaneswar – 751 013 to transact the following business :

**ORDINARY BUSINESS :**

1. To receive, consider and adopt the Directors' Report, audited Balance Sheet as on 31st March, 2003 and the Profit & Loss Account for the year ended 31st March, 2003 together with the reports of the Auditors thereon.
2. To declare dividend.
3. To appoint Directors in place of those retiring.

**SPECIAL BUSINESS**

4. Fixation of remuneration of Statutory Auditors.

To consider and if thought fit, to pass the following resolution as an ordinary resolution with or without modification(s).

"RESOLVED THAT pursuant to sub-clause (aa) of Section 224(8) of the Companies Act, 1956 as amended, the Board of Directors of the Company be and is hereby authorised to fix a suitable remuneration for the Statutory Auditors of the Company for the financial year 2003-04 as may be mutually agreed upon between the Board of Directors and the Statutory Auditors of the Company, on their appointment by the Comptroller & Auditor General of India (C&AG)."

By order of the Board

**(K. N. RAVINDRA)**  
**COMPANY SECRETARY**

Place : Bhubaneswar  
Date : 00.00.2003

**Notes:**

- (a) Explanatory Statement pursuant to Section 173(2) of the Companies Act, 1956, in respect of item No. 4 set out above is annexed hereto.
- (b) A MEMBER ENTITLED TO ATTEND AND VOTE AT THE MEETING IS ENTITLED TO APPOINT A PROXY TO ATTEND AND VOTE INSTEAD OF HIMSELF. SUCH PROXY NEED NOT BE A MEMBER OF THE COMPANY. PROXIES IN ORDER TO BE EFFECTIVE MUST BE RECEIVED BY THE COMPANY NOT LESS THAN FORTY-EIGHT HOURS BEFORE THE COMMENCEMENT OF THE MEETING. A BLANK PROXY FORM IS ENCLOSED.
- (c) The Register of Members and Share Transfer Books of the Company will remain closed from 2nd September, 2003 to 9th September, 2003 (both days inclusive) as notified in the press.
- (d) If dividend on shares as recommended by the Board of Directors is approved at the Meeting, payment of such dividend will be made within 30 days of its declaration to those shareholders, whose names appear :
  - i) as Beneficial Owners as at the end of the business on 1st September, 2003 as per the beneficial owners position to be downloaded by NSDL & CDSL in respect of the shares held in the electronic form and
  - ii) as members in the Register of Members of the Company, after giving effect to all valid share transfers in physical form lodged with the Company on or before 1st September, 2003.

- (e) Details of Directors seeking re-appointment in this Annual General Meeting are attached separately to the Notice.
- (f) Members physically holding shares, are requested to notify immediately, change in their address specifying it in block letters with PIN CODE and/or change in their Bank particulars, if any, to the Registered Office of the Company, quoting their Folio Number. Members holding shares in electronic form are requested to notify their change of address and/or bank particulars along with 9 digit MICR Code to their respective Depository Participants only, so that the same can be printed on the dividend warrants to protect the members from any loss by way of fraud/forgery.
- (g) Members attending the meeting are requested to bring copies of their Annual Reports since it may not be possible on the part of the Company to supply additional copies at the meeting.
- (h) Members holding shares and debentures (in case the member is also a debenture holder), in physical mode, in identical order of names in more than one folio are requested to write to the Company's Registered Office enclosing their share/debenture certificates to consolidate their holdings under one folio separately for shares and for debentures, so that multiple correspondence/despatch of multiple dividend/interest warrants can be avoided.
- (i) As per the provisions of the Companies Act, 1956, facility for making nominations is now available to shareholders and debenture holders in respect of the shares and debentures held by them. In case, shares/debentures are held in electronic form registration of nomination has to be done with the respective Depository Participants only without referring the matter to the Company. Nomination Forms (Form 2B) if needed, can be obtained from the Registered Office of the Company.
- (j) The Company provides the facility of centralised ECS (Credit Clearing) to all shareholders, holding shares in electronic and physical forms, presently residing in the following 15 designated centers of Reserve Bank of India for payment of dividend as per Notification No. F.No.5/9/99-CL.V; General Circular No. 5/2002, dtd. 01.03.2002 of Department of Company affairs :

Ahmedabad, Bangalore, Bhubaneswar, Chandigarh, Chennai, Guwahati, Hyderabad, Jaipur, Kanpur, Kolkata, Mumbai, Nagpur, New Delhi, Patna and Thiruvananthapuram.

Shareholders holding shares in the physical form, who wish to avail ECS facility, may authorize the Company with their ECS mandate in the prescribed form for payment of dividend through ECS on or before 1st September, 2003. A blank ECS Bank Mandate form is attached for use by such shareholders. This form can also be downloaded from the Company's website [www.nalcoindia.com](http://www.nalcoindia.com). The mandate given by the shareholder would be used for all future payments unless amended/withdrawn.

Shareholders holding shares in electronic form, residing in the above 15 designated centers of Reserve Bank of India, may please note that the Company will consider 9 digit MICR Code along with Bank particulars, as downloaded by their respective Depositories, for payment of dividend through ECS.

- (k) Members holding shares in electronic form may please note that their bank details including 9 digit MICR Code as downloaded by the respective Depositories to the Company will be printed on their dividend warrants/used for making payment of dividend through ECS as per the applicable regulations of the Depositories and the Company will not entertain any direct request from such members for change/deletion of such bank details. However, if there is any change in their Bank particulars and/or change in address after the date of download of beneficial owners position by the Depositories but before the date of despatch of dividend warrant/Demand Draft, the Company may consider such requests provided that such requests are received through their respective Depository Participants, duly certified by them. Further, instructions, if any, already given to the Company by them in respect of shares held in physical form will not be automatically applicable to the dividend paid on shares held in electronic form. Members may therefore give instructions regarding particulars of their bank accounts and address in which they wish to receive dividend, to their respective Depository Participants only.
- (l) Members, who have not yet surrendered the old Pre-Capital Restructured share certificates (issued prior to the Record Date, i.e. 22.03.1999) are requested to surrender the same to the Company immediately to enable the Company to send the corresponding new series of share certificates and debenture certificates and/or cash refunds as per the Capital Restructuring Scheme of the Company effected on 26.03.1999.
- (m) Pursuant to the provisions of Section 205A(5) of the Companies Act, 1956, dividend from the financial year 1995-96 onwards and debenture interest from 1999-2000 onwards, which remain unpaid or unclaimed for a period of seven years will be transferred by the Company to the Investor Education and Protection Fund established by the Central Government pursuant to Section 205C of the Companies Act, 1956. The unpaid or unclaimed dividend for the financial year 1995-96 remaining at the credit of the Unpaid Dividend Account of the Company is due for transfer to the aforesaid Fund on or before 27.02.2004. Members who have not so far encashed their dividend warrants are requested make a claim by writing to the Company. No claims shall lie against the Fund or the Company in respect of individual amounts which were unclaimed and unpaid for a period of seven years from the dates that they first became due for payment and no payment shall be made in respect of any such claims.

## ANNEXURE TO NOTICE

### Explanatory Statement pursuant to Section 173(2) of the Companies Act, 1956.

#### Item No. 4 :

As per the amended Section 619(2) of the Companies Act, 1956 Auditors of a Government Company are appointed or re-appointed by the Comptroller and Auditor General of India (C&AG).

As per sub-clause (aa) of Section 224(8) of the Companies Act, 1956 the remuneration of an auditor appointed under Section 619 of the Companies Act, 1956 by the C&AG, shall be fixed by the Company in General Meeting or in such manner as the Company in General Meeting may determine.

Statutory Auditors have not been appointed by C&AG for the financial year 2003-04 so far. Shareholders may authorise the Board of Directors of the Company to fix a suitable remuneration to be paid to the Statutory Auditors of the Company as may be mutually agreed upon between the Board of Directors and Statutory Auditors of the Company on their appointment by the C&AG for the financial year 2003-04.

Your Directors, therefore, recommend this Ordinary Resolution authorizing the Board for fixation of the remuneration of the Statutory Auditors of the Company on their appointment.

None of your directors is interested in the proposal.

By order of the Board



(K. N. RAVINDRA)  
COMPANY SECRETARY

Place : Bhubaneswar  
Date : 00.00.2003

#### Details of Directors seeking re-appointment in Annual General Meeting fixed on 29th September, 2003. (In terms of Clause – 49 of the Listing Agreement)

1.	<b>Shri G. Upadhyaya</b> Father's Name Date of Birth Date of Appointment Expertise in specific functional areas  Qualifications List of outside Directorships held Members of Committees of the Board  Members of Committees in other companies	Late Shri B. Upadhyaya 25.01.1945 01.04.2002 Varied experience in Human Resources Development and Industrial Relations P.G.Diploma in IR & W, Master of Management Studies Nil a. Share transfer Committee b. Debenture Transfer Committee c. Standing Committee Nil
2.	<b>Dr. Sutanu Behuria</b> Father's Name Date of Birth Date of Appointment Expertise in specific functional areas Qualifications List of outside Directorships held  Members of Committees of the Board Members of Committees in other companies	Shri N. C. Behuria 02.07.1954 30.04.2002 IAS officer with varied experience in Administration M.A., Ph.D, IAS. a. Coal India Limited b. Singareni Collieries Company Limited c. Eastern Coalfields Limited d. Hindustan Copper Limited e. Hindustan Zinc Limited Audit Committee <b>Audit Committee :</b> a. Coal India Limited b. Singareni Collieries Company Limited c. Eastern Coalfields Limited d. Hindustan Copper Limited e. Hindustan Zinc Limited

\* Audit Committee in NALCO has been assigned with the job of looking into the redressal of Shareholders/Investors' Grievances. This is in line with clarifications given by The Stock Exchange, Mumbai (BSE).

## ***01. Directors' Report.***

## ***02. Annexures to the Directors' Report.***

- A. Statement of Particulars under the Companies (Disclosure of particulars in the report of Board of Directors) Rules, 1998.
- B. Report on Corporate Governance.
- C. Management Discussion & Analysis Report.
- D. Review of Accounts by C & AG.



## Directors' Report

To

The Members,

Your Directors take pleasure in presenting the 22nd Annual Report of your Company together with the Audited Accounts for the year ended 31st March, 2003.

### Performance Highlights

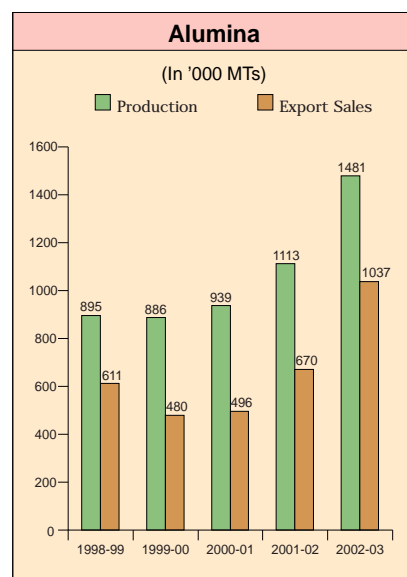
It is heartening to note that your Company has come out with excellent physical and financial results during the year ended March 31, 2003 despite bearish market sentiments. New records have been achieved in almost all the key areas.

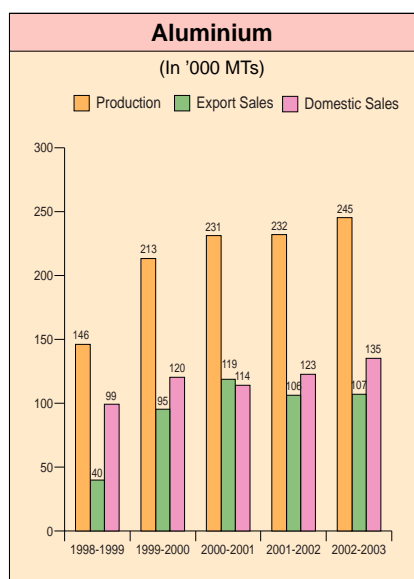
Brownfield expansion came into fruition partially during the year. The balance work on expansion project is nearing completion well within the approved project cost. Pragmatic cost cutting measures have ensured that your Company continues to be one of the lowest cost Alumina, Aluminium producing companies in the world.

### Mines

Mining of 47,77,003 MT of Bauxite has been the highest since inception exceeding the previous best of 35,22,059 MT achieved during 2001-02.

Productivity of operations has taken a quantum jump with annual overall output per man-shift higher at 46.7 MT against previous best of 33.39 MT achieved





during 2001-02. Also the specific consumption of power has improved to 0.83 Kwh/T exceeding the previous lowest of 1.05 Kwh/T.

Mines achieved the zero accident operation for the 5th year in succession.

#### Alumina Refinery

Highest ever production of Calcined Alumina at 14,80,600 MT and Hydrate of 14,96,600 MT have exceeded the previous best of 11,13,000 MT & 11,14,000 MT respectively achieved in 2001-02.

Similarly, Power Generation of 364.64 MU at Co-generation plant of Refinery has been the highest since inception exceeding previous record of 294.96 MU achieved in 2001-02.

On efficiency parameter, the specific consumption of HFO in Calciners has been the lowest ever at 79.06 Ltr/T against previous record of 79.50 Ltr/T achieved in 2001-02. Similarly specific coal consumption at 604 Kg/T has surpassed the decade old record of 628 Kg/T achieved in 1989-90.

#### Smelter Plant

Smelter Plant has achieved the highest ever cast metal production of 2,44,708 MT as compared to the previous highest of 2,31,674 MT achieved during 2001-02. Production of export quality cast metal of 1,57,818 MT is also all time high compared to 1,25,499 MT achieved during 2001-02.

Productivity of the plant has improved considerably compared to the last year. The specific consumption of CP Coke has been reduced to 393 Kg/T from 406 Kg/T, CT Pitch consumption has been reduced to 104 Kg/T from 116 Kg/T, AC power consumption has been reduced to 14,904 Kwh/T from 15,212 Kwh/T, DC Power consumption has been reduced to 13,904 Kwh/T from 14,129 Kwh/T and Aluminum Fluoride consumption has been reduced from 27.23 Kg/T to 25.42 Kg/T. The current efficiency has increased to 93.07% from 91.90% and pot productivity has increased to 1.367 MT/pot/day from 1.345 MT/pot/day. Average metal purity for the year has been 99.72% against MOU norm of 99.70%.

The Company achieved a major milestone through launching of value-added products from Rolled Products Unit on November 30, 2002. Also, on the penultimate day of the financial year 2002-03, 120th pot of expansion project was commissioned, thereby increasing the plant capacity to 2,87,500 tonnes per annum.

#### Carbon Area

In the Carbon area production of 1,27,183 nos. of green anodes, 1,24,629 nos. of baked anodes has been the highest compared to production of 1,20,170 nos. of green anodes and 1,17,534 nos. of baked anodes during the year 2001-02. Rodded Anode production of 1,33,321 nos. also has been the highest compared to 1,25,304 nos. produced during 2001-02.

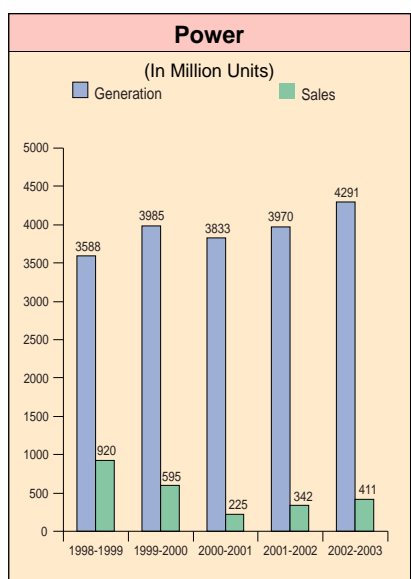
#### CPP

Captive Power Plant generated 4,777 MU of Gross Power and 4,291 MU of Net Power being the highest since inception as compared to 4,419 MU Gross Power and 3,970 MU Net Power achieved in 2001-02.

Productivity of the plant has improved considerably compared to the previous year, with specific coal consumption of 0.774 Kg/Kwh against 0.778 Kg/Kwh, Plant Load Factor at 75.149% compared to 70.062%. The best ever productivity parameters were achieved for the overall fuel consumption at 0.59 ml/kwh, DM water make up at 2.54% and Auxiliary Power Consumption at 9.012%. The specific CT make up water consumption was 1.274% which is the best during the period of last 3 years. Also, 9.04% reduction in raw water consumption with respect to last year could be achieved due to commissioning of ash pond overflow recycling system.

#### Port Facilities

At Port Facility, Visakhapatnam storage capacity was augmented to 75,000 tonnes after commissioning of 3rd Alumina Silo on 22 May, 2002. Alumina export during the year through Visakhapatnam port was 10,37,287 MT and metal export was 52,730 MT. In addition, export of Metal through Kolkata and Paradip Ports was 54,572 MT, total export of Metal being 1,07,302 MT. Highest ever Caustic Soda import of 2,28,716 MT was also handled during the year at Port Facilities, Visakhapatnam.





Shri Ramesh Bais, Hon'ble Union Minister of State (Independent Charge), at Damanjodi during his maiden visit to Nalco

### Marketing Alumina

Your Company achieved the highest ever Alumina export of 10,37,287 MT during the year against the previous best of 6,70,120 MT achieved in 2001-02. Besides, around 12,009 MT of Alumina, Hydrate and Special Hydrate/ Alumina were sold in the domestic market during the year. The export earning of Rs.798.70 crore for Alumina and total export earnings of Rs.1,515.84 crore were also the all time high.

During the year, a record movement of 14,77,204 MT of Alumina was achieved.

### Aluminium

Highest ever metal sale of 2,42,089 MT was achieved by your Company during the year against the previous best of 2,32,951 MT achieved during 2000-01. The year end aluminium inventory remained at 2,755 MT compared to an inventory of 3,010 MT Primary Metal in 2001-02.

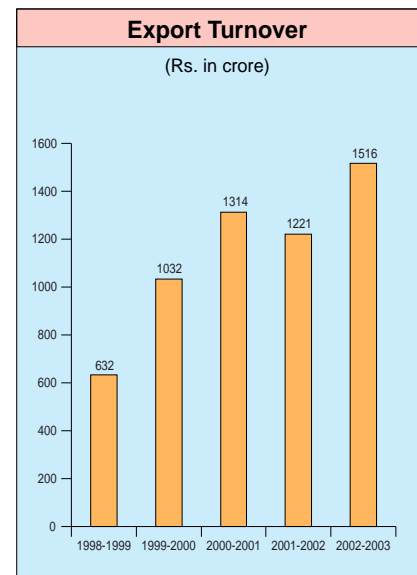
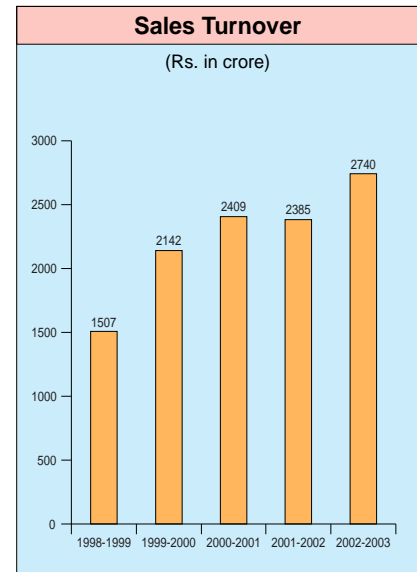
New stock yards were opened at Bangalore, Jaipur and Kolkata. 16,325 MT of metal was sold from the stockyards. Further, action is being taken to open another stockyard at Silvassa. For the first time, your Company entered into MOU with 30 customers in the domestic sector for supply of primary metal during the period July'02 to March'03 which were executed successfully. Domestic sale of rolled products commenced from 30th November,2002.

### Finance

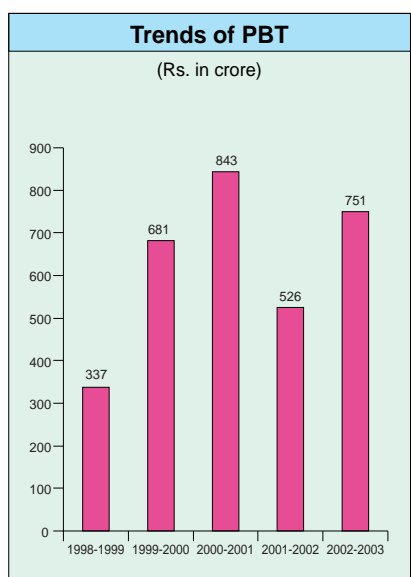
Because of increased production and sales performance on all fronts, the net profit for the year after provision for taxes increased from Rs.409.35 crore to Rs. 520.92 crore. The summarized financial results as compared to previous year is furnished below:

(Rs. in crore)

	Year ending 31.03.2003	Year ending 31.03.2002
1. Net Sales	2,564.30	2,224.78
Other Income	230.60	151.22
Total Income	2,794.90	2,376.00
2. Profit before interest, depreciation provision & taxes	1,225.74	956.41
3. Less : Interest	105.66	116.90
Depreciation & provisions	368.65	313.90
4. Profit Before Tax (PBT)	751.43	525.61
5. Provision for Taxes	230.51	116.26
6. Profit After Tax (PAT)	520.92	409.35
7. Appropriation:		
General Reserve	195.00	41.00
Debenture redemption reserve	(-)107.61	110.00
Proposed dividend	386.59	257.73
Dividend tax	49.53	—
	523.51	408.73







### Prepayments of loan and fresh borrowings

Outstanding foreign currency loan of US \$ 29.851 million, amounting to Rs.145.67 crore as on 31.03.2002, taken from EFIBANCA, Italy by erstwhile IAPL which was subsequently taken over and amalgamated with your Company, was prepaid fully on 30.04.2002. Out of Rs.643.54 crore 14.5% Non-convertible Redeemable Secured Debentures outstanding as on 31.03.2002, an amount of Rs.215.21 crore was redeemed during the year.

During the year, your Company has incurred a total capital expenditure of Rs.483.89 crore, substantially on account of the expansion project. In order to meet the above capital expenditure and current operating activities, your Company took net short term borrowings of Rs.121.87 crore to meet deficit in cash flows.

### Dividend and appropriations

Your Directors are pleased to recommend a dividend rate of 60% for 2002-03 on the paid-up equity capital of Rs.644.31 crore amounting to Rs.386.59 crore. In addition, Rs.49.53 crore is payable by the Company towards dividend tax on proposed dividend. Thus, dividend and dividend tax constitute 84% of Profit After Tax. It is proposed to transfer Rs.107.61 crore from Debenture Redemption Reserve to Profit and Loss Account. It is also proposed to transfer Rs.195 crore to General Reserve Account from Profit and Loss Account.

### Human Resources

The manpower strength of your Company is as follows :

	As on 31.03.2003	As on 31.03.2002
Executives	1,607	1,534
Supervisors	798	773
Skilled/Highly skilled	3,111	3,147
Unskilled/Semiskilled	1,138	1,190
<b>Total</b>	<b>6,654</b>	<b>6,644</b>

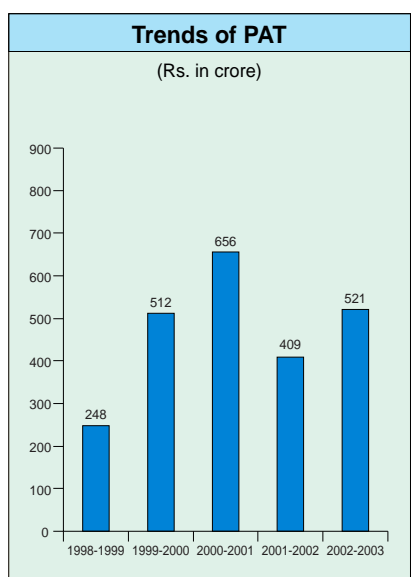
### Training and Development

As a part of Competence Identification exercise, training needs are now identified from the skill gaps arising from actual skills and required skills. This has made the whole process of training more scientific and systematic. Moreover, as a logical consequence of the Competence Identification, training effectiveness evaluation is being carried out for all skill based training programmes.

The training statistics for 2002-03 is given below:

	No. of employees covered	Mandays
Training in-house	5,320	13,009
Training external (within India)	825	3,000
Training abroad	45	397
<b>Total</b>	<b>6,190</b>	<b>16,406</b>

Emerging out of various thrust areas identified for training, some specialized training programmes were conducted on Attitude Building, Competence Identification, The Science of being Happy, Ethics in Business & Administration, Employee Development Programmes and a programme on Leadership, Motivation and Synergy at workplace in which Trade Union representatives and IR executives participated.





### Presidential Directives

In line with Presidential Directives, measures to improve the representation of the SC/ST communities on employment of the Company continued. The Company is also complying with the provisions of Persons with Disability Act, 1995.

As on 31.03.2003, out of 6,654 employees on the Company's rolls including trainees, there were 1,101 SCs, 1,205 STs, 559 OBCs and 55 physically handicapped persons. The total number of lady employees in the organization stands at 274. Thus, 16.55% of employees are SC, 18.11% are ST, 8.4% are OBC and 0.83% are physically handicapped. Every third employee in the Company belongs either to SC or ST categories.

### Industrial Relations Scenario

The collaborative approach on industrial relations front has been exemplified by various landmark achievements towards a healthy work culture. The reduction in rate of overtime, the manpower redeployment, computerized card punching system, shift working, seven days in a week operation at Mines etc. have been achieved with the cooperation of employees in general and Unions in particular. The drawbacks of a multi-Union situation has been reduced after recognition of majority Unions by verification of membership through secret ballot at major production units viz, Alumina Refinery, Smelter and CPP. The process of Union recognition at Mines is in the hands of Central Labour Authorities. After the recognition of the Unions for a period of three years, a combined training programme of Union representatives and Management was held on Leadership, Motivation and Synergy at Workplace. Regular structured meetings at bi-partite level and settlement of Productivity linked Incentive Scheme and commissioning of targeted expansion activities have been achieved smoothly.

Though there have been no mandays loss on account of industrial relations problem, the Statewide agitation by political parties, Trade Unions of the State and the Coordination Committee of Officers' Associations and Unions against the Central Government's decision on disinvestment/privatization of your Company resulted in total bandh and the total mandays lost during the year mainly on this account is about 0.35% of the total mandays available.

The Land Affected Villagers also intensified their agitational action in the wake of the Government's decision on disinvestment/privatisation of your Company. Constant interaction with the employee groups and representatives of Land Affected Villagers with the support of the State Administration and proactive steps taken by the management have reduced the adverse impact of the agitation on the project and production activities of the Company.

### Visit by Parliamentary Committees

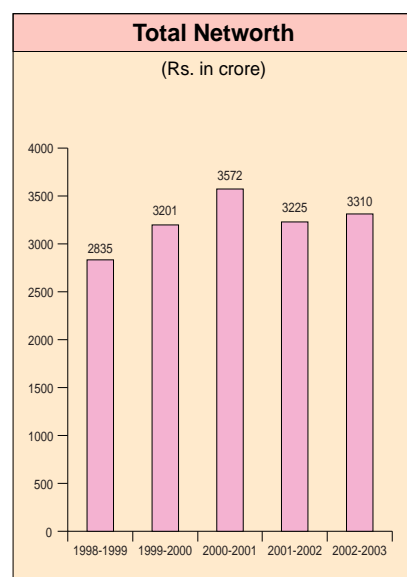
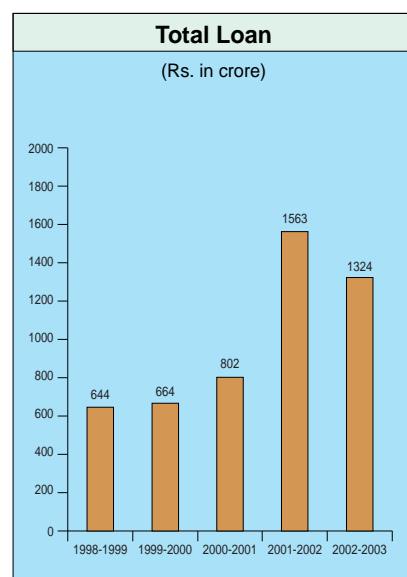
During the financial year 2002-03, the following Hon'ble Parliamentary Committees visited your Company:

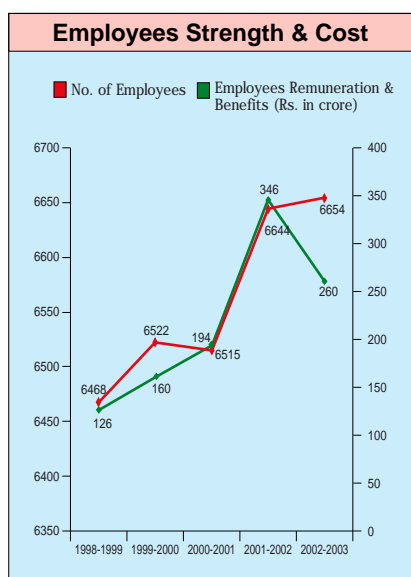
1. Parliamentary Standing Committee on Labour and Welfare from 15.06.2002 to 18.06.2002.
2. Parliamentary Committee on Petitions from 23.09.2002 to 26.09.2002.
3. The Third Sub-Committee of Committee of Parliament on Official Language inspected New Delhi Office on 27.06.2002.

### Peripheral Development Activities

Your Company continued its social sector activities in right earnest with funds provided for developmental projects in the villages surrounding its plants and facilities.

Since your Company is very much committed to social sector development, it has increased the fund allocation from 0.5% to 1% of the net profit of the preceding year for social sector activities to be undertaken by your Company during the succeeding year. Your Company is also providing additional funds from time to time with special approvals of the Board for local area development and relief works based on expectations of the public representatives and local Government authorities. During the financial year 2002-03, a total amount of





Rs. 3.73 crore has been sanctioned for such activities excluding the special sanction of Rs.0.84 crore for development of Biju Patnaik Park in Bhubaneswar city.

Meanwhile, the Government of Orissa has constituted a Rehabilitation Advisory Committee (RAC) consisting of Revenue Divisional Commissioner, Sambalpur, Chairman-cum-Managing Director of your Company, Executive Director (S&P), Angul of your Company, District Collector, Angul, Member of Lok Sabha, Dhenkanal and Deogarh and local MLAs for the purpose of ensuring proper rehabilitation and resettlement of families displaced/to be displaced/affected in connection with your Company's projects. This RAC is also functioning as peripheral development committee for Angul sector.

Your Company has successfully completed its responsibility of building 144 schools at several cyclone affected areas of undivided Cuttack district on behalf of the Government of Orissa and Prime Minister's office. Additional 53 nos. of schools in the district of Jagatsinghpur were again entrusted to your Company out of which 50 nos. of schools have been completed and handed over to the Government of Orissa.

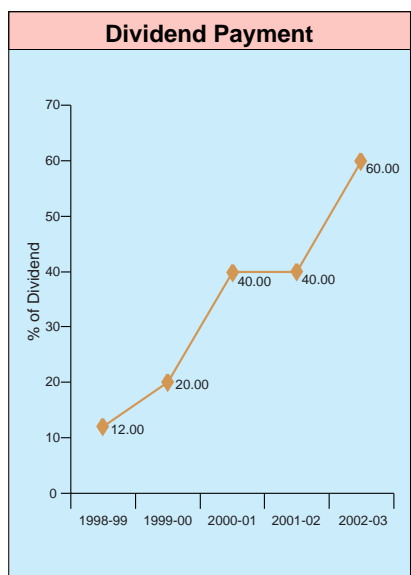
Your Company also sponsored Kalinga Mahotsav, a national festival of martial dances, on 1st & 2nd of February, 2003 at Dhuli – Peace Pagoda, Bhubaneswar, organized by Orissa Tourism.

In its pursuit of preserving the art and culture of Orissa, your Company in association with the Government of Orissa organised Rajarani Music Festival and continued its patronage to various socio-cultural, professional and sports events in the state of Orissa.

#### Awards & Recognitions

Receipt of following awards bear ample testimony to the achievements of your Company in various fields:

1. The Top Export Award of CAPEXIL for the year 2001-02 for the 15th time in succession.
2. The Top Export Award of EEPIC for the 3rd year in succession.
3. The prestigious Misrilal Jain Environment Award, instituted by the Federation of Indian Mineral Industries (FIMI) for its "outstanding contribution to the national goal of sustainable development through environmental conservation and rational utilization of natural resources", by Bauxite Mine.
4. The Pollution Control Excellence Award – 2002, instituted by the State Pollution Control Board, Orissa in recognition of the effective pollution control measures taken and for adoption of excellent environment management practices by your Company's Alumina Refinery at Damanjodi.
5. The Best Enterprise Award by the Forum of Women in Public Sector (WIPS) for making excellent contribution to the growth and development of women and impacting their lives significantly in and around the organization.
6. The Award for Excellence, instituted by the Institute of Marketing and Management, New Delhi.



Nalco Foundation Day Lecture by Dr. Sam Pitroda, Chairman, WorldTel



*Father Marian felicitated by Shri Sarat Kar, Speaker, Orissa Legislative Assembly*

### Expansion of Aluminium Smelter and CPP

#### Smelter

It is heartening to report that your Company has successfully commissioned 120 pots under the expansion project of Aluminium Smelter and 7th Unit of Captive Power Plant of 120 MW during the financial year. Your Company has started to reap the benefits of this expansion which is evident from the increased production. The start-up of the balance 120 pots is linked with the availability of power from the 8th Unit of CPP of another 120 MW and is expected to be commissioned by 30.04.2004.

You will be pleased to know that your Company is poised to complete the S&P expansion project including 7th unit of CPP and 8th unit of CPP well within the approved project cost of Rs. 2,541.98 crore. It is now expected that these projects will be completed with an overall saving of about Rs.150 crore. There has been a delay of about 10 months in the S&P expansion project due to various reasons beyond the reasonable control of Project authorities.

#### 8th Unit of CPP

The 8th Unit of CPP is at an advanced stage of completion and is expected to be synchronized by end February, 2004 within the schedule date of completion for this project. It is also expected that there will not be any cost overrun in this project.

#### Special Grade Alumina Project

The special hydrate portion of the Special Grade Alumina Project has been commissioned in March, 2003. This project is now expected to be completed in all respects by September, 2003.

#### Rolled Products Unit

It is quite heartening to report that Cold Rolled Products have been launched in the Domestic Market on a limited scale during November, 2002 and the Company has sold about 405 MT Rolled Products till 31.03.2003.

The proposal for revised project cost estimates is awaiting the approval of PIB and the project activities are on hold. It is expected that the balance activities will be completed within six months from the date of approval of the revised project cost.

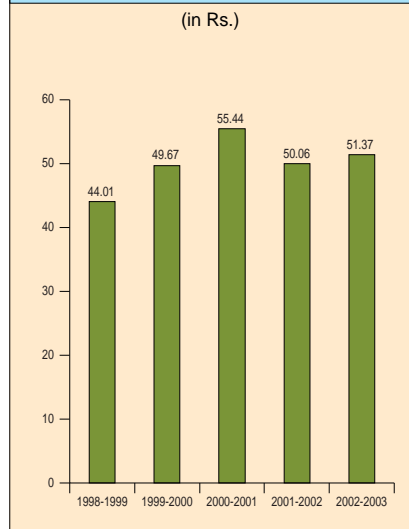
#### Financial Status

A total expenditure of Rs.1,926.87 crore has been incurred on S&P expansion till 31.07.2003. Most of it has been funded through internal resource generation. Further, out of the approved cost of Rs.2,541.98 crore, commitment of Rs.2,253.50 crore has been made till 31.07.2003.

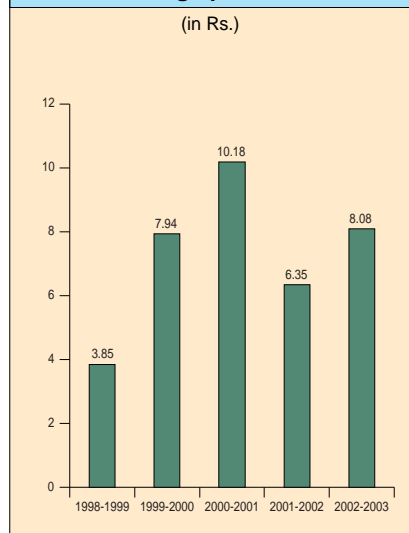
#### MOU Performance

Your Company's performance was rated "Excellent" in the evaluation of the Memorandum of Understanding (MOU) signed with Government of India for the year 2002-03. A target production of 15.70 lakh MT of Alumina and

#### Book Value per share of Rs. 10/- each



#### Earnings per Share





2.90 lakh MT of Aluminium has been set in the MOU signed with Government of India for the year 2003-04.

### Corporate Planning

Your Company moved steadily on its growth roadmap as laid down in its Corporate Plan 1995-2005. Strategies relating to production and expansion were implemented in letter and spirit. Action plans concerning Marketing, HRD, Finance, Materials etc. were put in practice on continuous basis. Periodic review and monitoring were done to evaluate the degree of compliance.

Keeping in view the current changes in the business environment and performance of the Company, Corporate Plan for 2002-2007 and Vision Document for 2002-2012 are under preparation with necessary recasting of the existing plan documents. As per the new plans advance actions have been initiated for putting up of 4th stream of Alumina Refinery of 5.25 lakh TPY capacity and new pot line of 1.15 lakh TPY capacity along with corresponding facilities to meet the requirement of power.

### Computerisation Activities

Your Company has successfully implemented the following during the year under report :

- Stockyard sales operations were re-initiated by your Company during this year. Three stockyards at Kolkata, Jaipur and Bangalore became operational. Computerised invoicing was resorted to at these locations. To achieve this, stockyards were connected to Zonal Offices and Corporate Office through ISDN connection. Stockyard applications were implemented and made operational.
- At Alumina Refinery, Damanjodi Gigabit Ethernet Local Area Network was installed and made operational.
- Maintenance management module of RAMCO e-applications ERP module was customized and deployed at Alumina Refinery and rolled over to the previous installation at Aluminium Smelter for achieving the uniformity in application environment and versions with identical features.
- Re-engineering of applications, development of new modules continued at all units supporting functional areas of Finance, Inventory and Purchase, Share Registry, Sales and Marketing, Plant Maintenance, HRD, etc. Applications were developed using new tools of web and workflow environments in addition to client-server environment adopted by your Company.
- Applications for the new product line of Rolled Products Unit for all operational areas were customized and deployed for operations.
- Computing resources such as hardware, system and utility software were augmented for smooth operation at all the units.
- System audit was conducted by Internal Audit Agency and M/s. PWC as a part of routine and specialized activity for disinvestment.
- All through the year, service and support from all service providing agencies were ensured to be timely and satisfactory.



*Shri C. Venkataramana, CMD, switching on the 7th Unit of CPP*





Shri Bhairon Singh Shekhawat, Hon'ble Vice-President of India, handing over the Niryat Shree Award

### Quality Management

The momentum of Quality Management interventions introduced earlier were also maintained during the year. Vigorous efforts through out the year for upgrading the quality system to meet the requirements of ISO 9001 : 2000 culminated in successful certification of all production facilities - Bauxite Mines, Alumina Refinery, Captive Power Plant, Smelter Plant - including connected Corporate functions. Continual improvement activities in operation and other service areas continued during the year.

Training and development in the field of total quality was continued during the year. While the main thrust was on Training programmes on revised ISO 9001 requirements and their implementation, programmes focussing on Total Quality Management, Facilitation Skills, Daily Routine Activity Management were also conducted during the year.

The Quality Apex Council has decided to implement CII-EXIM Bank Business Excellence Model in the Company, starting with Alumina Refinery from this year. Activities towards this have been initiated.

Quality Circle (QC) movement in the organisation received a major fillip when eight Quality Circles from different units were selected through Chapter/National competitions and participated in the International Convention at Lucknow. Quality Circle "Digvijay" of Smelter Plant were felicitated for "Excellent" performance at the Convention and also qualified among the few teams to participate in International Convention of Quality Circles to be held at Tokyo in October, 2003.

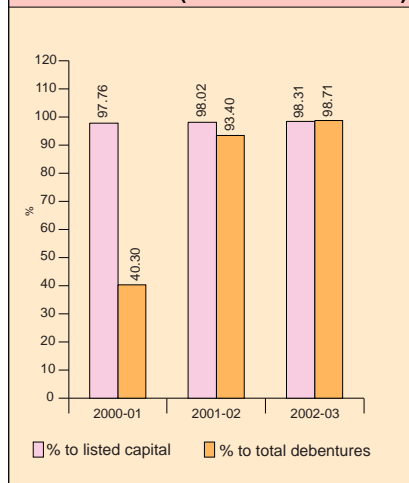
As a part of its responsibility for Quality improvement in the State, NALCO has been organising the All-Orissa Quality Circle Convention and Competition for the NALCO Trophy. The Convention was organised by NALCO for the eighth consecutive year in April, 2003 in which 23 Quality Circles drawn from different organisations in the State participated. Besides being the single most important quality event, it has significantly contributed to spreading the QC movement, in the State.

### Highlights of Safety, Health & Environment Management

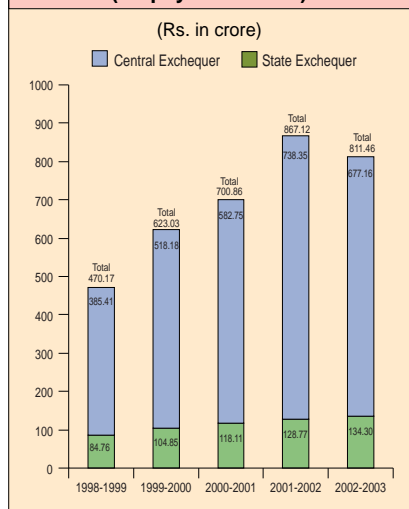
Your Company continued to give thrust on pollution control and environmental management during the year under review.

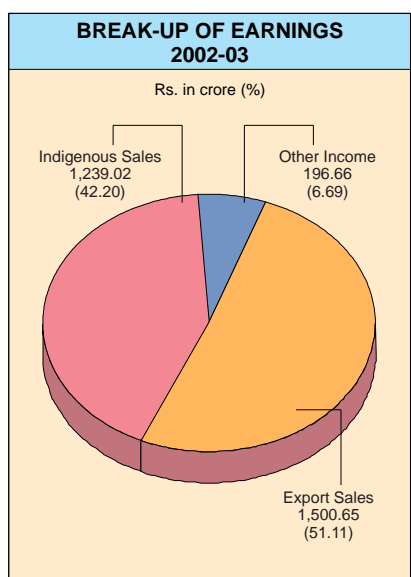
All the units of the Company operated with valid consent orders under Air (PCP) Act, 1981 and Water (PCP) Act, 1974 for the year 2002-03 and had authorization under Hazardous Waste (Management & Handling) Rules, 2000. Your Company is also meeting the stipulated pollution norms prescribed by the statutory authorities as per Environment Protection (EP) Act, 1986. The successful implementation of Thickened & Tailing Disposal (TTD) system for red mud disposal and maintaining zero discharge for all units are major achievements for the Company. Alumina Refinery unit of your Company has received the prestigious "Pollution Control Excellence Award, 2002" from the State Pollution Control Board, Orissa, for its excellent Environment Management.

### Dematerialisation of Shares (% to listed capital) and Debentures (% to total debentures)



### Contribution to Public Exchequer (on payment basis)





### Ancillary Development

Your Company right from the construction stage has given special thrust on development of SSI/Ancillary Industries in the State of Orissa to produce the products by the SSI units of Orissa which can be used during construction and commissioning stage. After commissioning of the units at Damanjodi and Angul there has been continuous effort for promotion of SSI/Ancillary Industries. Till date ancillary status to 46 SSI units of Orissa have been awarded as per the policy adopted.

In the direction of promotion of ancillary industries, your Company has participated from time to time in exhibitions and Buyers & Sellers meets at Bhubaneswar, Cuttack, Angul, Damanjodi, Rourkela, Sambalpur and Rayagada. Your Company has also participated in 'Fusion-2002', National Industrial Exhibition-cum-vendor development programme held on 27th and 28th September, 2002 organised by Orissa Small Scale Industries Association, Small Industries Service Institute and Director of Industries. On 24th December, 2002 your Company has also conducted Plant Level Advisory Committee Meeting (PLAC), chaired by Chairman-cum-Managing Director of your Company, in which Principal Secretary, Industries Department, Director of Industries, Government of Orissa and all other senior officials from different organisations and Associations participated, in the interest of development of SSI/Ancillary units in the State of Orissa.

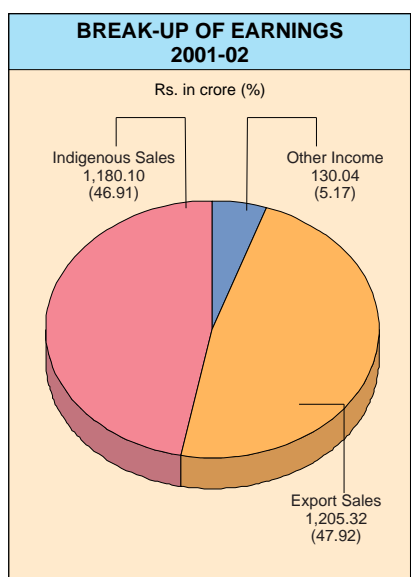
### Rajbhasha

During the year, special efforts were made for compliance of Official Language rules of the Government of India. Your Company's New Delhi office achieved hundred percent working knowledge by the employees which was notified in the Gazette of Government of India on 26th August, 2002. The Third Sub-Committee of Committee of Parliament on Official Language headed by the Deputy Chairman, Dr. Laxminarayana Pandey inspected the New Delhi office of your Company on 27th June, 2002.

Session-wise nomination for Hindi training of the employees of Corporate Office and the units continued and imparting Hindi training through correspondence course also continued. For doing the day-to-day work originally in Hindi, workshops were organised. At Corporate Office, Hindi workshop was organised for the newly recruited 38 Graduate Engineer Trainees.

Hindi week from 9th September, 2002 to 16th September, 2002 and Hindi Day on 14th September, 2002 were observed at various offices at Bhubaneswar, New Delhi, Visakhapatnam and at the units. A number of Hindi competitions were organised among the employees on this occasion and prizes were distributed to the winners. Special issue of Hindi magazine 'Akshar' was published from the Corporate Office.

Angul Town Official Language Implementation Committee meetings were organised regularly under the Chairmanship of Executive Director, S & P Complex of your Company.



Export of one millionth tonne of alumina



*Sadhvi Uma Shree Bharati, Former Union Cabinet Minister for Coal & Mines, handing over the FIMI Environment Award*

### Vigilance

While prevention and detection of corruption is the primary function of the Vigilance Department, stress is laid on preventive vigilance with a view to aiding and assisting the management in improving systems and procedures, so as to ensure transparency in decision making. A number of surprise checks, regular inspections and system studies were conducted during the year and feed back furnished to the concerned authorities. A campaign for creating awareness was taken up by organizing the vigilance awareness week celebration commencing from 31st October to 6th November, 2002 at all the units of your Company, in which distinguished guests were invited to share their views on prevention of corruption.

### Sports

Your Company's ace shooter Bhagaban Behera received the President of India's 'Home Guards & Civil Defence Medal.'

Your Company's Olympian Ms. Anuradha Biswal has not only bagged the Gold Medal in Asian Grand Prix at Manila but also established a new national record in the circuit National Meet at New Delhi in her pet event of 100 meter hurdles.

Representing Orissa in women's football, your Company's Sradhanjali Samantaray emerged as the top scorer in the National Games at Hyderabad with 8 goals, enabling her team to bag the Bronze. Also, in Senior Nationals at Siliguri, she was the top scorer with 10 goals to her credit.

### Particulars of Employees

During the year under review, no employee of your Company was in receipt of remuneration in excess of the limits i.e. Rs.2,00,000/-p.m or Rs.24,00,000/-p.a prescribed under the provisions of Section 217(2A) of the Companies Act, 1956 read with the Companies (Particulars of Employees) Rules, 1975.

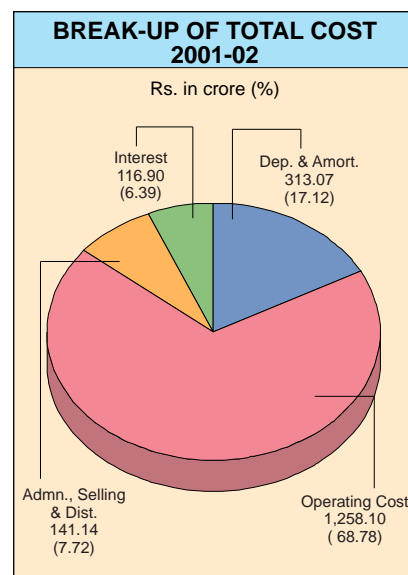
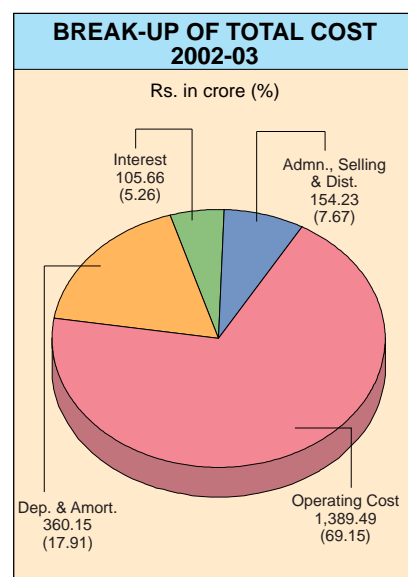
### Report on Conservation of Energy, R & D and Technology Absorption

Information in accordance with provision of Section 217(1)(e) of the Companies Act, 1956, regarding Conservation of Energy, Research & Development and Technology Absorption is placed at Annexure-I to this report.

### Status of listing in Stock Exchanges

Your Company's shares and debentures are listed in the following Stock Exchanges for which listing fees for 2003-04 has been paid :

1. Bhubaneswar Stock Exchange, 6th Floor, IDCO Towers, Janpath, Bhubaneswar - 751 022.
2. The Delhi Stock Exchange Association Limited, West Plaza, Indira Gandhi Stadium, Indraprastha Estate, New Delhi - 110 002.







Kalinga Mahotsav : A national festival of martial dances



3. The Calcutta Stock Exchange Association Limited, 7, Lyons Range, Kolkata - 700 001.
4. Madras Stock Exchange Limited, Exchange Building, Post Box No.183, 11, Second Line Beach, Chennai - 600 001.
5. The Stock Exchange, Mumbai (BSE), Phiroze Jeejeebhoy Towers, 25th Floor, Dalal Street, Mumbai - 400 001.
6. National Stock Exchange of India Limited (NSE), Exchange Plaza, 5th Floor, Plot No.C/1, G Block, Bandra-Kurla Complex, Bandra(E), Mumbai - 400 051.

#### **Delisting of Securities**

As you are aware, your Company has initiated the process for delisting of securities from Bhubaneswar Stock Exchange, The Delhi Stock Exchange Association Limited, The Calcutta Stock Exchange Association Limited and Madras Stock Exchange Limited as per Securities and Exchange Board of India (De-listing of Securities) Guidelines-2003, to save recurring expenditure on listing fee. The trading of your Company's securities in the aforesaid stock exchanges is either negligible or nil. This will not affect the interest of the investors since your Company's securities will continue to be listed in The Stock Exchange, Mumbai (BSE) and National Stock Exchange of India Limited, Mumbai (NSE) which have nation wide trading terminals.

#### **Foreign Exchange Earnings and Outgo (on Cash Basis)**

Foreign Exchange earnings (on cash basis) during the year 2002-03 was Rs.1,532.79 crore as against Rs.1,235.42 crore during the previous year.

The Foreign Exchange outgo (on cash basis) during the year was Rs.276.56 crore as against Rs.451.45 crore during the previous year.

#### **Directors' Responsibility Statement under Section 217 (2AA) of the Companies Act, 1956**

Your Directors confirm;

1. that in the preparation of the annual accounts, the applicable accounting standards had been followed along with proper explanation relating to material departures;
2. that the directors had selected such accounting policies and applied them consistently and made judgments and estimates that are reasonable and prudent so as to give a true and fair view of the state of affairs of the Company at the end of the financial year and of the profit of the Company for that period;
3. that the directors had taken proper and sufficient care for the maintenance of adequate accounting records in accordance with the provisions of Companies Act, 1956 for safeguarding the assets of the Company and for preventing and detecting fraud and other irregularities;

## **C A R I N G   F O R   C U L T U R E**



Pandit Hariprasad Chaurasia  
at Rajarani Music Festival



4. that the directors had prepared the annual accounts on a going concern basis.

#### Corporate Governance

A report on Corporate Governance is placed at Annexure-II to this report. Your Company has voluntarily got the Secretarial Audit done for the year 2002-03 as a part of good Corporate Governance practice and the report is placed at Annexure-III to this report.

#### Management Discussion & Analysis Report

Management Discussion & Analysis Report is placed at Annexure-IV to this report.

#### C&AG Comments

Review on Accounts for the year ended 31st March, 2003, prepared by the Comptroller and Auditor General of India is placed at Annexure-V to this report.

#### Deposits

Your Company has not accepted or renewed any deposits during the year under report.

#### Auditors

M/s. Tej Raj & Pal, Chartered Accountants, 1, Kalpana Square, Bhubaneswar-751 014 have been appointed as Statutory Auditors of the Company for the year 2002-03 by the Comptroller and Auditor General of India.

M/s. KKA & Associates, Practicing Company Secretaries, 401, 4th Floor, Janapath Towers, Ashok Nagar, Bhubaneswar-751 009 have been appointed as Secretarial Auditors of the Company for the year 2002-03.

M/s. S S Sonthalia & Co., Cost Accountants, 23, HIG Duplex, Sailashri Vihar, Bhubaneswar-751 021 have been appointed as Cost Auditors of the Company for the year 2002-03.

#### Directors

There has been no change in the composition of the Board and Audit Committee since the previous Annual General Meeting of your Company. The Board met 9 times and the Audit Committee met 5 times during the year 2002-03. The Audit Committee also monitors the redressal of Complaints/Grievances of Shareholders/Investors of your Company.

#### Acknowledgement

Your Directors are thankful to the Government of India in general and Ministry of Mines in particular, the Government of Orissa, Indian Railways, Mahanadi Coal Fields, State Bank of India, GRIDCO and other Government agencies for their valuable guidance, support and co-operation without which it would have been difficult to achieve the results reported for the year. The Directors look forward to their continued support and co-operation in the coming years as well.

Your Directors also express their sincere thanks to all the shareholders, customers, business associates including Professional Consultants, Solicitors for their co-operation and assistance extended to your Company.

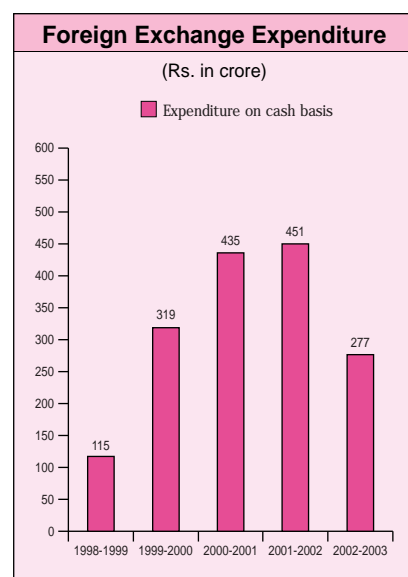
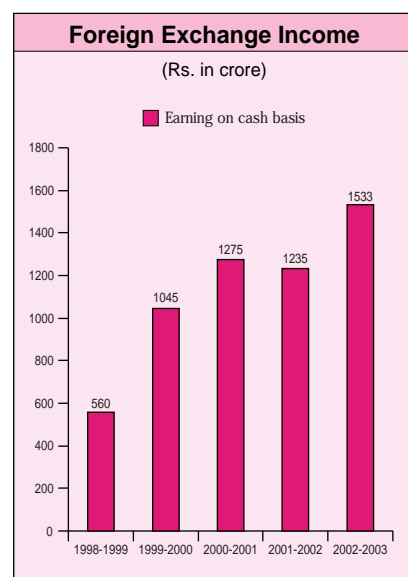
Your Company is deeply indebted to each member of the Company for the support, co-operation and confidence reposed on us. Your Directors place on record their deep appreciation of the efforts and hard work by your Company's employees.

For and on behalf of the Board of Directors



(C VENKATARAMANA)  
Chairman-cum-Managing Director

Place : Bhubaneswar  
Date : 26.08.2003



### STATEMENT OF PARTICULARS UNDER THE COMPANIES (DISCLOSURE OF PARTICULARS IN THE REPORT OF BOARD OF DIRECTORS) RULES, 1988.

Extreme care was taken by NALCO in selection of modern technology for its expansion projects and energy efficient equipments were installed after meticulous evaluation of these equipments. Energy audits, condition monitoring and system modifications were undertaken for optimal energy consumption. Non-conventional energy systems like solar water heating systems and solar photovoltaic systems were in operation for harnessing renewable energy sources. Periodical review and monitoring of the energy consumption took place at regular intervals in all units of NALCO.

Some of the important energy conservation measures implemented by the company are highlighted below :

#### A) ENERGY CONSERVATION MEASURES TAKEN:

##### Smelter

1. With better availability of export quality metal, idle operation of furnace has been reduced. This along with launder covering has reduced fuel oil consumption in Cast House.
2. All melting and holding furnaces in cast houses are modified to provide separate blower for combustion and atomization air, leading to improved burner efficiency and lower fuel consumption.
3. Through modification in stem brushing system stem beam voltage drop has marginally reduced.
4. Due to higher baking level of anodes there has been reduction in the average value of anode resistivity and improvement in air reactive and carboxy reactivity residue. This has resulted in reduction in DC energy consumption.
5. Fuel oil saving has been observed with use of fuel oil additive.

##### Alumina Refinery

1. Condensate Polishing Unit was operated continuously from Oct.'02, resulting in –
  - Reduction in filtered water consumption, DM water plant load and raw water intake.
  - Higher temperature of CPU product water enhanced Boiler Cycle efficiency and contributed to a reduction in coal consumption.
2. Specific Coal consumption has reduced by 6.65%. This has been achieved by –
  - Optimal control of excess air to achieve efficient and complete combustion.
  - Rigorous monitoring and control of coal leakages and losses.

- Higher temperature of DM water produced by CPU.
3. Reduction in specific fuel oil consumption in calcination by about 0.55%. This was achieved through –
    - Better capacity utilization in calcination with availability of hydrate from 3rd stream.
    - Installation of Hydrate bypassing system.
  4. Reduction in specific electrical energy consumption by about 4.66% was achieved by –
    - Operating two fans instead of installed three fans in CT3 of SPP, for about 5 months.
    - Installation of classifying cyclone in hydrate filtration circuit.
    - Optimization of number of air compressors in operation.
    - Higher production volume realized from the third stream.
    - Installation of VFD.
  5. Specific consumption steam (total) was reduced by 9.3% through improved steam economy in evaporators and controlling steam leakages.
- Overall specific prime energy consumption per ton of hydrate reduced by 5.17%.

##### CPP :

1. By optimally running of 3 CW pumps instead of 4 CW pumps for any two consecutive units in operation during winter season (4 months).
2. Replacement of conventional A.C. System having high energy consuming compressors with Vapour Absorption Air Conditioning Machine.
3. By arresting leakages, monitoring the silica level in the boiler water and restricting the continuous blow down DM make up has been reduced.
4. Recycling of Ash Pond over flow as well as the industrial drain water round the year.
5. Optimal use of Cooling Tower Fan in the Circulating Water system during winter season.
6. By attending and arresting different leakages in the Plant Air System the consumption of instrument air has been reduced, thereby reducing the number of compressors in operation.
7. Installation of aerodynamic energy efficient fibre body cooling tower fan blades has resulted in power saving.
8. Dry testing of oil guns without actually consuming any fuel oil.

## FORM - A

### FORM FOR DISCLOSURE OF PARTICULARS WITH RESPECT TO CONSERVATION OF ENERGY

#### A. Power and Fuel Consumption

	CAPTIVE POWER PLANT ANGUL		ALUMINA REFINERY DAMANJODI	
	Current year 2002-03	Previous year 2001-02	Current year 2002-03	Previous year 2001-02
<b>1. Electricity</b>				
<b>a) Purchased from GRIDCO</b>	47.260	42.588	—	14.508
Unit (Million KWH)				
Total amount (Rs. in lakhs)	1,489.97	1,099.93	—	415.81
Rate / Unit (Rs./KWH)	3.15	2.58	—	2.87
<b>b) Own Generation</b>				
<b>i) Through Diesel Generator</b>	NA	NA	NA	NA
Unit				
Unit per Ltr. of Diesel oil				
Cost / Unit				
<b>ii) Through Steam Turbine/Generator</b>				
Units (Gross)/Million KWH	4,285.016	4,418.957	364.643	294.958
Units per litre of fuel oil/gas	1,123.79	1,213.92	—	—
Cost / Units (Rs./KWH)	1.04	1.11	—	—
<b>2. Coal (Specify quality &amp; where used)</b>				
(Quantity F&G) Million KWH				
Quantity (Tonnes)	36,91,642	34,37,376	9,04,520	6,83,454
Total Cost (Rs. in lakh)	19,016.21	17,384.10	9,254.12	6,900.12
Average rate (Rs./Tonne)	515.12	505.74	1,023.10	1,009.60

#### 3. Furnace Oil

	Captive Power Plant Angul		Alumina Refinery Damanjodi		Smelter Plant Angul	
	Current year 2002-03	Previous year 2001-02	Current year 2002-03	Previous year 2001-02	Current year 2002-03	Previous year 2001-02
Quantity (KL)	3,813	3,640	1,25,302	90,207	24,785	24,520
Total amount (Rs. in lakhs)	443.04	425.53	13,961.98	8,068.07	2,722.94	2,315.59
Average rate (Rs./Tonne)	11,619	11,690	11,143	8,944	10,986	9,444
<b>4. Others/Internal generation</b>						
Quantity	NA	NA	NA	NA	NA	NA
Total Cost						
Rate/Unit						

#### B. Consumption per unit of production

Products (with details)	Unit	Standards (if any)	Current year (2002-03)	Previous year (2001-02)
			1	2
<b>1. Alumina</b>				
a) Power	(Kwh/Tonne)	380	347	356.32
b) Fuel oil for calcination	(Kg/Tonne)	85.30	79.06	78.68
c) Coal for steam	(Kg/Tonne)	674	611	614
d) Oil for steam	(Kg/Tonne)	10.00	5.57	2.37
<b>2. Aluminium</b>				
a) A.C.Power	(Kwh/Tonne)	14,600	14,898	15,212
b) Fuel Oil	(Ltr./Tonne)	95	104	106
c) Others				
(i) CP Coke	(Kg/Tonne)	408	377	391
(ii) CT Pitch	(Kg/Tonne)	106.50	99.84	108.00



## FORM - B

### FORM FOR DISCLOSURE OF PARTICULARS WITH RESPECT TO ABSORPTION RESEARCH & DEVELOPMENT (R&D)

#### 1. Specific areas in which R&D activities carried out by the Company are:

##### (A) In-house R&D activities :

###### a) Alumina Plant :

###### (i) Soda Reduction from Calcined Alumina :

Studies were done for reducing the soda content of calcined alumina from 0.38% on lab scale. Different reaction times, concentrations, solid/liquid ratios were tried. It was observed that the calcined alumina soda could be brought down to 0.06% level using acid route.

###### (ii) Improvement of Zeolite Whiteness :

Zeolite-A was prepared in the laboratory using the Sodium Silicate having turbidity on 15 NTU and the products so obtained was having a Whiteness Index above 95%. The presence of sediment in Sodium Silicate solution was found to be one of the contributing factors for low Whiteness Index.

###### (iii) Studies on oil-water emulsion samples of Smelter, Angul :

Oil-water emulsion separation studies were successfully completed. Oil-water emulsion separation was done using sulphuric acid. Different concentrations, times, temperatures were studied. The oil content in the underflow water was successfully brought down to a level of 60-70 PPM using 0.2 to 0.5 ml of sulphuric acid/100 ml of emulsion. This effluent can be mixed with other effluents of the plant streams so that the final content of oil in the water before disposal meets pollution control norm of 10 mgpl max.

###### (iv) M/s Ciba specialties additive for TTD circuit:

M/s Ciba specialties have carried out several lab scale trials of their flocculant for the TTD mud settling. As a result of the above trials, Alcar 600 series product was found to be suitable and the same has been introduced into the plant for TTD mud settling. Similar lab studies were also conducted by M/s SNF, M/s Dai-ichi and M/s Tellabs.

###### (b) Smelter Plant :

###### (i) Baked Anode Properties :

Anode characterization and continuous

monitoring of anode quality from the newly commissioned Baking Furnace has resulted in improvement in Anode quality.

###### (ii) Study on Baking Level :

Anode baking characteristics evaluated in section 20 with Innovatherm fire regulation system to assess performance of the new system especially baking level which has improved.

###### (iii) $\text{AlF}_3$ Control in Pots :

$\text{AlF}_3$  addition in pot through revised 'recommended chart' has resulted in higher conformance level of excess  $\text{AlF}_3$  in pots – a factor for improved current efficiency.

###### (iv) Bath Inventory in Pots :

Trials with non standard method for Bath inventory has proved to be useful.

###### (v) Development of Cathode Clad :

Alternate indigenous supplier of bimetallic cathode clads have been developed after successful field trial in potlines.

###### (vi) Busbar Coating :

Trials with Busbar coating have shown a reduction in surface temperature. Further studies on millivolt saving in Busbar Shop are continuing.

###### (vii) Evaluation of Bake Oven Performance :

Detailed evaluation of Bake Oven performance was carried out to improve quality and productivity. Recommendations are being implemented stage wise.

##### (B) Collaborative R&D Projects in hand :

(i) Dispersion pattern and behaviour of Valuable Trace and Rare Earth Elements in Bauxite Profiles at Panchpatmali deposit and scope of their recovery from rejects of Refinery Plant in collaboration with RRL, Bhubaneswar.

(ii) Technology Demonstration Studies on effect of Fly Ash on Soil Fertility and Crop Yield at CPP, Angul and Demonstration Trials in the Farmers' fields around CPP for popularisation of bulk use of Fly Ash in collaboration with RRL, Bhopal.

(iii) Joint Research Project (JRP) for extraction

of Iron from NALCO's Red Mud and Preparation of Techno-economic Feasibility Report (TEFR) for setting up of an Optimal size commercial plant for production of iron by ROMELT Process in collaboration with MISA, Russia/RSIL, New Delhi.

- (iv) Studies on Mechanochemical Activation of Bauxite to improve the performance of Bayer Process for Alumina Production and minimize Environmental impact of Red Mud in collaboration with NML, Jamshedpur.
- (v) Development of Squeeze Cast, Premium Quality Aluminium Alloy Castings in collaboration with Indian Institute of Science, Bangalore.
- (vi) Studies on Extraction of Alumina from Last Washer Mud of NALCO's Alumina Plant in collaboration with JNARDDC, Nagpur.
- (vii) Studies on Modeling of Alumina Precipitation Circuit in collaboration with EIL, New Delhi.

## 2. Benefits derived as a result of the above R & D:

- (i) Recognition of In-house R&D Units of NALCO at M&R Complex, Damanjodi and S&P Complex, Angul has been renewed upto 31.03.2006 by DSIR, Ministry of Science & Technology, Government of India.
- (ii) Facilities developed at both the R&D Centers are continuously utilised for addressing day-to-day problem solving; process & product development, Energy Conservation, Waste Utilisation activities with emphasis on Development of In-house expertise for growth of indigenous technology in the Company by adopting novel innovative practices.
- (iii) A R&D Plan for the Company aimed at full scale technology absorption, assimilation and up-gradation for attaining self sufficiency in Alumina-Aluminium technology has been approved for implementation.
- (iv) A Board Level Technology Committee has been constituted which meets once in a year to review and give directions to the R&D and Technological Up-gradation activities undertaken by the Company.
- (v) A patent application entitled – "Process for preparation of Surface Coated Microfined Alumina Trihydrate" has been filed in India during the year.
- (vi) Zeolite-A plant, set up based on indigenous technology, is under operation. Products are sold to the user detergent industries.

## 3. Future Plan of Action :

- (i) Finalization of Company's R&D Plan and placement of requisite manpower at respective centers.

(ii) Process Up-gradation & Optimization, Development of new Value Added Products & Products of Strategic Importance, Waste Utilization, Energy Conservation & Diversification for production of value added items etc. to be the focus areas of Company's Research & Development efforts.

(iii) National & International Collaborations with Research Organizations, Academic Institutions and Industries.

(iv) Thrust on Patenting Activities.

## New Projects :

The following Projects were started during the year 2002-03 and their implementation schemes are currently under preparation. The Projects are likely to be put up for Management's approval and implementation during the year 2003-04. The Project periods for the following would vary between one year to three years of In-house Research/External JRP/Pilot Plant Studies/Preparation of Detailed Feasibility Report (DFR) :

- (i) Treatment & Disposal of Spent Pot Lining Materials.
- (ii) Development of Ferrite Cement.
- (iii) Production of Gallium Metal (10 tpa, 3N grade) & its subsequent purification to 7N grade through Eco-friendly Technology.
- (iv) Manufacture of Cathode Carbon Side Slabs from Spent Pot Lining Materials.
- (v) Development of Rare Earth Added Aluminium Alloys for Conductor Application.
- (vi) Development of Aluminium Metal Matrix Composites and Armour Plate production through continuous Caster Route.
- (vii) Mathematical Modeling of Electrolytic Pots.
- (viii) Development of New Alloys.
- (ix) Studies on enhancement of Pot Amperage.
- (x) Extraction of Nickel from Chromite Overburden of Sukinda, Orissa, Transfer of HZL rights/liabilities to NALCO.
- (xi) Development of Zeolite-P, X & Y for Detergent and Catalytic Applications.

## 4. Expenditure on R&D :

	(Rs.in lakhs)	
	2002-03	2001-02
a) Capital	0.34	86.37
b) Recurring	202.73	171.93
Total	203.07	258.30
c) Total R&D expenditure as % of total turnover	0.08	0.11

## II. TECHNOLOGY ABSORPTION, ADAPTATION AND INNOVATION :

Measures taken by the Company in its different units concerning technology absorption, adaptation and innovations and benefits derived thereof are summarized below :

### (a) M&R Complex, Damanjodi :

Sl. No.	Details of Modifications	Benefits thereof
1.	A 10,000 tpa Detergent Grade Zeolite-A Plant has been commissioned using indigenous technology jointly developed by NALCO and CSMCROREI, Bhavnagar.	Production of value added product Detergent Grade Zeolite-A.
2.	Developed a Spent Liquor Separating Cyclone System to help reduce carry over of Hydrates.	Improving the productivity of the Alumina Refinery.
3.	Introduction of pre-desilication unit for removal of reactive silica.	Increasing Aluminate liquor RP.
4.	Introduction of thickened tailings disposal system for better compaction of red mud.	Saving soda losses through red mud.
5.	Introduction of interstage coolers at precipitators.	Increase in productivity of Alumina.

### (b) Smelter Plant, Angul :

Sl. No.	Details of Modifications	Benefits thereof
1.	One pot of pot line 1 has been modified to accommodate one aluminium fluoride hopper and microprocessor logic modified for controlled feeding of aluminium fluoride.	This will ensure improving conformance level (with respect to excess $\text{AlF}_3\%$ ) of bath composition and thus improve current efficiency.
2.	Mixer top cover has been provided with 10 mm thick chromium boride crystal wear plates liner.	No HTF leakage observed any more.
3.	Micro processor based "Setaram" heat regulation system which had become unreliable had been replaced by PLC based fire regulation system of M/s. Innovatherm, Germany.	Baking level has improved leading to improved anode quality.
4.	The in-house modification with rope system in stem brushing machine was implemented for improvement in anode stem brushing.	Stem/beam contact drop reduced by 5 mv resulting in energy savings.
5.	The electromagnetic clutches of wire rod mill 1 & 2 have been replaced by mechanical clutches in the stand drive system.	Equipment down time for shear pin replacement has been drastically reduced.
6.	Crushed bath filling to PTM system modified by Vibromotor type extractor in place of imported eccentric type vibrating conveyor.	The incidence of tripping due to overloading of system has been eliminated. A step in import substitution.
7.	System designed and installed to ensure stem straightening with non-vertical stem in hooking/unhooking station.	Hooking/unhooking cycle time reduced considerably both for butts and rodged anodes.

### (c) Captive Power Plant, Angul :

Sl. No.	Details of Modifications	Benefits thereof
1.	BHEL was engaged in combustion optimization in one of the units in November, 2002. Three mills operation was tried successfully and now 3 mills are tried in all the units since January, 2003. Correction was made in Primary airflow measurement of all the units, which was faulty since inception.	Mill availability has increased and there is power savings in running the auxiliary equipments to the tune of 200 KW/unit.  Correction in the air flow measurement has also resulted in better mill performance due to correct flow of required quantity to mills which was very high before, leading to flame instability.



**(c) Captive Power Plant, Angul (Contd.)**

Sl. No.	Details of Modifications	Benefits thereof
2.	In addition to the existing two passes in the ESP system one more ESP Pass (C-Pass) has been installed and commissioned in Unit # 5 as a pollution control measure.	This has been done to meet the stack pollution norm.
3.	New Multi-stage Valves (MIL Make, 38-78103 type) were replaced in place of Single Stage Re-heater Spray Water line Block Valves in Unit # 2 & # 5 during overhauling of Boiler.	Multi-stage Valves are giving much better performance in avoiding seat passing, which was a frequent problem in single stage valves; thus reducing operational problem & valve break down.
4.	Near Super-heater Header-7 Boiler there was erosion of the steam supply tube due to fly ash impact & subsequently tubes were getting failed. Half tube shields were provided on all 86 Nos. supply tube bends so that surface erosion (Fly ash) of tubes are minimized.	There is reduction in boiler tube failure on this account.
5.	Existing cooling tower fan blades were replaced in all 6 cells of one unit with energy efficient light weight fibre body aerodynamic fan blades.	Power saving to the tune of 25% achieved.
6.	Industrial drain water was recycled by pump on continuous basis. About 2,27,000 M3 of water, which previously was going out of the plant was recycled back to our ash handling system during 2002-03.	There is water conservation as well as condition of "zero discharge" imposed by pollution board is being met.
7.	Reduction in Lube Oil top up : The lubricating oil top up system has been computerized, where top up in about 800 equipments are regularly monitored and corrective actions are taken wherever necessary.	With this, the quantity of lube oil topped up has reduced to 12,773 liters in the year 2002-03 against the previous year consumption of 17,828 liters. This amounts to a reduction of 5,055 liters i.e. 28.35% over the last year.

**III. DETAILS OF TECHNOLOGY IMPORTED DURING LAST FIVE YEARS :**

**a. M&R Complex, Damanjodi**

Sl. No.	Technology Imported	Year of Import	Has technology been fully absorbed?	If not fully absorbed, areas where this has not taken place, reasons therefor and future plans of action.
1.	Debottlenecking of alumina plant was carried out by importing improvements made by Aluminium Pechiney (AP) thereby increasing the production of each stream to 5.25 lakh tpy. Some of the improvements are : — Pre-desilication — Interstage cooler — Hydrate Classification	1996	Fully absorbed	—
2.	Plant has been set up for production of 26,400 tpa Special Grade Alumina and hydrate with technical know-how from M/s ATA, USA.	1995	Not applicable	10,000 tpa Special Grade Hydrate Unit of Special Grade Alumina Plant has been inaugurated. This now broadens the product mix of the Company and provides further value addition.

**b. Smelter Plant, Angul :**

Sl. No.	Technology Imported	Year of Import	Has technology been fully absorbed?	If not fully absorbed, areas where this has not taken place, reasons therefor and future plans of action.
1.	Technology for continuous strip casting (jumbo caster) from M/s. FATA-HUNTER	1998	Fully absorbed	—
2.	Autogenous Mill in the new bath system.	1998	Fully absorbed	—
3.	Import of developments made by AP for use in expansion of smelter (2,30,000 tpy to 3,45,000 tpy)	1998-99	AP technology is being implemented.	AP technology is being implemented.
4.	Manufacture, Testing and supply of Anode Beam milling machine for Potline Mechanical.	1997	Fully absorbed	—
5.	Manufacture, testing and supply of Anode Raising Beam with hammering arrangements.	1998	Fully absorbed	—
6.	Aluminium cold rolling Technology with equipments to roll Aluminium sheet up to 0.12 mm thickness, 1676 mm width and in the form of coils (1800 mm OD X 600 mm ID) commissioned.	2001-02	In the process of stabilization and absorption.	Commissioned during March, 2002.

## REPORT ON CORPORATE GOVERNANCE

## Philosophy

NALCO believes in practising good Corporate Governance, attaining maximum level of transparency, accountability and equity in all facets of its operations and in all its interactions with its stakeholders viz. shareholders, employees, the Government, bankers, society at large, customers etc.

## Board of Directors

The Board of Directors of the Company, as on date of this report, comprises of eight directors - Chairman-cum-Managing Director (Executive Chairman), three executive directors and four non-executive directors. In terms of Clause 49 of the Listing Agreement with Stock Exchanges, at least half of the Board should comprise of independent directors. Out of four non-executive directors, two are independent directors in terms of Clause 49 of Listing Agreement. The matter has been taken up with the Government of India for re-constitution of the Board by appointing some more part-time non-official directors to

bring the composition of the Board in line with the requirements of the said Clause. The Board meets regularly and is responsible for the proper direction and management of the Company. All the Directors have access to the advice of the Company Secretary, who is responsible to the Board for ensuring that Board procedures are followed and all the applicable rules and regulations are complied with.

During the financial year ended March 31, 2003, nine Board Meetings were held on 29.04.2002, 20.06.2002, 10&11.07.2002, 29.07.2002, 28&29.08.2002, 28&29.10.2002, 25.11.2002, 18.12.2002 & 30.01.2003. The maximum time gap between any two Board meetings was not more than two calendar months.

The composition of the Board, Directors' attendance at the Board Meetings during the year and also at the last Annual General Meeting, number of directorships in other companies and membership in other committees etc. are given as under:

Name & Designation	Board Meetings		Attendance at last AGM held on 30.10.2002	No. of other directorships	Membership in other Committees of other companies	
	Held during the tenure	Attended			Member-ship	Chairman-ship
Shri S. C. Tripathi Chairman-cum-Managing Director (Ceased to be Chairman-cum-Managing Director w.e.f. 19.04.2002)	Nil	Nil	—	01	—	—
Shri C.Venkataramana Chairman-cum-Managing Director (Took over additional charge of Chairman-cum-Managing Director w.e.f. 19.04.2002 in addition to his duties as Director (Finance). Appointed as full fledged CMD w.e.f. 26.06.2002)	09	09	Yes	Nil	Nil	Nil
Dr.(Smt.) Aruna Bagchee Part-time official Director (Ceased to be Director w.e.f. 27.08.2002)	04	01	—	02	—	—
Shri S. P. Gupta Part-time official Director (Ceased to be Director w.e.f. 30.04.2002)	01	Nil	—	03	—	—
Smt Adarsh Misra Part-time official Director (Appointed as Director w.e.f. 27.08.2002)	05	04	—	01	Nil	Nil
Dr. S.Behuria Part-time official Director (Appointed as Director w.e.f. 30.04.2002)	08	07	Yes	05	05	04
Shri S. B. Nayak Director (Production) (Ceased to be Director w.e.f. 31.08.2002)	05	04	—	Nil	—	—
Shri S. K. Banerjee Director (Projects & Technical)	09	09	—	Nil	Nil	Nil
Shri G.Upadhyaya Director (Personnel & Administration) (Appointed as Director w.e.f. 01.04.2002)	09	09	Yes	Nil	Nil	Nil
Shri B.N.Jha Director (Commercial) (Appointed as Director w.e.f. 13.08.2002)	05	05	Yes	Nil	Nil	Nil
Shri G.P.Gupta Part-time Non-official Director (Appointed as Director w.e.f. 11.06.2002)	08	07	Yes	05	05	02
Shri P. Mohapatra Part-time Non-official Director (Appointed as Director w.e.f. 11.06.2002)	08	06	—	01	Nil	Nil

The Board has reserved certain items of governance which include approval of annual and interim results, acquisitions, disposals and joint ventures as well as material agreements, major capital expenditure, major sale contracts, employees remuneration and perquisites, incentive schemes, manpower plans, budgets, all statutory compliance and long term plans for its review and approval.

### Remuneration of Directors (as on 31.03.2003)

#### (a) Whole time Directors

Name	Relationship with other Directors	Business relationship with the Company, if any	Remuneration paid during 2002-03			
			All elements of remuneration package, i.e. Salary, CPF, Pension, Gratuity etc. (Rs.)	Other benefits (Rs.)	Service contracts, notice period, severance fee	Stock option details, if any
Shri C. Venkataramana (Took over additional Charge of Chairman-cum-Managing Director w.e.f. 19.04.2002. Appointed as full fledged CMD w.e.f. 26.06.2002)	Nil	Chairman-cum-Managing Director	5,94,762	2,06,619	Note 'A'	Nil
Shri S. K. Banerjee	Nil	Director (P&T)	5,88,940	1,68,685	Note 'A'	Nil
Shri G. Upadhyaya	Nil	Director (P&A)	5,87,105	1,47,701	Note 'A'	Nil
Shri B. N. Jha (Appointed as Director w.e.f. 13.08.2002)	Nil	Director (C)	3,31,714	85,307	Note 'A'	Nil
Shri S. B. Nayak (Ceased to be Director w.e.f. 31.08.2002)	Nil	Director (P)	2,77,556	1,03,015	Note 'A'	Nil

**Note 'A'** - Appointed by the President of India. The appointment may be terminated by either side on 3 months notice or on payment of 3 months salary in lieu thereof. No severance fees is payable to these Directors.

The terms & conditions of all the whole time functional directors are decided by the President of India as per Article 63 of Articles of Association of the Company. While Chairman-cum-Managing Director is placed at schedule "A" scale of pay i.e. Rs.27,750-750-31,500, the other whole time functional directors are placed at schedule "B" scale of pay i.e. Rs. 25,750-650-30,950. All the terms & conditions of the whole time functional directors other than the scale of pay, leased accommodation, provision of car etc. as specified in their respective appointment orders are same as those of the regular employees of the Company. All other terms & conditions not covered in their respective appointment orders are governed by the rules of the Company.

The benefit of monthly incentive schemes which are based on the performance parameters is equally applicable to whole time functional directors like other employees of the Company. The maximum amount that can be earned under production linked incentive scheme is Rs.2,850/- per month and the maximum amount that can be earned under Nirantar Utkarsha Utpadana Puraskar (NUUP) is Rs.500/- per month.

#### (b) Part-time non-official Directors

Name	Sitting Fees (Rs.)		Total (Rs.)
	Board Meetings	Committee Meetings	
Shri G. P. Gupta	35,000	20,000	55,000
Shri P. Mohapatra	30,000	55,000	85,000

An amount of Rs.5,000/- is paid to the part time Non-official Director as sitting fee for attending each of

Board/Sub-committee Meetings.

Sitting Fees is the only remuneration paid by the Company to the part time non-official Directors.

#### (c) Part-time official Directors

No remuneration is paid to the part-time official Directors by the Company.

The following Committees of the Board have been formed with specific responsibilities.

### Audit Committee

The composition of the Audit Committee as on 31.03.2003 was as follows:

Shri G. P. Gupta, Chairman  
Shri Pyarimohan Mohapatra, Member  
Dr. S. Behuria, Member

The above composition consists of all non-executive directors of which two are independent directors.

There is no change in the composition of the Audit Committee as on date of this report.

The Audit Committee's functions include the following apart from the areas specified in the amended Clause 49 of the Listing Agreement and various provisions in the Companies Act, 1956 as amended from time to time:

- To check whether controls are adequate commensurate with size of the operations.
- To study the areas where income can be increased and the areas where cost can be reduced.
- Management Information System on each of the above areas.

M/s. Tej Raj & Pal, Bhubaneswar have been appointed as Statutory Auditors of the Company by the Comptroller and Auditor General of India as per Section 619(2) of the Companies Act, 1956. In terms of sub-clause (aa) of Section 224(8) of the Companies Act, 1956, the shareholders had authorised the Board of Directors to fix a suitable remuneration to be paid to the Statutory Auditors of the Company on their appointment by the C&AG for the year 2002-03. The Board on recommendation by the Audit Committee has fixed Rs. 5,00,000/- plus reimbursement of out of pocket expenses as the remuneration of Statutory Auditors for the year 2002-03.

During the year, five Audit Committee Meetings were held. The Company Secretary is also the Secretary to the Audit Committee. The Chairman of the Audit Committee apprises the Board about the observations of the Audit Committee during the Board Meeting. The minutes of the Audit Committee Meetings are also placed before the Board in their subsequent Meetings.

The Audit Committee also monitors redressal of complaints/grievances of the shareholders/investors of the Company. The details of shareholders/investors complaints received and the status of their redressal are placed before the Audit Committee Meetings as well as the Board Meetings.

### Technology Committee

The Board has constituted a Technology Committee, consisting of the following Directors:

Shri P. Mohapatra – Part time non-official Director  
Shri S. K. Banerjee – Director (Projects & Technical)  
Shri B.N.Jha – Director (Commercial)

This Committee monitors and pays special attention, to the assessment of status of the Company's own technology, acquiring and assimilating new technologies necessary to make it competitive and to its own R&D efforts for maintaining

a sustained strength in the technological field.

During the year, one such Technology Committee Meeting was held.

### Remuneration Committee

This is a non-mandatory provision in the Listing Agreement with the Stock Exchanges. The need for a Remuneration Committee is not felt by the Company in view of the fact that the Company is a Government Company in terms of Section 617 of the Companies Act, 1956. The remuneration of the whole time Directors is fixed by the President of India.

### Standing Committee

A Standing Committee has been constituted by the Board consisting of the Chairman-cum-Managing Director, all whole time Directors and co-opted officer(s) of the Marketing Department. The Committee deals with sales contracts of value between Rs.30 crore and Rs.50 crore each for export of alumina/aluminium. All sales contracts over Rs.50 crore each are decided by the Board. The decisions of the Committee are put up in the subsequent Board Meeting for information.

During the year, one such Standing Committee Meeting was held.

### Share Transfer Committee & Debenture Transfer Committee

The Board has constituted two separate committees namely Share Transfer Committee and Debenture Transfer Committee to consider and approve all related issues in physical mode besides taking note of beneficial owners position under demat mode. During the year 2002-03 the Share Transfer Committee met 38 times and the Debenture Transfer Committee met 34 times.

Shri K.N.Ravindra, Company Secretary is the Compliance Officer of the Company and is the Secretary to these Committees.

During the year 2002-03, the Company received 108 complaints/grievances from the shareholders/investors of the Company and has redressed all of them besides attending to various queries/correspondence within a period of around 8-10 days from the date of receipt of the same. The details of these complaints/grievances are as under:

Particulars	Letters in the nature of various types of complaints/grievances received		
	Individuals & Institutions	Stock Exchanges	SEBI
No. of cases received during the period 01.04.2002 to 31.03.2003.	104	02	02
No. of cases attended and redressed to the satisfaction of the shareholders/investors.	104	02	02
No. of pending cases remained unresolved/un-redressed.	Nil	Nil	Nil

The status of complaints/grievances is regularly placed before each Audit Committee Meeting as well as the Board Meeting.

### Sub-Committee

In addition to the above Committees, Board also constitutes Sub-Committees of Directors with specific assignments. During the year 2002-03, two such Sub-Committees were constituted with specific assignments and 7 Sub-Committee meetings were held.

### General Body Meetings

Particulars of the Annual General Meetings of the Company held in last 3 years:

Year	Date	Time	Location
1999-2000	30.09.2000	11.00 A.M.	NALCO BHAWAN, P/1, Nayapalli, Bhubaneswar
2000-2001	05.11.2001	11.00 A.M.	NALCO BHAWAN, P/1, Nayapalli, Bhubaneswar
2001-2002	30.10.2002	10.00 A.M.	NALCO BHAWAN, P/1, Nayapalli, Bhubaneswar

No special resolution was passed through postal ballot at any of the General Meetings of the Members held during the year under report.

### Disclosures

As per the disclosures given by the Directors of the Company, there were no materially related party transactions that have potential conflicts with the Company at large.

There is no case of non-compliance of statutory provisions of the Companies Act, 1956 or SEBI Regulations or provisions of Listing Agreement except regarding composition of Board as required under Clause 49 of the Listing Agreement stated under the heading Board of Directors and none of these authorities have passed any strictures or imposed any penalty on the Company on any matter related to capital markets during the last three years.

### Means of Communication

Quarterly Unaudited Financial Results are published in The Economic Times, local Oriya daily newspapers and some other leading English newspapers. The same are also posted in the Company's website [www.nalcoindia.com](http://www.nalcoindia.com). The Company's website also displays official news, releases etc. In addition, the Company also uploads the required information under Electronic Data Information Filing And Retrieval (EDIFAR) system in the website maintained on line by National Informatics Centre (NIC) which can be accessed from the SEBI website i.e. [www.sebiedifar.nic.in](http://www.sebiedifar.nic.in) and [www.sebi.gov.in](http://www.sebi.gov.in).

Management's Discussion and Analysis forms part of the Annual Report of the Company which is posted to the

shareholders of the Company along with the Notice of AGM every year.

### General Shareholder information

The Annual General Meeting is scheduled to be held on Monday, the 29th September, 2003 at 11.00 A.M. at NALCO BHAWAN, P/1, Nayapalli, Bhubaneswar-751 013.

Financial Calendar (tentative and subject to change) :

Events	Tentative Date
Annual General Meeting for the year ending March 31, 2003	29th September, 2003
Unaudited Financial results for the first quarter ending 30th June, 2003	July, 2003
Unaudited Financial results for the second quarter ending 30th September, 2003	October, 2003
Unaudited Financial results for the third quarter ending 31st December, 2003	January, 2004
Unaudited Financial results for the year ending 31st March, 2004	April, 2004

### Book Closure Dates

Tuesday, 2nd September, 2003 to Tuesday, 9th September, 2003 (both days inclusive) for determining the entitlements of dividend for the financial year 2002-03.

### Dividend payment date

Before 28th October, 2003 as per the provisions of the Companies Act, 1956.

### Listing on Stock Exchanges

The Company's shares and debentures are listed in Bhubaneswar Stock Exchange, The Delhi Stock Exchange Association Limited, The Calcutta Stock Exchange Association Limited, Madras Stock Exchange Limited, The Stock Exchange, Mumbai (BSE) and National Stock Exchange of India Limited (NSE).

### Delisting of Securities

The company has initiated process for delisting of securities from Bhubaneswar Stock Exchange, The Delhi Stock Exchange Association Limited, The Calcutta Stock Exchange Association Limited and Madras Stock Exchange Limited as per Securities and Exchange Board of India (De-listing of Securities) Guidelines, 2003, to save recurring expenditure on listing fee. The trading of company's securities in the aforesaid stock exchanges is either negligible or nil. This will not affect the interest of the investors since Company's securities continue to be listed in The Stock Exchange, Mumbai (BSE) and National Stock Exchange of India Limited, Mumbai (NSE) which have nation wide trading terminals.



## Stock Code

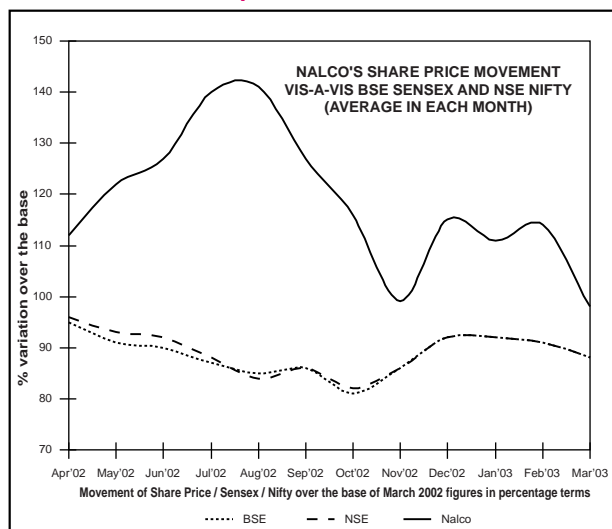
Stock Exchange Code	Reuters Code
BSE : 532234	NALU.BO (Mumbai Stock Exchange)
NSE : NATIONALUM	NALU.NS (National Stock Exchange)

## Market Price Data in last Financial Year 2002-03

Month	BSE		NSE	
	High (Rs.)	Low (Rs.)	High (Rs.)	Low (Rs.)
April-2002	98.75	81.90	102.00	79.55
May-2002	116.35	82.05	116.30	83.10
June-2002	109.90	95.25	109.95	95.20
July-2002	131.00	95.65	131.00	97.00
August-2002	122.20	108.90	122.15	107.00
September -2002	118.50	87.50	118.50	87.30
October-2002	104.50	83.10	104.65	82.60
November-2002	92.00	68.50	91.95	68.00
December-2002	105.00	81.60	105.00	81.00
January-2003	97.25	82.35	97.45	82.20
February-2003	97.20	87.00	97.15	87.05
March-2003	87.60	70.25	88.00	70.05

The Company's shares are regularly traded in BSE and NSE.

## Performance in comparison to broad – based Indices



## Registrar and Transfer Agents

All work related to Share Registry in terms of both physical and electronic segments are maintained at a single point at the Company's In-house Share Registry located at NALCO BHAWAN, P/1, Nayapalli, Bhubaneswar-751 013 (Orissa).

## Share Transfer System

All share transfers and debenture transfers are effected in time. Transfer-cum-Dematerialisation Option letters are sent regularly after each Share Transfer Committee Meeting and Debenture Transfer Committee Meeting to all the transferees and dematerialisation of shares/debentures is effected, wherever valid requests are received or else the physical certificates are despatched to the transferees within the scheduled time.

## Distribution of shareholding

The Company had 34,332 shareholders and 15,474 debenture holders as on 31.03.2003. The shareholding pattern of the Company as on 31.03.2003 was as under :

Category	No. of shares held			Percentage of shareholding		
	As on 31.03.03	As on 31.03.02	Difference	As on 31.03.03	As on 31.03.02	Difference
<b>A. Promoter's holding</b>						
1. Promoters						
— Indian Promoters (Govt. of India)	56,14,99,635	56,14,99,635	—	87.15	87.15	—
— Foreign Promoters	Nil	Nil	—	Nil	Nil	—
2. Persons acting in Concert	Nil	Nil	—	Nil	Nil	—
<b>Sub -Total</b>	<b>56,14,99,635</b>	<b>56,14,99,635</b>	<b>—</b>	<b>87.15</b>	<b>87.15</b>	<b>—</b>
<b>B. Non-Promoters Holding</b>						
3. Institutional Investors						
a. Mutual Funds and UTI	1,76,66,739	3,97,35,991	(2,20,69,252)	2.74	6.17	(3.43)
b. Banks, Financial Institutions, Insurance Companies (Central / State Government Institutions / Non-Government Institutions)	2,47,73,081	46,44,131	2,01,28,950	3.84	0.72	3.12



Category	No. of shares held			Percentage of shareholding		
	As on 31.03.03	As on 31.03.02	Difference	As on 31.03.03	As on 31.03.02	Difference
c. FIs	57,19,998	1,82,66,566	(1,25,46,568)	0.89	2.83	(1.94)
<b>Sub -Total</b>	4,81,59,818	6,26,46,688	(1,44,86,870)	7.47	9.72	(2.25)
4. Others						
a. Private Corporate Bodies	2,31,62,139	1,19,55,551	1,12,06,588	3.59	1.86	1.73
b. Indian Public	1,07,76,743	71,79,079	35,97,664	1.68	1.11	0.57
c. NRIs/OCBs	4,76,432	4,79,210	(2,778)	0.07	0.07	—
d. Others	2,34,861	5,49,465	(3,14,604)	0.04	0.09	(0.05)
<b>Sub -Total</b>	3,46,50,175	2,01,63,305	1,44,86,870	5.38	3.13	2.25
<b>GRAND TOTAL</b>	64,43,09,628	64,43,09,628	—	100.00	100.00	—

### Dematerialisation of shares, debentures and liquidity

The Company's shares and debentures are admitted for dematerialisation through National Securities Depository Limited and Central Depository Services (India) Limited under ISIN INE 139A01026 and ISIN INE 139A07015 respectively.

Total number of shares and debentures dematerialised during the year 2002-03 are 2,38,475 and 3,39,335 respectively.

Status of dematerialisation of shares and Debentures is as follows :

Year	Shares dematerialized (Cumulative)	Debentures dematerialized (Cumulative)
	% to Listed Capital	% to total debentures
1998-99	78.07	—
1999-00	96.57	—
2000-01	97.76	40.30*
2001-02	98.02	93.40
2002-03	98.31	98.71

\* Dematerialisation of debentures commenced w.e.f. 14.08.2000.

Keeping in view the present trend in the Capital Market, NALCO has been encouraging dematerialisation of securities because of the inherent benefits of holding securities in the electronic mode. However, the Company had received some rematerialisation requests during the year and accordingly it has effected rematerialisation of 1,451 shares and 93 debentures and despatched the physical share/debenture certificates in time to the concerned investors.

### Outstanding GDRs/ADRs/Warrants or any Convertible Instruments, Conversion Date and likely impact on equity

The Company has neither issued any GDR / ADR nor any convertible instrument as on date.

### Plant locations of the Company

#### Mines & Refinery

Mines & Refinery Complex  
Damanjodi  
Dist.-Koraput(Orissa)  
Pin – 763 008

#### Smelter Plant

Nalco Nagar  
Dist.-Angul (Orissa)  
Pin –759 145

#### Captive Power Plant

Angul (Orissa)  
Pin – 759 122

#### Port Facilities

Opposite Ore Handling Complex, Port Area  
Visakhapatnam – 530 035 (Andhra Pradesh)

#### Address for correspondence

The Company's Registered Office is situated at :

NALCO BHAWAN  
Plot No. P/1, Nayapalli  
Bhubaneswar – 751 013 (Orissa)

Shareholders and Debentureholders correspondence should be addressed to :

Share Registry  
NALCO BHAWAN  
Plot No. P/1, Nayapalli  
Bhubaneswar – 751 013(Orissa)

Tel. 0674-2301988 to 2301999 (12 lines) (EPABX) -  
(Extn. 2585-87)  
Fax. 0674-2300677

e-mail addresses: i) knravindra@nalcoindia.co.in  
ii) dmrao@nalcoindia.co.in  
iii) nkmohanty@nalcoindia.co.in  
iv) bharatsahoo@yahoo.com

Shareholders/Debentureholders holding shares/debentures in electronic form should address all their correspondence regarding change of address, bank particulars etc. to their respective Depository Participants (DPs) only. No need to inform these changes to the Company.

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## AUDITORS' CERTIFICATE

To  
The Members of  
National Aluminium Company Limited  
Bhubaneswar

We have examined the compliance of the conditions of Corporate Governance by National Aluminium Company Limited for the year ended 31st March, 2003 as stipulated in Clause-49 of the Listing Agreement of the said Company with Stock Exchanges in India.

The compliance of conditions of Corporate Governance is the responsibility of the management. Our examination was limited to the procedures and implementation thereof adopted by the Company for ensuring the compliance of the conditions of Corporate Governance. It is neither an audit nor an expression of the opinion on the financial statements of the Company.

As on 31.03.2003, the composition of the Board was not in conformity with the provisions of Clause-49. We were informed that the Company, being a Government Company has taken up the matter with the Administrative Ministry, Ministry of Mines for appointment of more

independent Directors for complying with these requirements.

In our opinion and to the best of our information and explanations given to us, we certify that the Company has complied with other conditions of Corporate Governance as stipulated in the above mentioned Listing Agreement.

We state that in respect of investor grievances received during the year ended 31st March, 2003, no investor grievances are pending against the Company as on 31st March, 2003 as per the records maintained by the Company and presented to the Audit Committee/ Board.

We further state that such compliance is neither an assurance as to the future viability of the Company nor the efficiency or effectiveness with which the management has conducted the affairs of the Company.

For Tej Raj & Pal,  
Chartered Accountants

Place : Bhubaneswar  
Date : 29th July, 2003

**P. Venugopala Rao**  
Partner

## SECRETARIAL AUDIT REPORT

To  
The Members of  
National Aluminium Company Limited  
Bhubaneswar

We have examined all secretarial records and the compliance of provisions of the Companies Act, 1956, the guidelines and the instructions issued by the Securities and Exchange Board of India (SEBI) and the relevant clauses of the Listing Agreement with Stock Exchanges where the shares and debentures of National Aluminium Co. Ltd. (the company) are listed, for the year ended 31st March, 2003 and we report that :

1. The company is maintaining all statutory records and registers as required to be maintained under various provisions of the Companies Act, 1956 and the rules made thereunder and all the records and entries in the registers are up to date.
2. The company has filed all statutory returns timely with the Registrar of Companies as well as with other Statutory Authorities and has furnished the required documents/intimations to the Stock Exchanges regularly and within the scheduled time frame as required under various clauses of the Listing Agreements.
3. The Board of Directors of the company comprised of eight directors; consisting of the Chairman-cum-Managing Director (Executive Chairman), three executive directors and four non-executive directors as on 31.03.2003. In terms of Clause 49 of the Listing Agreement, at least half of the Board should comprise of independent directors. Out of four non-executive directors two were independent directors in terms of Clause 49 of Listing Agreement. The matter has been taken up with the Government of India for re-constitution of the Board by appointing some more part-time non-official (Independent) directors to bring the composition of the Board in line with the requirements of Clause 49 of the Listing Agreement.
4. The company has an In-house Share Registry located at NALCO BHAWAN, Nayapalli, Bhubaneswar and all the work related to Share Registry in terms of both physical and electronic segments are being handled here at a single point.
5. The company has setup adequate systems and procedures voluntarily even prior to the recent SEBI guidelines to ensure daily reconciliation of shares and debentures held in physical and electronic segments with the total shares and debentures issued by the Company.
6. To ensure speedy and timely transfer/transmission of shares and debentures in physical segment, the Share/Debenture Transfer Committees constituted by the Board comprising of 3 directors consider and approve all the share/debenture related issues besides taking note of beneficial owners position under demat mode. All the complaints/grievances relating to share/debenture transfers/transmissions, demat/remat of shares and debentures, issue of duplicate share/debenture certificates, payment of dividend/debenture interest etc. are promptly attended to by the company and they are resolved within 8-10 days of their receipt. Details of shares and debentures transfers, complaints, electronic holding of shares and debentures (both NSDL and CDSL) etc. are put up at every Board Meeting and Audit Committee Meeting (Audit Committee is also entrusted with the job of looking into redressal of investors grievances). During the previous year ended 31st March, 2003, the Share Transfer Committee has met 38 times and the Debenture Transfer Committee has met 34 times.
7. The dematerialisation/rematerialisation requests of shares and debentures are processed by the company within 15 days from the date of receipt of physical documents from the DPs as per the SEBI guidelines.
8. During the year, the Board of Directors of the company met 09 times on 29.04.02, 20.06.02, 10&11.07.02, 29.07.02, 28&29.08.02, 28&29.10.02, 25.11.02, 18.12.02 & 30.01.03 in respect of which proper notices were given. The proceedings of the meetings including the circular resolutions passed were properly recorded in the Minutes Book maintained by the company and duly signed.
9. The Company has paid half yearly interest on debentures on due dates i.e. 25.09.2002 & 25.03.2003. The company has also paid dividend by due date after its declaration and whenever necessary has kept in abeyance rights to dividend and rights to debenture interest and/or right to 1/3rd redemption proceeds pending registration of transfer of shares/debentures or pending final settlement of suits in compliance with the provisions of the Companies Act, 1956.
10. As per the terms and conditions of the Issue, the company has redeemed 1/3rd face value (Rs. 333/- per debenture) of Debentures on the due date on 25.03.2003 after complying with the relevant provisions of the Companies Act, 1956. The company has also redeemed 14,591 debentures in full as per the options exercised by the respective debenture holders.
11. No Public Deposits were accepted by the Company under Companies (Acceptance of Deposit) Rules, 1975 during the year. The company has neither issued any GDR/ADR nor any convertible instrument during the year under report, which may have an impact on equity.
12. The company has not received any show cause notice for any alleged offence/violation under the Companies Act 1956, or under the clauses of the Listing Agreement or under SEBI guidelines and no fine, penalty or other punishment has been imposed on the company in this regard during the year under review.

**K K A & Associates**  
(Practicing Company Secretaries)

Place : Bhubaneswar  
Date : 04.08.2003

**K.K. Agarwal**  
(C.P. No. 2804)

## MANAGEMENT DISCUSSION & ANALYSIS REPORT

### Industry Structure & Development

Aluminium occupies the top slot among the non-ferrous metals. Steadily over the years, it has moved in its fast growth track globally because of its versatility, unique properties and excellent alloying nature. In India, it started with production of 2500 MT in 1943, in 1950 it was 4000MT, in 1980 it rose to 1.99 lakh tonnes/annum, in 1995 it was 5.18 lakh tonnes and now it is approximately 7.5 lakh tonnes per annum. Being impressed by its amazing growth rate, some of the primary producers in India have chalked out plans for massive investments in the field for undertaking both green-field and brown field expansions.

During the year, the international aluminium market remained sluggish due to poor demand because of ongoing recessionary trend and other adverse factors created out of geopolitical instability. In India, a bad monsoon, rising tensions across the borders, sporadic terrorist attacks and overall slowdown in all segments of industry badly affected the domestic market for aluminium. The international market did not look up for the third consecutive year due to mounting tension in the gulf and in Korean peninsula. Economic slowdown persisted across the globe with production cuts, job cuts and weak equity markets. The LME price of aluminium hovered around US\$1300 through out the year with marginal fluctuations on either side. Although there were slight improvements towards end of the financial year, the recovery could not last long. Alumina prices in the international market varied within the range of US\$143 to US\$ 260. It slightly firmed up towards the last quarter of the year because of strong

Chinese demand. It is expected that Alumina prices may further harden up in the coming year.

During the year, production from your Company's expanded capacities of the Mines and Refinery was fully available and from that of aluminium smelter, only 50% of ongoing expansion capacity was commissioned and balance is expected in later part of 2003-04. It is expected that production from the already expanded capacities of both the smelter and power plant will be fully available during 2003-04.

Your Company's Specialty Alumina and other value added business are acting as platforms for institutionalising the process of innovation for rapidly scaling up of new ideas, knowledge & skill prior to their launching in the market.

### Opportunities & Threats

The availability of surplus Alumina with your Company confers it with attractive opportunities for participating in the JVs of overseas smelters. The ongoing globalization trend may bring ample opportunities for the Company in playing a key role in metal trading, hedging, tolling, technology collaboration and in redefining new areas for application of its value added rolled products and chemical business.

The threat perceptions for the Company include possible worsening of geopolitical scenario across the globe, softening of LME prices, continuation of recessionary trend and levy of antidumping duties on its raw material import.

### Physical and Financial Performance during the year

Sl. No.	Item	Unit	Performance during 2002-03	Actuals during 2001-02	% of increase(+)/decrease(-) over last year
<b>A. PRODUCTION</b>					
1.	Bauxite	MT	47,77,003	35,22,059	(+) 35.63
2.	Alumina	MT	14,80,600	11,13,000	(+) 33.03
3.	Aluminium	MT	2,44,708	2,31,674	(+) 5.63
4.	Power	MU	4,291.6	3,970	(+) 8.1
<b>B. SALES/EXPORT</b>					
1.	Export of Alumina	MT	10,37,287	6,70,120	(+) 54.79
2.	Export of Aluminium	MT	1,07,302	1,06,282	(+) 0.96
3.	Domestic Metal sale	MT	1,34,787	1,23,095	(+) 9.50
4.	Total Metal Sale	MT	2,42,089	2,29,377	(+) 5.54

Sl. No.	Item	Unit	Performance during 2002-03	Actuals during 2001-02	% of increase(+)/decrease(-) over last year
<b>C. FINANCIAL PARAMETERS</b>					
1.	Sales Turnover	Rs. crore	2739.67	2385.42	(+) 14.85
2.	Gross Margin	Rs. crore	1120.08	839.51	(+) 33.42
3.	Export Earning	Rs. crore	1500.65	1205.32	(+) 24.50
4.	Profit before tax	Rs. crore	751.43	525.61	(+) 42.96
5.	Profit after tax	Rs. crore	520.92	409.35	(+) 27.26

### Internal Control Systems

The Company has adequate internal control systems. During the year the Company has engaged external auditing firms for conducting internal audit of all units and Corporate office with a view to widen and deepen the scope of internal control systems. The independent Audit Committee constituted by the Board has reviewed the internal Audit Reports.

### Outlook for Future

**Aluminium :** The total world supply of aluminium is estimated to be around 27.10 million tonnes exceeding the estimated total world consumption of 26.3 million tonnes thereby forcing the market to net surplus to the tune of 0.8 million tonnes during the year. The growth in the major economies such as US, Europe, Japan etc. are likely to be bearish. The western world demand may not be encouraging. However the Chinese demand may grow strongly. The aluminium prices shall be under pressure on account of market uncertainties. The aluminium cash price moved in the range USD 1314-1485 per tonne during the period April-July, 2003.

**Alumina :** The Chinese demand is expected to be strong and shall help alumina prices to be firm. The total alumina imports to China may touch 5.0 million tonnes during the year. The total world supply of alumina is estimated to be around 52.9 million tonnes against the estimated total world consumption of 53.0 million tonnes thereby showing a deficit of 0.1 million tonnes during the year. Due to strong demand and high prices some idled refineries should be viable for restart. The spot alumina prices remained in USD 280-315 FOB per tonne range during April-July, 2003, for Australian alumina.

Your Company with its technological edge and professional approach, has successfully faced the troubled situation created out of the bleak global scenario prevailing during the past years. Apart from firming up its position in the field of Alumina and Aluminium, it has entered into new areas like special Alumina, zeolite, rolled products etc. with consistent track record in capacity utilisation, quality management and customer servicing, it has chartered a course of international confidence. With signs of

improvement, it is expected that there will be gradual recovery of the markets, industry and overall economy. It is anticipated that LME prices for metals will move upward in the coming years.

Your Company's future strategic growth plans include further expansion of the capacities in Mines, Refinery, Smelter and Captive Power Plant. It has plans for putting up one more stream of 5,25,000 tpy Alumina Refinery increasing smelter capacity by 1,15,000 tpy and further addition of two units of 120 MW each in its Captive Power Plant. Its strategic plans are also directed towards meaningful utilisation of resources and full capacity utilisation of existing units with proactive financial management and thrust on human resource development.

The year 2003-04 will see a quantum jump in production of Primary Aluminium in the country from the current level by approx. 1,50,000 MT. This additional quantity will come from the brown field expansion of capacities by the Primary Producers including your Company. This will create a strong competition among the Primary Producers in the already over supplied Domestic Market and your Company would definitely aim for increasing its market share in the Domestic Market apart from increasing exports.

Your Company will strive to consolidate its position in the Domestic Market further in the value added segments of Special Alumina, Special Hydrate, Zeolite-A and the Rolled Products as the production of these products will be available on a consistent basis. Your Company also has plans to enter the overseas market shortly with these products. Though test marketing of small quantities of these products were done in the current year, it aims to enter the market in a big way in the coming year.

### Risks & Concerns

Your Company being a dominant player in the overseas market, its prime risk lies in erratic fluctuation and softening of LME prices. The appreciation of rupee against US\$ and its impact on the export realisations is a matter of concern. Apart from this, probability of imposition of antidumping duties on its imported raw materials and its cost fluctuations add to the existing concern. Your Company

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enjoys a natural hedge on an overall basis against these concerns as it exports significantly.

#### **Business Development**

During the year, your Company examined and reviewed a number of joint venture proposals for setting up of overseas refineries and smelters. These proposals are being looked into from different angles involving your Company's role in such overseas projects like commissioning, technology collaboration, maintenance, operation, raw material supply and marketing of products.

Your Company has plans for undertaking few backward integration projects for catering its raw material requirements and for insulating itself from their price escalations. Proposals received for JVs, takeovers, tolling/conversion arrangements were also evaluated and are being considered depending on their merit. Your Company also actively associated itself with different professional bodies like AAI, IAI, CII, FICCI, Chamber of Commerce and Industry, Confederation of power plants etc. and contributed for furthering the cause of the industry.

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#### **Annexure - V**

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#### **COMMENTS OF THE COMPTROLLER AND AUDITOR GENERAL OF INDIA UNDER SECTION 619(4) OF THE COMPANIES ACT, 1956, ON THE ACCOUNTS OF NATIONAL ALUMINIUM COMPANY LIMITED, BHUBANESWAR FOR THE YEAR ENDED 31<sup>ST</sup> MARCH 2003.**

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I have to state that the Comptroller and Auditor General of India has no comment upon or supplement to the Auditors' Report under Section 619(4) of the Companies Act, 1956 on the accounts of National Aluminium Company Limited, Bhubaneswar for the year ended 31<sup>st</sup> March 2003.

Dated, Kolkata,  
The 18<sup>th</sup> August 2003

Sd/-  
**(S. B. Pillay)**  
Principal Director of Commercial Audit  
& Ex-Officio Member, Audit Board-I,  
**KOLKATA**



## REVIEW OF ACCOUNTS OF NATIONAL ALUMINIUM COMPANY LIMITED FOR THE YEAR ENDED 31<sup>ST</sup> MARCH 2003 BY THE COMPTROLLER & AUDITOR GENERAL OF INDIA

(Review of accounts has been prepared without taking into account the comments under Section 619(4) of the Companies Act, 1956 and qualifications contained in Statutory Auditors' Report.)

### 1. Financial Position

The table below summarises the financial position of the company under broad headings for the last three years:

	2000-01	2001-02	2002-03
<b>Liabilities</b>			
a) Paid up capital			
(i) Government	561.50	561.50	561.50
(ii) Others	82.81	82.81	82.81
b) Reserves and Surplus			
(i) Free Reserves & Surplus	2605.02	2147.94	2340.40
(ii) Capital Reserves	1.27	1.22	1.17
(iii) Debenture Redemption Reserve	321.77	431.77	324.16
c) Borrowings from			
(i) Non-convertible Redeemable Debentures	643.54	643.54	428.33
(ii) Bonds	—	440.00	440.00
(iii) Foreign Currency Loan	—	145.67	—
(iv) Commercial paper	—	196.37	—
(v) Export Packing Credit	—	137.87	256.34
(vi) Other Loan	—	—	199.77
d) Deferred Tax Liability	—	492.13	573.17
e) Current Liabilities & Provision	805.01	719.20	1011.60
<b>TOTAL</b>	<b>5020.92</b>	<b>6000.02</b>	<b>6219.25</b>
<b>Assets</b>			
f) Gross block	5216.63	6277.75	7459.96
g) Less : Cumulative Depreciation	3079.32	3388.13	3747.01
h) Net Block	2137.31	2889.62	3712.95
i) Capital Work-in-Progress	1695.08	1920.81	1298.66
j) Investments	140.29	50.00	200.00
k) Miscellaneous Expenditure not written off	—	1.14	1.14
l) Current Assets, Loans and Advances	1048.24	1138.45	1006.50
<b>TOTAL</b>	<b>5020.92</b>	<b>6000.02</b>	<b>6219.25</b>
m) Working Capital (l-e)	243.23	419.25	(-) 5.10
n) Capital Employed (m+h)	2380.54	3308.87	3707.85
o) Net Worth [a+b(i)+b(iii)—k]	3571.10	3222.88	3307.73
p) Net Worth per rupee of paid up capital (in Rupees)	5.54	5.00	5.13

### 2. Working Results

	2000-01	2001-02	2002-03
(i) Sales	2410.79	2406.92	2773.61
(ii) Less Excise Duty	147.13	160.41	175.37
(iii) Net sales	2263.66	2246.51	2598.24
(iv) Other Misc. Income	155.51	130.04	196.66
(v) Profit/Loss before tax and Prior period adjustment	841.04	524.71	733.84
(vi) Prior period adjustment	(2.33)	(0.90)	(17.59)
(vii) Profit/Loss before tax	843.37	525.61	751.43
(viii) Tax provision	187.54	116.26	230.51
(ix) Profit after tax	655.83	409.35	520.92
(x) Proposed Dividend including interim dividend and dividend tax	284.01	257.73	436.12



### 3. Ratio Analysis

Some important financial ratios on the financial health and working of the company at the end of last three years are as under :

	2000-01	2001-02	2002-03
A. Liquidity Ratio			
Current Ratio	130	158	99
B. Debt Equity Ratio			
Long term Debt to Equity	18	44	26
C. Profitability Ratio			
a) Profit before tax to :			
(i) Capital Employed	35.43	15.88	20.26
(ii) Net Worth	23.62	16.31	22.72
(iii) Sales	33.32	20.93	25.66
b) Profit after tax to Equity Capital	101.79	63.53	80.85
c) Earning per Share (Rupees)	10.18	6.35	8.08

### 4. Sources and Utilisation of Funds

Funds amounting to Rs. 1206.79 crore from internal and external sources were generated and utilised during the year as shown below :

#### Sources of Funds

Funds from Operations :-

a) Profit after tax

Add : Deferred tax

Add : Depreciation

b) Decrease in Working Capital

Total Funds inflow during the year

#### Utilisation of Funds

a) Increase in Gross Fixed Assets and Capital Work-in-Progress

b) Increase in Investment

c) Dividend paid

d) Decrease in borrowing

Total funds outflow during the year

(Rs. in crore)

520.92

81.04

358.88

960.84

245.95

1206.79

560.06

150.00

257.72

239.01

1206.79

### 5. Inventory Levels

The inventory levels at the close of last three years are given below :

	2000-01	2001-02	2002-03
(i) Raw Materials	48.25	57.52	71.61
(ii) Stores & Spares	213.52	261.55	280.74
(iii) Finished Goods and work-in-progress	144.88	164.33	137.60

### 6. Sundry Debtors

The Sundry debtors vis-a-vis sales during the last three years are given below :

Yer ended as on	Sundry Debtors			Sales during the year	(Rs. in crore)
	Considered Good	Considered Doubtful	Total		% of total sundry debts to sale
31.03.2001	263.07	42.29	305.36	2531.29	12%
31.03.2002	257.83	42.30	300.13	2510.95	12%
31.03.2003	101.83	42.66	144.49	2928.03	5%

Percentage of doubtful debts to total debts increased from 14 per cent in 2001-02 to 30 percent in 2002-03.

Sd/-

(S. B. Pillay)

Principal Director of Commercial Audit  
& Ex-Officio Member, Audit Board-I,

**KOLKATA**

Dated, Kolkata

The 18<sup>th</sup> August 2003

# Auditors' Report

To  
The Members of  
National Aluminium Company Limited  
Bhubaneswar

We have audited the attached Balance Sheet of **NATIONAL ALUMINIUM COMPANY LIMITED**, Bhubaneswar as at 31st March, 2003 and the Profit and Loss Account for the year ended on that date annexed thereto and the cash flow statement for the period ended on that date. These financial statements are the responsibility of the company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in India. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

As required by Manufacturing and Other Companies (Auditor's Report) Order, 1988 issued by the Central Govt. of India in terms of Sec.227 (4A) of the Companies Act, 1956, we enclose in the Annexure a statement on the matters specified in paragraphs 4 and 5 of the said order.

Further to our comments in the Annexure referred to above, we report that:

- (i) We have obtained all the information and explanations, which to the best of our knowledge and belief were necessary for the purpose of our audit;
- (ii) In our opinion, the company has kept proper books of account as required by law so far as appears from our examination of the books;
- (iii) The Balance Sheet and Profit and Loss Account dealt with by this report are in agreement with the books of account;
- (iv) In our opinion, the Balance Sheet and Profit and Loss Account dealt with by this report comply with the Accounting Standards referred to in the sub-section (3C) of section 211 of the Companies Act, 1956 except accounting for certain items of scrap and bath tapped from pot shells on disposal as stated in Accounting Policy No.B.3.4 of Schedule-W, and not on accrual basis in line with Accounting Standard-1;

- (v) None of the directors is disqualified as on 31st March, 2003 from being appointed as a Director in terms of clause (g) of sub-section (1) of Section 274 of the Companies Act, 1956;
- (vi) (1) As stated in Note No.2.1 of Schedule-X to the Accounts, depreciation charged for the year is higher by Rs.181.83 crores and the accumulated depreciation charged up to 31.03.2003 is lower by Rs. Nil, compared to the depreciation calculated at the rates prescribed under Schedule-XIV of the Companies Act, 1956;
- (2) As stated in Note No. 3.1 of Schedule-X to the Accounts,
  - (a) There has been a change in the method of accounting of borrowing cost, which resulted in increase in the value of Fixed Assets/Capital work in progress by Rs.18.83 crores with corresponding increase in profit (Current year Rs. 4.04 crores, prior period Rs. 14.79 crores); and
  - (b) There has also been change in the method of valuation of anodes, which resulted in decrease in the value of stock of finished/ intermediary products and work in progress by Rs.1.32 crores with corresponding decrease in profit by the same amount.
- (3) Subject to the foregoing, in our opinion and to the best of our information and according to the explanations given to us, the said Balance Sheet and Profit and Loss Account together with notes thereon, give in the prescribed manner, the information required by the Companies Act, 1956 in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India:
  - a. in the case of the Balance Sheet, of the state of affairs of the company as at 31st March, 2003 ;
  - b. in the case of the Profit and Loss Account, of the profit of the Company for the year ended on that date; and
  - c. in the case of Cash Flow statement, of the cash flows for the year ended on that date.

For Tej Raj & Pal  
Chartered Accountants

Place : New Delhi  
Date : 23rd June, 2003

Partner

**ANNEXURE TO THE AUDITORS' REPORT  
(REFERRED TO IN PARAGRAPH (1) OF OUR REPORT OF EVEN DATE)**

1. a. The Company has maintained proper records to show full particulars including quantitative details and situation of the fixed assets except adjusting increase/decrease in cost consequent on revaluation of foreign currency liabilities to respective assets held at different units.  
b. The Company has a regular programme of verification of fixed assets, which is kept up during the year and which, in our opinion, is adequate and reasonable, having regard to the size of the Company and the nature of its assets.
2. None of the fixed assets of the Company has been revalued during the year.
3. The Stocks of finished goods, stores, spare parts and raw materials of the Company at all its locations except stocks with third parties and in transit have been physically verified by the management at reasonable intervals.
4. In our opinion, the procedures of physical verification of stocks followed by the management is reasonable and adequate in relation to the size of the Company and the nature of its business. However, in the case of green anode rejects and baked/rodded anode rejects physical verification has been done through counting by identifying the green and baked anode rejects by visual inspection instead of on technical analysis.
5. The discrepancies noticed on such physical verification of stocks as compared to books were not material. Such discrepancies relating to shortages have been dealt with in the books of account, while excesses have been ignored except in case of finished goods.
6. In our opinion and on the basis of our examination of the valuation of stocks, such valuation is fair and proper in accordance with the normally accepted accounting principles and is on the same basis as in the preceding year, except valuation of anodes at cost instead of at direct material cost.
7. The Company has not taken any loans, secured or unsecured, from companies, firms or other parties listed in the Registers maintained Under Section 301 of the Companies Act, 1956 and/or from companies under the same management as defined under Section 370(1B) of the Companies Act, 1956. However, Section 370(1B) has been made inoperative on and after 31.10.1998.
8. The Company has not granted any loan, secured or unsecured, to the companies, firms or other parties listed in the Registers maintained under Section 301 of the Companies Act, 1956 and/or to companies under the same management as referred under Sub-section (1B) of Section 370 of the Companies Act, 1956 which is prima facie prejudicial to the interest of the Company. However, Section 370 (1B) has been made inoperative on and after 31.10.1998.
9. The principal amounts and interest wherever applicable thereon in respect of loans and/or advances in the nature of loans given by the Company to bodies corporate and employees have been recovered regularly.
10. In our opinion and according to the information and explanations given to us, there are adequate internal control procedures commensurate with the size of the Company and nature of its business with regard to purchase of stores, raw materials including components, plant and machinery, equipments and other assets and with regard to sale of goods.
11. The company has not purchased goods or materials or sold goods, materials or services from/to any parties listed in the register maintained under Section 301 of the Companies Act, 1956.
12. As explained to us, the Company has a regular procedure for determination of unserviceable or damaged stores, raw materials and finished goods. Adequate provision has been made in the accounts for the loss arising on items so determined.
13. The Company has not accepted any deposit from Public, in terms of Section 58A of the Companies Act, 1956.
14. In our opinion, reasonable records have been maintained by the Company for the sale and disposal of realizable scrap. The Company has no by-product.
15. In our opinion, the company has a reasonably adequate internal audit system commensurate with the size and nature of its business.
16. We broadly reviewed the books of account maintained by the Company pursuant to the rules made by the Central Government for the maintenance of cost records under Section 209(1)(d) of the Companies Act, 1956 and are of the opinion that prima-facie the prescribed records have been maintained. We have not, however, made a detailed examination of the said records. As per the directions of the Central Government, Cost Auditors have been appointed to carry out detailed review of records for the year.
17. The Company is regular in depositing Provident Fund dues with appropriate authority. None of the employees of the Company is a member of the Employees' State Insurance. Pension dues from 16.11.95 amounting to Rs. 21.57 crores, have been deposited with NALCO Employees' Provident Fund Trust and not with Regional Provident Fund Commissioner pending grant of exemption from such payment in view of creation of separate pension fund by the Company as stated in note No. 2.2 of Schedule-X to the Accounts.
18. According to the information and explanations given to us, no undisputed amount payable in respect of income tax, wealth tax, sales tax, customs duty and excise duty, were outstanding as at the last day of the financial year for a period of more than six months from the date they became payable.
19. During the course of our examination of books of account carried out in accordance with the generally accepted auditing practices, we have not come across any personal expenses other than expenses under contractual obligations and/or generally accepted business practices which have been charged to revenue account.
20. The Company is not a Sick Industrial Company within the meaning of clause (o) of Sub-section (1) of Section 3 of Sick Industrial Companies (Special Provisions) Act, 1985.

For Tej Raj & Pal  
Chartered Accountants

Place : New Delhi  
Date : 23rd June, 2003

**Partner**

# Annual Accounts

01. Balance Sheet
02. Profit & Loss Account
03. Schedules Forming Part of the Balance Sheet
04. Schedules forming Part of the Profit & Loss Account
05. Significant Accounting Policies
06. Notes forming part of the Accounts
07. Additional Information forming part of the Account
08. Cash Flow Statement

# Balance Sheet as at March 31, 2003

(Rupees in crores)

	Schedule	As at March 31, 2003	As at March 31, 2002
<b>SOURCES OF FUNDS</b>			
<b>Shareholders' Funds :</b>			
Share Capital	A	644.31	644.31
Reserves and Surplus	B	2,665.73	2,580.93
<b>Loan Funds :</b>			
Secured Loans	C	1,324.44	1,563.45
Unsecured Loans		—	—
<b>TOTAL</b>		<b>4,634.48</b>	<b>4,788.69</b>
<b>APPLICATION OF FUNDS</b>			
<b>Fixed Assets :</b>			
Gross Block	D	7,459.96	6,277.75
Less : Depreciation		3,747.01	3,388.13
Net Block		3,712.95	2,889.62
Capital Work-in-Progress	E	1,298.66	1,920.81
		5,011.61	4,810.43
<b>Investments</b>	F	200.00	50.00
<b>Current Assets, Loans &amp; Advances :</b>			
Inventories	G	489.25	484.32
Sundry Debtors		101.83	257.83
Cash and Bank Balances		49.56	114.23
Other Current Assets		89.80	41.54
Loans and Advances		276.06	240.53
		1,006.50	1,138.45
<b>Less : Current Liabilities &amp; Provisions :</b>			
Liabilities	H	553.59	444.24
Provisions		458.01	274.96
		1,011.60	719.20
Net Current Assets/(Liabilities)		(5.10)	419.25
<b>Deferred Tax Liability (Net)</b>		(573.17)	(492.13)
<b>Miscellaneous Expenditure</b> (to the extent not written off)		1.14	1.14
<b>TOTAL</b>		<b>4,634.48</b>	<b>4,788.69</b>
<b>Significant Accounting Policies</b>	W		
<b>Notes on Accounts</b>	X		
<b>Additional information</b>	Y		
<i>(Schedules A to Y form part of Accounts)</i>			

In terms of our report of even date attached.

For and on behalf of  
Tej Raj & Pal  
Chartered Accountants

For and on behalf of Board of Directors

**P. Venugopala Rao** New Delhi  
Partner 23rd June, 2003

**K. N. Ravindra**  
Company Secretary

**S. K. Banerjee**  
Director  
(Projects & Technical)

**C. Venkataramana**  
Chairman-cum-  
Managing Director

# Profit and Loss Account for the year ended March 31, 2003

(Rupees in crores)

	Schedule	Year ended March 31, 2003	Year ended March 31, 2002
<b>INCOME :</b>			
Gross Sales	I	2,739.67	2,385.74
Less : Excise Duty		175.37	160.64
Net sales		2,564.30	2,225.10
Finished goods internally consumed/capitalised		33.94	21.18
Accretion / (Decretion) to stock of finished / intermediary products / work-in-process	J	(32.44)	4.59
Other Income	K	196.66	130.04
		<b>2,762.46</b>	<b>2,380.91</b>
<b>EXPENDITURE :</b>			
Raw Materials consumed	L	342.24	315.90
Power & Fuel	M	560.41	444.71
Repairs & Maintenance	N	138.38	111.99
Other Manufacturing Expenses	O	87.39	67.46
Employees' Remuneration & Benefits	P	265.51	346.04
Administrative Expenses	Q	62.25	59.97
Other Expenses	R	18.23	26.23
Selling and Distribution Expenses	S	65.69	53.80
Interest & Financing Charges	T	120.45	116.90
Provisions	U	8.50	0.83
Depreciation		359.57	312.37
		<b>2,028.62</b>	<b>1,856.20</b>
<b>PROFIT FOR THE YEAR</b>			
Add : Prior Period Adjustments (Net)	V	733.84	524.71
		17.59	0.90
<b>PROFIT BEFORE TAX</b>			
		751.43	525.61
Less : Provision for taxation - Current		149.47	124.77
Less/(Add) : Provision for taxation - Deferred		81.04	(6.62)
Add : Provision for taxation for earlier years written back		—	1.89
<b>PROFIT AFTER TAX</b>			
		520.92	409.35
Balance of Profit brought forward from previous year		5.69	5.02
Transfer from Capital Reserve		0.05	0.05
Transfer from General Reserve		—	498.75
Transfer from Debenture Redemption reserve		107.61	—
Less : Provision for opening deferred tax liabilities		—	(498.75)
Amount available for appropriation		<b>634.27</b>	<b>414.42</b>
<b>APPROPRIATIONS :</b>			
Proposed dividend		386.59	257.73
Tax on dividend		49.53	—
Transfer to Debenture Redemption Reserve		—	110.00
Transfer to General Reserve		195.00	41.00
		<b>631.12</b>	<b>408.73</b>
Balance of Profit carried to Balance Sheet		<b>3.15</b>	<b>5.69</b>
<b>Earning per share</b>		<b>8.08</b>	<b>6.35</b>

**Significant Accounting Policies**

**Notes on Accounts**

**Additional Information**

(Schedules A to Y form part of Accounts)

In terms of our report of even date attached.

For and on behalf of

Tej Raj & Pal

Chartered Accountants

For and on behalf of Board of Directors

**P. Venugopala Rao** New Delhi  
Partner 23rd June, 2003

**K. N. Ravindra**  
Company Secretary

**S. K. Banerjee**  
Director  
(Projects & Technical)

**C. Venkataramana**  
Chairman-cum-  
Managing Director



## Schedules forming part of the Balance Sheet

(Rupees in crores)

	As at March 31, 2003	As at March 31, 2002
<b>Schedule A</b>		
<b>SHARE CAPITAL</b>		
<b>Authorised :</b>		
130,00,00,000 Equity Shares of Rs. 10/- each	1,300.00	1,300.00
<b>Issued, Subscribed and Paid-up :</b>		
64,43,09,628 Equity Shares (Previous year 64,43,09,628 shares) of Rs. 10/- each fully paid up. Out of these shares, Government of India holds 56,14,99,635 shares (Previous year 56,14,99,635 shares).	644.31	644.31
<b>Schedule B</b>		
<b>RESERVES &amp; SURPLUS</b>		
<b>Capital Reserve :</b>		
Grants-in-aid received from Government of India :		
As per last Balance Sheet	1.22	1.27
Add : Received during the year	—	—
	1.22	1.27
Less : Transfer to Profit & Loss Account	0.05	0.05
	1.17	1.22
<b>General Reserve :</b>		
As per Last Balance Sheet	2,142.25	2,600.00
Less : Transfer to Profit & Loss Account	—	498.75
Add : Transfer from Profit & Loss Account	195.00	41.00
	2,337.25	2,142.25
<b>Debenture Redemption Reserve :</b>		
As per Last Balance Sheet	431.77	321.77
Add/(Less) : Transfer from Profit & Loss Account	(107.61)	110.00
	324.16	431.77
<b>Balance in Profit &amp; Loss Account</b>	3.15	5.69
<b>Total :</b>	<b>2,665.73</b>	<b>2,580.93</b>
<b>Schedule C</b>		
<b>LOAN FUNDS</b>		
<b>Secured Loans :</b>		
<b>14.5% Non-convertible Redeemable Debentures</b>	428.33	643.54
64,21,642 Nos of Rs.667 each (Previous year 64,35,348 Nos of Rs.1000 each) Redeemable at par in two annual instalments on 26.3.2004 and 26.03.2005 and secured by hypothecation of plant & machinery and other assets (excluding book debts) of captive power plant at Angul.		
<b>Long term foreign currency loan from EFIBANCA, Italy</b>	—	145.67
(Current year nil, previous year US \$ 29.851 million, Prepaid in full on 30.4.2002)		
<b>8.60% Non-convertible Secured Redeemable Taxable Bonds</b>	300.00	300.00
Rs.210.00 crores redeemable on 15.11.2004 and Rs.90.00 crores redeemable on 15.2.2005. Secured by hypothecation of part of plant & machinery of Smelter Plant at Angul.		
<b>8.60% Non-convertible Secured Redeemable Taxable Bonds</b>	140.00	140.00
Redeemable on 21.3.2007 with put and call option at the end of third year. Secured by hypothecation of part of plant & machinery of Alumina Refinery plant at Damanjodi.		
<b>Short term borrowings :</b>		
(Secured by hypothecation of raw materials, finished/intermediary products, stores and book debts etc.)		
Working Capital Demand Loan (at CP related cost)	100.00	
Foreign currency Non-Resident (B) - Demand loan	99.77	
Export Packing Credit (EPC)	57.75	137.87
Pre-shipment Packing Credit in Foreign Currency (PCFC)	198.59	
Commercial Paper	—	196.37
<b>Sub total :</b>	<b>1,324.44</b>	<b>1,563.45</b>
<b>Unsecured Loans :</b>	—	—
<b>Total :</b>	<b>1,324.44</b>	<b>1,563.45</b>

**Schedule D**  
**FIXED ASSETS**

(Rupees in crores)										
Particulars of Assets	Gross Block			Depreciation			Net Block			
	As on 1.4.2002	Additions	Sales/ Adjust-ments	As on 31.3.2003	As on 1.4.2002	For the Year	On Sales/ Adjust-ments	Upto 31.3.2003	As on 31.3.2003	As on 31.3.2002
<b>A. PLANT, MINES AND OTHERS :</b>										
Freehold land including development costs	37.20	7.06	—	44.26	—	—	—	—	44.26	37.20
Leasehold land including development costs	4.57	—	—	4.57	1.48	0.10	—	1.58	2.99	3.09
Buildings	220.13	86.53	0.06	306.72	102.39	11.09	0.03	113.51	193.21	117.74
Roads, bridges and culverts	35.01	10.07	—	45.08	8.78	0.62	—	9.40	35.68	26.23
Railway sidings	66.33	3.01	—	69.34	42.51	3.29	—	45.80	23.54	23.82
Water supply, drainage and sewerage	58.05	2.82	—	60.87	31.38	2.86	—	34.24	26.63	26.67
Power supply, distribution and lighting	261.55	136.25	(0.18)	397.62	125.61	14.97	(0.18)	140.40	257.22	135.94
Plant and machinery	5,280.11	884.93	(2.02)	6,163.02	2,976.44	316.71	(1.89)	3,291.26	2,871.76	2,303.67
Office equipments	21.34	2.58	0.02	23.94	11.44	2.54	—	13.98	9.96	9.90
Furniture and fittings	13.63	0.46	(0.10)	13.99	9.00	0.70	(0.07)	9.63	4.36	4.63
Vehicles	24.39	4.24	(0.24)	28.39	18.15	1.15	(0.14)	19.16	9.23	6.24
Miscellaneous equipments	41.30	3.64	(0.05)	44.89	15.71	1.99	(0.01)	17.69	27.20	25.59
Total	6,063.61	1,141.59	(2.51)	7,202.69	3,342.89	356.02	(2.26)	3,696.65	3,506.04	2,720.72
<b>B. SOCIAL FACILITIES :</b>										
Freehold land including development costs	2.92	—	—	2.92	—	—	—	—	2.92	2.92
Leasehold land including development costs	0.35	—	—	0.35	0.25	0.02	—	0.27	0.08	0.10
Buildings	148.61	37.92	(0.07)	186.46	23.39	2.90	(0.04)	26.25	160.21	125.22
Roads, bridges and culverts	17.03	0.38	—	17.41	3.25	0.27	—	3.52	13.89	13.78
Water supply, drainage and sewerage	21.94	1.74	(0.39)	23.29	7.13	0.89	(0.11)	7.91	15.38	14.81
Power supply, distribution and lighting	15.00	2.66	—	17.66	6.72	0.79	—	7.51	10.15	8.28
Office equipments	0.09	—	—	0.09	0.08	—	—	0.08	0.01	0.01
Furniture and fittings	1.97	0.08	0.04	2.09	1.64	0.07	0.04	1.75	0.34	0.33
Vehicles	0.78	0.13	—	0.91	0.54	0.04	—	0.58	0.33	0.24
Miscellaneous equipments	5.45	0.65	(0.01)	6.09	2.24	0.26	(0.01)	2.49	3.60	3.21
Total	214.14	43.56	(0.43)	257.27	45.24	5.24	(0.12)	50.36	206.91	168.90
Total for current year	6,277.75	1,185.15	(2.94)	7,459.96	3,388.13	361.26	(2.38)	3,747.01	3,712.95	2,889.62
Total for previous year	5,219.72	1,063.39	(5.36)	6,277.75	3,079.66	313.28	(4.81)	3,388.13	2,889.62	2,140.06

**Notes :**

- Plant and machinery includes capitalisation of Rs.1,759.73 (Previous year Rs.1,759.73) towards net exchange variation loss in accordance with Accounting Policy No. B 5.4 of Schedule W.
- Depreciation for the year includes Rs.1.11 transferred to expenditure during construction period, pending capitalisation to Fixed Assets (previous year Rs.0.21) and Rs.0.58 charged to prior period adjustment (Previous year Rs.0.70).
- Included in Gross Block above are the following assets laid on land not belonging to the Company :
  - Buildings – Rs.1.21 (Previous year Rs. 1.10)
  - Roads, bridges and culverts – Rs. 3.32 (Previous year Rs. 2.95)
  - Water supply, drainage and sewerage – Rs.1.02 (Previous year Rs. 1.02)
  - Power supply, distribution and lighting – Rs.7.88 (Previous year Rs. 6.87)
  - Railway sidings – Rs. 6.53 (Previous year Rs. 6.53)

(Rupees in crores)

	As at March 31, 2003	As at March 31, 2002
<b>Schedule E</b>		
<b>CAPITAL WORK-IN-PROGRESS</b>		
Construction and other work-in-progress at cost (Includes borrowing cost of Rolled Products Unit of Rs. 84.13 crores, previous year Rs.72.43 crores)	1,076.04	1,507.18
Advances to contractors and suppliers for capital goods (Unsecured, considered good)	10.62	22.79
Stock of construction materials (at cost) (Including materials with contractors Rs.16.64, Previous year Rs.41.64)	63.71	194.94
Construction materials and Plant & Machinery-in-transit (at cost)	8.46	35.80
Exchange variation pending capitalisation	39.32	39.08
Expenditure during construction pending allocation (Schedule E.1)	100.51	121.02
Total :	<u>1,298.66</u>	<u>1,920.81</u>
<b>Schedule E.1</b>		
<b>EXPENDITURE DURING CONSTRUCTION</b> (Pending allocation)		
<b>Opening Balance</b>	121.02	168.13
Expenditure / Adjustments during the year :		
Technical Knowhow	0.44	1.48
Technical Consultancy	19.31	27.03
Other Expenses	8.10	21.01
Interest & financing charges	42.48	8.70
Startup and commissioning expenses	51.12	57.58
Excise Duty	4.93	—
Selling & Distribution expenses	0.85	0.57
Depreciation	1.11	0.21
	<u>128.34</u>	<u>116.58</u>
Less : Income/Adjustments during the year :		
Sale out of trial production	49.00	15.39
Export incentives	0.75	2.00
Finished goods transferred to commercial product	5.51	18.30
Interest	0.02	0.01
Other Income	1.19	0.20
	<u>56.47</u>	<u>35.90</u>
Net Expenditure during the year	<u>71.87</u>	<u>80.68</u>
Total Expenditure	192.89	248.81
Less : Transfer to other heads	1.48	2.88
Less : Amount allocated to Fixed Assets	90.90	124.91
Balance carried forward	<u>100.51</u>	<u>121.02</u>

**Schedule F****INVESTMENTS :**

	Face value per unit (Rs.)	March 31, 2003		March 31, 2002	
		Number	Book Value	Number	Book Value
<b>Non-Trade :</b>					
10 year 15% GRIDCO Bonds, 1999	1,000	500,000	50.00	500,000	50.00
10 year 10.95% GRIDCO Bonds, 2002	1,000	1,500,000	150.00		—
Total :			<u>200.00</u>		<u>50.00</u>

(Rupees in crores)

	As at March 31, 2003		As at March 31, 2002	
Schedule G				
CURRENT ASSETS, LOANS & ADVANCES				
Current Assets :				
Inventories :				
(As Certified by the Management)				
Raw Materials (Including in transit Rs. 9.33, Previous year Rs. 10.45 )	71.61		57.52	
Stock of Finished/intermediary products/ work-in-process	137.60		164.33	
Coal and fuel oil (Including in transit Rs. 9.42 Previous year Rs. 1.99)	30.05		21.68	
Stores, spares and others (Including in transit Rs. 34.79, Previous year Rs. 54.55)	248.97		239.87	
Fixed Assets retired from active use and unserviceable materials	1.72		1.67	
Less : Provision	<u>0.70</u>		<u>0.75</u>	
	1.02		0.92	
	489.25			484.32
Sundry Debtors :				
(Unsecured)				
Debts over six months				
Considered good	28.07		144.11	
Considered doubtful	<u>42.66</u>		<u>42.30</u>	
	70.73		186.41	
Less : Provision for doubtful debts	<u>42.66</u>		<u>42.30</u>	
	28.07		144.11	
Other debts, considered good	<u>73.76</u>		<u>113.72</u>	
	101.83			257.83
Cash and Bank Balances :				
Cash on hand including imprest & stamps	0.14		0.14	
Cheques and postal orders on hand	3.02		2.38	
Balances with Scheduled Banks :				
In Current Accounts	0.23		1.02	
In Exchange Earner's Foreign Currency Account	0.01		110.29	
In Unpaid dividend Accounts	0.29		0.40	
In Term Deposits (As per direction of Orissa High Court)	<u>45.87</u>		<u>—</u>	
	49.56			114.23
Other Current Assets :				
Interest accrued :				
Investments	15.57		1.46	
Bank Deposits and others	2.70		1.20	
Loans to Employees	<u>19.47</u>	37.74	<u>16.31</u>	18.97
Accrued Export Incentives	<u>55.94</u>		<u>22.57</u>	
Less : doubtful realisation	<u>3.88</u>	<u>52.06</u>	<u>—</u>	<u>22.57</u>
		89.80		41.54
Sub-total of Current Assets :		730.44		897.92

(Rupees in crores)

	As at March 31, 2003	As at March 31, 2002
<b>Schedule G</b>		
<b>CURRENT ASSETS, LOANS &amp; ADVANCES (Contd.)</b>		
<b>Loans and Advances :</b>		
(Unsecured, considered good unless otherwise stated)		
Loans to employees (Secured Rs. 53.80, Previous Year Rs. 44.27)	63.93	48.27
Stores on loan basis		
Considered good	0.16	0.27
Considered doubtful	<u>0.06</u>	<u>0.06</u>
	0.22	0.33
Less : Provision for doubtful recovery	<u>0.06</u>	<u>0.06</u>
	0.16	0.27
Advances to Employees	5.87	5.42
Income Tax refund receivable	22.88	21.88
Payments made towards disputed Sales Tax, Customs and Excise demands	18.36	18.81
Advances to Suppliers and others :		
Considered good	5.85	5.72
Considered doubtful	<u>3.29</u>	<u>3.18</u>
	9.14	8.90
Less : Provision for doubtful advances	<u>3.29</u>	<u>3.18</u>
	5.85	5.72
Prepaid Expenses	1.63	2.47
<b>Claims Recoverable (Considered good) :</b>		
CENVAT credit claims	82.60	87.19
DEPB claims	51.12	30.85
Other claims	<u>14.56</u>	<u>11.23</u>
	148.28	129.27
Claims Considered doubtful	<u>8.44</u>	<u>4.24</u>
	156.72	133.51
Less : Provision for doubtful claims	<u>8.44</u>	<u>4.24</u>
	148.28	129.27
<b>Deposits with :</b>		
Customs Authorities	0.07	1.69
Port Authorities	0.44	0.24
Excise Authorities	0.04	0.01
Other Government Departments	6.22	4.54
Others	<u>2.33</u>	<u>1.94</u>
	9.10	8.42
Sub-total of Loans, advances, claims and deposits :	<u>276.06</u>	<u>240.53</u>
Total :	<b><u>1,006.50</u></b>	<b><u>1,138.45</u></b>

Note : Loans due from Directors as on 31.3.2003 – Rs. 1.19 lakhs, Maximum amount due during the year Rs. 4.28 lakhs) (Previous year – Rs. 4.07 lakhs, Maximum amount due Rs. 6.12 lakhs)

(Rupees in crores)

	As at March 31, 2003	As at March 31, 2002
<b>Schedule H</b>		
<b>CURRENT LIABILITIES &amp; PROVISIONS</b>		
<b>Current Liabilities :</b>		
Sundry creditors :		
on capital account	141.77	103.40
others	151.86	111.36
Other liabilities (Including advances from customers of Rs. 19.32, previous year Rs. 19.53)*	144.64	86.14
Security deposits :		
on capital account	39.13	51.33
others	34.06	34.86
Book Overdraft	32.99	41.73
Interest accrued but not due on :		
Redeemable debentures	1.02	1.53
Foreign currency loan	—	3.61
Redeemable bonds	8.09	8.10
Short term loans	<u>0.03</u>	<u>2.18</u>
	553.59	444.24
<b>Provisions :</b>		
For taxation (net of advance payment of tax)	0.97	6.95
For proposed dividend	386.59	257.72
For tax on dividend	49.53	—
For leave encashment and post-retirement medical benefits	<u>20.92</u>	<u>10.29</u>
	458.01	274.96
<b>Total :</b>	<b><u>1,011.60</u></b>	<b><u>719.20</u></b>

\*As on 31.3.2003, no amount is due for credit to Investor Education and Protection Fund.



## Schedules forming part of the Profit & Loss Account

(Rupees in crores)

	Year ended March 31, 2003	Year ended March 31, 2002
<b>Schedule I</b>		
<b>SALES</b>		
<b>Export :</b>		
Calcined Alumina	798.70	496.35
Aluminium Standard and Sow Ingots	701.95	708.97
	<u>1,500.65</u>	<u>1,205.32</u>
<b>Domestic :</b>		
Alumina Hydrate	8.79	6.58
Calcined Alumina	4.45	0.69
Aluminium Standard and Sow Ingots	787.90	624.90
Aluminium Wire Rods	292.46	384.90
Aluminium Billets	63.12	70.47
Aluminium Strips	42.59	59.82
Electricity	39.71	33.06
	<u>1,239.02</u>	<u>1,180.42</u>
Total :	<u><b>2,739.67</b></u>	<u><b>2,385.74</b></u>

### Schedule J

#### ACCRETION/DECRETION TO FINISHED/WORK-IN-PROCESS/INTERMEDIARY PRODUCTS

	Opening Stock	Transfer from trial operation	Adjusted Opening Stock	Closing Stock	Accretion/ Decretion
<b>Finished Products :</b>					
Bauxite	6.57	—	6.57	5.40	-1.17
	(5.85)	—	(5.85)	(6.57)	(0.72)
Alumina Hydrate	1.54	—	1.54	1.35	-0.19
	(0.39)	—	(0.39)	(1.54)	(1.15)
Calcined Alumina	38.74	—	38.74	22.45	-16.29
	(30.98)	(3.38)	(34.36)	(38.74)	(4.38)
Aluminium Standard and Sow Ingots	12.80	0.04	12.84	2.58	-10.26
	(9.22)	—	(9.22)	(12.80)	(3.58)
Aluminium Wire Rods	1.87	0.17	2.04	5.43	3.39
	(0.53)	—	(0.53)	(1.87)	(1.34)
Aluminium Billets	0.79	0.03	0.82	0.97	0.15
	(13.30)	—	(13.30)	(0.79)	(-12.51)
Aluminium Strips	2.16	0.09	2.25	4.54	2.29
	(0.43)	—	(0.43)	(2.16)	(1.73)
<b>Intermediary products:</b>					
Anodes	13.59	—	13.59	16.81	3.22
	(16.74)	—	(16.74)	(13.59)	(-3.15)
Anode butts	27.47	0.36	27.83	23.46	-4.37
	(27.85)	—	(27.85)	(27.47)	(-0.38)
Aluminium scraps	6.55	—	6.55	2.27	-4.28
	(2.78)	—	(2.78)	(6.55)	(3.77)
<b>Work-in-process</b>	52.25	5.02	57.27	52.34	(4.93)
	(36.81)	(11.48)	(48.29)	(52.25)	(3.96)
Total :	<b>164.33</b>	<b>5.71</b>	<b>170.04</b>	<b>137.60</b>	<b>-32.44</b>
	(144.88)	(14.86)	(159.74)	(164.33)	(4.59)

Figures in brackets represent those of previous year.

(Rupees in crores)

	Year ended March 31, 2003	Year ended March 31, 2002
<b>Schedule K</b>		
<b>OTHER INCOME</b>		
<b>Operating :</b>		
Export incentives	145.28	102.15
Exchange variation gain	7.33	6.06
	<u>152.61</u>	<u>108.21</u>
<b>Non-Operating :</b>		
Interest on/from :		
Investments	19.83	7.50
Debtors	0.02	0.07
Bank Deposits and others	1.89	0.02
Loans to Employees	4.02	3.14
Exchange variation gain on bank balance	0.22	0.49
Premium on forward contracts	1.41	—
Profit on sale of fixed assets	0.03	0.01
Sale of scrap	2.95	1.88
Sale of bath	1.68	2.84
Sale of butts & rejects	4.51	—
Receipt for rent, electricity & water charges	2.24	3.07
Miscellaneous Income	5.25	2.81
	<u>44.05</u>	<u>21.83</u>
Total :	<b><u>196.66</u></b>	<b><u>130.04</u></b>

Tax deducted at source from interest income from debtors, investments deposits with banks and financial institutions Rs.1.18 (previous year Rs.1.53).

**Schedule L****RAW MATERIALS CONSUMED**

	Year ended March 31, 2003		Year ended March 31, 2002	
	Quantity (MT)	Value	Quantity (MT)	Value
Caustic soda	1,11,223	139.80	75,518	122.44
C. P. Coke	90,141	89.96	90,614	69.56
C. T. Pitch	23,870	39.12	24,945	43.47
Aluminium fluoride	6,043	26.20	6,309	25.35
Lime	30,787	8.35	24,726	6.72
Crystal growth modifier	336	4.74	242	3.41
Purchased anodes	5,124 Nos.	22.44	7,022 Nos.	31.45
Others (Previous year includes calcined alumina of Rs. 3.43 crores transferred from trial operation)		11.63		13.50
Total :		<b><u>342.24</u></b>		<b><u>315.90</u></b>

(Rupees in crores)

	Year ended March 31, 2003	Year ended March 31, 2002
<b>Schedule M</b>		
<b>POWER &amp; FUEL</b>		
Coal	282.70	242.84
Fuel oil	179.40	114.54
Duty on self generation	91.76	68.90
Power transmission charges	5.06	3.15
Purchased power	1.49	15.28
Total :	<u>560.41</u>	<u>444.71</u>
<b>Schedule N</b>		
<b>REPAIRS &amp; MAINTENANCE</b>		
Buildings	8.47	5.87
Ash Pond damage	—	1.51
Machinery	121.94	99.59
Others	7.97	5.02
Total :	<u>138.38</u>	<u>111.99</u>
<b>Schedule O</b>		
<b>OTHER MANUFACTURING EXPENSES</b>		
Royalty & Cess	22.61	17.19
Freight inwards	24.01	21.45
Consumption of stores	24.17	22.55
Water charges	1.55	1.63
Technical assistance fee & expenses	8.57	4.87
Entry Tax	5.97	—
Excise Duty on closing stock of finished goods and other sales	0.51	(0.23)
Total :	<u>87.39</u>	<u>67.46</u>
<b>Schedule P</b>		
<b>EMPLOYEES' REMUNERATION AND BENEFITS</b>		
Salaries, wages, bonus & exgratia (Previous year includes wage revision liability of Rs.106.49 crores)	206.25	293.33
Contribution to Provident & Pension funds	16.40	29.20
Provision for leave encashment and post-retirement medical benefits	10.63	1.66
Staff welfare expenses	27.98	15.73
Gratuity	4.25	6.12
Total :	<u>265.51</u>	<u>346.04</u>

(Rupees in crores)

	Year ended March 31, 2003	Year ended March 31, 2002
<b>Schedule Q</b>		
<b>ADMINISTRATIVE EXPENSES</b>		
Rent	2.50	2.19
Rates and taxes	0.81	0.63
Insurance	3.20	2.48
Repairs & Maintenance :		
Buildings	1.98	1.41
Others	2.66	3.17
Vehicle operating expenses	0.77	0.81
Consumption of stores	0.34	0.44
Recruitment expenses	0.26	0.68
Bank charges	1.33	1.45
Legal expenses	0.50	0.57
Printing & Stationery	1.42	1.66
Electronic data processing expenses	1.94	1.67
Communication expenses	3.00	3.51
Advertisement & publicity	2.03	2.41
Electricity and water charges	3.30	2.74
Travelling expenses	6.74	6.84
Director's sitting fees	0.01	0.01
Hire charges for machinery and vehicles	3.46	3.45
Management development & training	2.43	2.34
Consultancy charges	0.73	0.76
CISF and other security expenses	15.57	14.17
Fire fighting services	2.51	2.13
Miscellaneous expenses	4.76	4.45
Total :	<b>62.25</b>	<b>59.97</b>
<b>Schedule R</b>		
<b>OTHER EXPENSES</b>		
Research & development expenses	1.52	1.24
Plantation and horticulture	1.28	1.20
Environment and pollution control	0.23	1.53
Peripheral development expenses	3.57	2.79
Expenditure relating to ash pond damage	—	1.96
Auditors' remuneration :		
Statutory audit fee	0.05	0.05
Statutory audit expenses	0.01	0.08
Tax audit, other certification fee and expenses	0.06	0.03
Cost audit fee & expenses	0.02	0.02
Donations	0.05	—
Demurrage	0.18	0.37
Loss on sale of assets	0.06	0.06
Shortages and losses	0.01	1.03
Stores & spares written off	11.14	15.85
Claims, receivables and debts etc. written off	0.05	0.02
Total :	<b>18.23</b>	<b>26.23</b>

(Rupees in crores)

	Year ended March 31, 2003	Year ended March 31, 2002
<b>Schedule S</b>		
<b>SELLING AND DISTRIBUTION EXPENSES</b>		
Packing and forwarding	1.55	1.46
Freight outwards and handling (net of recoveries)	42.23	34.20
Cash discount	12.20	11.04
Demurrage	0.19	0.08
Bank charges	1.04	0.81
Others	8.48	6.21
Total :	<b>65.69</b>	<b>53.80</b>
<b>Schedule T</b>		
<b>INTEREST AND FINANCING CHARGES</b>		
Interest on :		
Redeemable debentures	92.80	93.32
Redeemable bonds	25.80	8.70
Short term loans	19.61	14.28
Others	9.13	8.18
Issue and other expenses	0.80	1.12
	148.14	125.60
Less : Transferred to Capital Work-in-progress	27.69	8.70
Total :	<b>120.45</b>	<b>116.90</b>
<b>Schedule U</b>		
<b>PROVISIONS</b>		
Unserviceable materials	(0.05)	(0.16)
Doubtful Debts	0.36	0.01
Doubtful other current assets	3.88	—
Doubtful advances	0.11	0.83
Doubtful claims	4.20	0.15
Total :	<b>8.50</b>	<b>0.83</b>
<b>Schedule V</b>		
<b>PRIOR PERIOD ADJUSTMENTS (NET)</b>		
Sales	—	0.32
Raw materials consumed	(0.53)	(0.02)
Power and fuel	2.87	(2.27)
Repairs and maintenance	(0.04)	0.24
Other manufacturing expenses	—	(0.18)
Employees' remuneration & benefits	(5.24)	—
Administrative expenses	—	0.31
Selling & distribution expenses	(0.44)	—
Interest & financing charges	(14.79)	—
Depreciation	0.58	0.70
Total :	<b>(17.59)</b>	<b>(0.90)</b>

Figures in brackets represent credits

## **Schedule - W**

### **SIGNIFICANT ACCOUNTING POLICIES**

#### **A BASIS OF ACCOUNTING :**

The Company prepares its accounts on accrual basis under historical cost convention in accordance with mandatory accounting standards.

#### **B. BALANCE SHEET :**

##### **1. FIXED ASSETS :**

- 1.1 All fixed assets are stated at historical cost less depreciation. Cost of acquisition is inclusive of freight, duties, taxes and net of CENVAT credit wherever applicable.
- 1.2 Direct revenue expenditure incurred during construction period on New / Expansion projects is treated as expenditure during construction and is allocated to relevant fixed assets at the time of capitalisation.
- 1.3 Expenses on development of land including leasehold land are capitalised as part of cost of land.
- 1.4 Expenses of capital nature incurred on assets laid on land not belonging to the Company are capitalised under appropriate asset heads.
- 1.5 Where final bills/statements of account are not received, capitalisation of assets has been made provisionally on the basis of technical assessments which may undergo change on settlement of final bills / receipt of statements of account.
- 1.6 Fixed assets acquired out of financial grant from Government are shown at gross cost by crediting the grant-in-aid received to Capital Reserve. Equivalent amount of depreciation written off on such assets in each year is transferred from Capital Reserve to Profit & Loss Account.

##### **2. INVESTMENTS :**

Investments are stated at cost.

##### **3. INVENTORIES :**

- 3.1 Raw materials, stores, spare parts and tools are valued at weighted average cost and net of CENVAT credit wherever applicable.
- 3.2 Finished goods are valued at lower of cost or net realisable value. Cost is determined on the basis of current year's average cost of production and excludes selling and distribution overheads, interest, exchange variation and depreciation on capitalised exchange variation. Cost of Finished goods inside the plant includes excise duty payable.
- 3.3 Intermediary product, viz. Anodes are valued at cost. Anode butts and anode rejects are valued at lower of realizable value or 45% of direct material cost (being 50% of direct material cost less 10% thereof towards reprocessing cost).
- 3.4 Aluminium scrap is valued at cost. Scrap arising out of replacement of major machinery components is valued on the basis of technical estimation. Other scrap and bath tapped from pot shells are accounted for on disposal.

- 3.5 Stock of work-in-process is ascertained on the basis of technical estimates and is valued at annual average direct material, power & fuel and proportionate conversion cost.

- 3.6 Inventory of stores and spares, other than insurance spares, not moved for more than 5 years is valued at 5% of cost. Inventory of insurance spares is valued after making appropriate adjustments in line with Accounting Standard - 2 read with Accounting Standard - 10.

##### **4. DEFERRED REVENUE EXPENDITURE :**

- 4.1 Expenditure on feasibility studies, preparation of project reports, documentations and other related matters on new/expansion projects and unsuccessful projects and capital contribution to external Research & Development Institutions to the extent not adjusted, are grouped under this head pending capitalisation / write off. Expenditure on unsuccessful projects and capital contribution to external Research & Development Institutions is written off over a period of three years.
- 4.2 Preliminary and training expenses related to projects are amortised over a period of five years from the year of commencement of commercial production.

##### **5. FOREIGN CURRENCY TRANSACTIONS :**

- 5.1 Exports and imports during the year in foreign currency are recorded in Indian rupees by applying average Bill Buying and Bill Selling rates of the respective months.
- 5.2 Other transactions in foreign currency are accounted for at the exchange rates prevailing on the date of the transactions.
- 5.3 All foreign currency assets and liabilities are stated at the rates prevailing as on the date of the Balance Sheet.
- 5.4 Exchange differences relating to acquisition of fixed assets are adjusted against relevant nature of fixed assets. Other exchange differences arising out of their settlement and restatement are dealt with in the Profit & Loss Account.
- 5.5 In case of Forward Exchange contracts, the difference between the forward rate and the exchange rate on the date of inception of the contract is recognized as income or expense over the life of the contract.

#### **C. PROFIT AND LOSS ACCOUNT :**

##### **1. DEPRECIATION :**

- 1.1 Depreciation is provided under straight-line method.
- 1.2 Depreciation was charged in respect of main Plant and Machinery and related Factory Buildings and Storage godowns etc., at the rate of 5 per cent up to 31st March, 1994, based on estimated useful life of assets being 20 years without retention of 5 per cent residual value. The useful life of these assets has been revised to 18 years to bring it at par with the life of "Continuous process plant" as envisaged in Schedule XIV of Companies Act, 1956. Such change in life of assets has been considered from 1.4.93 i.e. from the year of introduction of "Continuous process plant"



concept in Schedule XIV of Companies Act, 1956. Depreciation rates on such assets have been recomputed based on guidelines issued under Circular No.14/93 dated, 20.12.93 by Department of Company Affairs, by allocating the unamortized value over the remaining life after retention of 5 per cent residual value except for assets already written off fully.

- 1.3 Depreciation on the following assets is provided based on their estimated useful life at the rates which are higher than the respective rates prescribed in Schedule XIV of Companies Act 1956.

Assets	Rate of Depreciation
Red mud pond (Earth work portion)	14.29%
Ash pond at Alumina Refinery (Earth work portion)	13.34%
Ash ponds at Captive Power Plant	18.08% to 26.51%

- 1.4 Depreciation on all other assets is provided as per rates prescribed in Schedule XIV of the Companies Act, 1956.
- 1.5 Assets costing Rs.5,000/- or less individually are depreciated fully in the year in which they are put to use.
- 1.6 Exchange variation loss/gain adjusted to cost of Plant and Machinery is fully depreciated prospectively over the residual life of assets.
- 1.7 Assets laid on land not belonging to the Company are depreciated over a period of five years.
- 1.8 Cost of leasehold land including development expenses thereon is amortised over a period of 25 years in the case of Mines and 20 years or the period of lease whichever is less in other cases commencing from the year of commercial operation.

## 2. PRIOR PERIOD INCOME /EXPENDITURE & PRE-PAID EXPENSES :

Income / Expenditure relating to prior period and pre-paid expenses not exceeding Rs. 1 lakh in each case is treated as income / expenditure of the current year.

## 3. RECOGNITION OF REVENUE :

- 3.1 Export sales are recognised based on the date of Bill of Lading irrespective of terms of sale viz. FOB, C&F, CIF etc. Indigenous sales are recognised based on the date of Railway Receipt, Lorry Receipt or Delivery Challan.
- 3.2 Claims are accounted for in the Profit and Loss Account based on certainty of their realisation.
- 3.3 Interest receivable is accounted for based on certainty of realisation from past experience.
- 3.4 Export incentives in the form of credit earned on exports made during the year, under Duty Entitlement Pass Book (DEPB) and Special/ Advance Licences, are treated as income at actual credit and estimated realisable value respectively.

## 4. EXCISE DUTY :

Excise Duty is accounted for on despatch of products from the factory and on closing stock inside the plant as stated in Para No.B 3.2

## 5. REPAIRS AND REPLACEMENTS :

- 5.1 Replacements of major machinery components of high value items of gear boxes, transformers, conveyor belts, wire ropes etc. are charged to Profit & Loss Account in the year of replacement after adjustment of estimated realisable value of the scrap arising therefrom.

- 5.2 Pot relining expenses are charged to Profit & Loss Account in the year of occurrence.

## 6. RETIREMENT BENEFITS :

- 6.1 Contribution to Provident Fund is provided on the basis of actual liability.
- 6.2 Liability on account of service gratuity is covered under Group Gratuity Life Assurance Scheme of Life Insurance Corporation of India. Contributions to the scheme are charged to Profit and Loss Account.
- 6.3 Liabilities towards other retirement benefits such as leave encashment and post retirement medical facilities to employees as at the end of the year are provided for on the basis of actuarial valuation.

## 7. RESEARCH & DEVELOPMENT EXPENDITURE :

Research and development expenditure except of capital nature, is charged to Profit & Loss Account in the year of incurring after setting off of incidental income, if any.

## 8. BORROWING COST :

Borrowing costs are accounted for as an expense in the period in which they are incurred, except to the extent where borrowing costs, that are attributable to the acquisition and construction of qualifying assets, are allocated to the cost of relevant fixed assets.

## 9. DEFERRED TAXATION :

Deferred Tax resulting from timing difference between book and tax profit is accounted for under the liability method, at the current rate of tax, to the extent that the timing differences are expected to crystallise.

## 10. DIVIDEND :

Proposed dividend, subject to approval of shareholders, is provided in the accounts.

## D. SEGMENT REPORTING :

1. The accounting policies adopted for segment reporting are in line with the accounting policies of the Company with the following additional policies for segment reporting.
2. The Company has considered Chemicals and aluminium as the two primary business segments. Chemicals include calcined alumina, alumina hydrate and other related products. Aluminium includes aluminium ingots, wire rods, billets, strips and other related products. Bauxite and power, produced for

captive consumption, are included under chemicals and aluminium respectively.

3. India and outside India are the two geographical segments. Since all production and other facilities are located in India, segment assets except export debtors are shown under one geographic segment i.e. India.
4. Inter-segment transfer of alumina is valued at annual weighted average export sales realisation, reduced by railway freight. Inter-segment transfer of power is valued at annual weighted average sales price to state grid.
5. Revenue and expenses have been identified to segments on the basis of their relationship to the operating activities. Revenue, expenses, assets and liabilities which relate to the enterprise as a whole and are not allocable on a reasonable basis, have been included under "Unallocated Corporate" segment.

#### Schedule -X

#### Notes Forming Part of the Accounts :

##### 1. Balance Sheet :

##### 1.1 Land :

- a) Value of freehold land includes advance payments made for acquisition through State Government. Land acquisition proceedings are still in progress and it is possible that further claims may arise on the Company. Relevant title deeds for the acquired land, except a few have been executed.
- b) Land acquired by the Company includes Government land on lease basis. Though the Company has been permitted by the Government to use such land, formalities for legal transfer are yet to be completed. It is possible that further claims may arise on the Company. Value of leasehold land represents amount deposited with the State Government and estimated liabilities provided for.

##### 1.2 Contingent Liabilities :

(Rupees in crores)

	As at 31st March, 2003	As at 31st March, 2002
a) Estimated amount of contracts to be executed on capital account (net of advances and Lcs opened)	132.31	615.83
b) Outstanding letters of credit, guarantees and counter guarantees	20.74	75.01
c) Claims against the Company not acknowledged as debts :		
i) Sales Tax on :		
Works contracts	6.05	6.05
Sale of products	45.22	46.66

(Rupees in crores)

	As at 31st March, 2003	As at 31st March, 2002
ii) Excise Duty on fabrication works	6.03	6.12
iii) Customs Duty on design/engineering charges, steel billets & other claims	13.88	13.80
iv) Claims of contractors, suppliers & others	50.74	13.60
v) Land acquisition & interest thereon	25.45	24.30
vi) Claims made by GRIDCO not covered by contractual terms	—	7.08
vii) Excise Duty for non submission of :		
a) Proof of export	5.92	30.48
b) Other documents	17.28	31.98
c) Shortage of Calcined Alumina	0.59	0.59
viii) Unrealised bank guarantees due to court injunctions	0.57	0.57
ix) Income Tax & Wealth Tax	38.65	165.10
x) Road Tax	0.01	0.01
xi) State Entry Tax	—	4.80
xii) Case u/s.7A of EPF Act	—	0.03
xiii) Interest on Electricity Duty	1.89	0.61
<b>TOTAL :</b>	<b>212.28</b>	<b>351.78</b>

- d) An amount of Rs.18.36 crores (Previous year Rs.18.81 crores) paid under protest against some of the above demands is shown under Loans and Advances. Besides the above claims, few more cases in respect of escalation and extra claims for works contracts have been referred to arbitration, the monetary value of such claims is not ascertainable.

- 1.3 Dues to various Small Scale Industrial Units amounting to Rs.0.58 crores (Previous year Rs.1.05 crores) have been grouped under Current Liabilities. There are no dues to Small Scale Industrial Units for more than thirty days.

- 1.4 Zeolite plant at Damanjodi, commissioned in November 2001 and Cold Rolled Mill of Rolled Products Unit at Angul, commissioned in June 2002, have not been capitalized as of 31.3.2003 as the quality parameters and commercial production quantity were not achieved.

## 2. Profit and Loss Account :

2.1 The depreciation rates followed by the Company in respect of certain assets are at variance with the rates specified in Schedule XIV as explained in Accounting Policy No.C.1.2, 1.3 and 1.6. Had the depreciation been calculated in respect of those assets by applying the rates specified in Schedule XIV of Companies Act, 1956, the charge for the year would have been lower by Rs.181.83 crores (previous year lower by Rs.152.11 crores). However the cumulative shortfall in depreciation under Section 205(2) of the Companies Act upto 31.3.2003 is Nil (previous year Rs.58.14 crores).

2.2 The Company has introduced its own "Employees Pension Scheme" with effect from 1.4.95, which has been recognised by Income Tax Department. In terms of para 39 of Employees Pension Scheme'95 (EPS'95), the Company has sought exemption from operation of EPS'95, which is awaited. Pending grant of recognition to Company's Pension scheme, the amounts otherwise payable to RPFC under EPS'95, amounting to Rs.21.57 crores from 16.11.95 to 31.3.2003 has been retained with the Nalco Employees Provident Fund Trust. Various unions and associations of NALCO have filed writ petition with the Hon'ble Supreme Court of India praying for exemption from operation of EPS'95. The Hon'ble Supreme Court in their interim order dated 30th April 2001 has directed Union of India, RPFC Bhubaneswar and NALCO to maintain status quo till final disposal.

2.3 As per certificate received from Life Insurance Corporation of India, the present value of accrued liability under Group Gratuity Scheme as per actuarial valuation as on 1.4.2003 is Rs.38.08 crores against which there is a fund balance of Rs.17.73 crores invested with LIC as per funding requirement of the scheme. Adhoc provision for gratuity of Rs.5.27 crores on account of wage revision of employees, made during 2001-02, is written back during the year, as the same is no more payable.

2.4 In respect of self-generation of power, the cost under "Power and Fuel" consists of consumption of coal and fuel oil but does not include other expenses of generation and consumption of certain other materials, which have been included under the primary heads of account.

2.5 Major components of deferred tax assets and liabilities

arising on account of timing differences are:

	Up to 31.3.2003	Up to 31.3.2002
	(Rs. in crores)	
Deferred tax liabilities:		
Depreciation differences	592.56	514.23
Others	21.13	5.18
	613.69	519.41
Less: Deferred tax assets:		
Taxes duties, etc.	16.65	9.30
Provision for doubtful debts, claims, etc.	21.43	17.75
Employee separation and retirement	2.44	0.23
	40.52	27.28
Net deferred tax liability	<b>573.17</b>	<b>492.13</b>

3.1 The changes made in the accounting policies during the year have the following effects on the items in financial statements:

- Consequent to change in the method of accounting of borrowing cost (Policy No. C.8), the fixed assets/Capital work-in-progress is increased by Rs.18.83 crores with corresponding increase in profit (current year Rs.4.04 crores, prior period Rs.14.79 crores).
- Consequent to change in the method of accounting of anodes (Policy No. B.3.3), the net stock of finished/intermediary products and work-in-process is decreased by Rs.1.32 crores with corresponding decrease in profit.

4.1 Figures have been rounded off to Rupees in crores with two decimal points as approved by Department of Company Affairs.

4.2 Previous year's figures have been regrouped / rearranged wherever necessary to make them more comparable.

## Schedule Y

### Additional information forming part of accounts for the year ended March 31, 2003

	Current year (Rs. in crores)	Previous year (Rs. in crores)
<b>1. Whole-time Directors' Remuneration :</b>		
Salaries	0.21	0.26
Company's contribution to Provident Funds & Gratuity scheme	0.03	0.03
Leave travel concession	—	—
Medical benefits	0.01	0.01
Other benefits	0.06	0.05
Total :	<b>0.31</b>	<b>0.35</b>

(In addition, each whole time director is allowed the use of Company's car for private purposes up to 750 kms per month on payment of Rs. 4,800/- to Rs. 9,360/- per annum as applicable. Sitting fees paid to non-functional Directors during the year is Rs. 1,40,000 (previous year Rs. 1,30,000).

### 2. Expenditure incurred in Foreign Currency on cash basis :

Continued technical assistance to Aluminium Pechiney	5.35	3.34
Payments to consultants/supervision charges	41.65	15.19
Travelling expenses	0.58	0.73
Interest on foreign currency loan	4.34	7.45
Books, periodicals, advertisement, bank charges etc.	0.74	0.32
Total :	<b>52.66</b>	<b>27.03</b>

### 3. Earnings in Foreign Currency on cash basis :

Export of goods	1,531.78	1,234.78
Despatch money	1.01	0.64
Total :	<b>1,532.79</b>	<b>1,235.42</b>

### 4. Value of Imports calculated on CIF basis :

Raw materials	118.11	105.79
Components, spare parts and construction materials	34.89	20.26
Capital goods	70.90	298.37
Total :	<b>223.90</b>	<b>424.42</b>

### 5. Value of Raw materials, stores, spares & components consumed during the year :

	Current Year		Previous Year	
	Value	%	Value	%
<b>a) Raw materials :</b>				
Imported	154.53	45.15	98.51	31.18
Indigenous	187.71	54.85	217.39	68.82
Total :	<b>342.24</b>	<b>100.00</b>	<b>315.90</b>	<b>100.00</b>
<b>b) Stores, spares and components :</b>				
Imported	50.09	36.00	39.24	37.00
Indigenous	89.06	64.00	66.81	63.00
Total :	<b>139.15</b>	<b>100.00</b>	<b>106.05</b>	<b>100.00</b>

## 6. Licenced Capacity, Installed Capacity and Actual Production/Generation :

Products	Licenced Capacity	Installed Capacity		Actual Production/Generation	
		Current year (In Tonnes)	Previous year (In Tonnes)	Current year (In Tonnes)	Previous year (In Tonnes)
i) Bauxite	Not Applicable	48,00,000	48,00,000	47,77,003	35,22,059
ii) Aluminium Hydrate	Not Applicable	15,75,000	15,75,000	14,96,600	11,14,000
iii) Calcined Alumina	Not Applicable	15,75,000	15,75,000	14,80,600	11,13,000
iv) Aluminium Metal	Not Applicable	2,87,500	2,30,000	2,44,708	2,31,674
a) Aluminium Standard Ingots	Not Applicable			93,486	81,704
b) Aluminium Sow Ingots	Not Applicable			1,03,166	95,372
c) Aluminium Wire rods	Not Applicable			32,791	40,808
d) Aluminium Billets	Not Applicable			7,074	5,446
e) Aluminium Strips	Not Applicable			4,899	6,503
v) Electricity	Not Applicable	840 MW	720 MW	4,291 MU	3970 MU

Note : 1. Installed capacities are as per project report.

2. Installed capacity of Aluminium metal is increased from 2,30,000 MT to 2,87,500 MT and Electricity from 720 MW to 840 MW in March 2003.

3. Production of Aluminium metal includes 5633 MT (Previous year Nil) out of trial operation.

4. Bauxite of 47,47,450 MT (previous year 35,16,727 MT), Alumina Hydrate of 14,80,909 MT (previous year 11,13,452 MT), Calcined Alumina of 4,73,486 MT (previous year 4,40,065 MT) and Electricity of 3,880 MU (previous year 3,664 MU) have been consumed internally during the year.

5. The Aluminium production at column iv) includes production of 1466 MT (previous year 916 MT) of bus bar, 950 MT (previous year 607 MT) of Anode stem and wedges and 876 MT of strip coil (previous year 318 MT) produced for internal consumption.

## 7. Stocks and Sales :

Products	Opening Stock		Sales		Closing Stock	
	Quantity In Tonnes	Value Rs. in crores	Quantity In Tonnes	Value Rs. in crores	Quantity In Tonnes	Value Rs. in crores
Bauxite	3,68,959 (3,63,819)	6.57 (5.85)	— —	— —	3,96,942 (3,68,959)	5.40 (6.57)
Alumina Hydrate	3,035 (923)	1.54 (0.39)	7,697 (5,760)	8.79 (6.58)	2,929 (3,035)	1.35 (1.54)
Calcined Alumina	75,507 (67,284)	38.74 (30.98)	10,40,780 (6,70,657)	803.15 (497.04)	43,423 (75,507)	22.45 (38.74)
Aluminium St. & Sow ingots	2,249 (1,792)	12.80 (9.22)	1,98,324 (1,74,911)	1,489.85 (1,333.87)	512 (2,249)	2.58 (12.80)
Aluminium Wire rods	309 (98)	1.87 (0.53)	32,174 (40,597)	292.46 (384.90)	923 (309)	5.43 (1.87)
Aluminium Billets	121 (2,300)	0.79 (13.30)	7,039 (7,625)	63.12 (70.47)	156 (121)	0.97 (0.79)
Aluminium Strips	331 (72)	2.16 (0.43)	4,552 (6,244)	42.59 (59.82)	678 (331)	4.54 (2.16)
Electricity (in MU net)	— —	— —	411 (342)	39.71 (33.06)	— —	— —

Note : 1. Figures in brackets pertain to those of previous year.

2. The closing stock of Aluminium ingots includes 246 MT of Sow ingots (previous year 771 MT).

3. Stock of Bauxite, Alumina hydrate and Calcined alumina are valued and disclosed as finished products.

4. Sales excludes sale of aluminium metal of 5,552 MT (Rs. 44.89 crores) out of trial production.

5. Figures of closing stock are after adjustment of shortage of Bauxite 1,570 MT (Previous year 192 MT), Alumina hydrate shortage of 8,100 MT (previous year excess of 7,324 MT) Calcined alumina excess of 1,582 MT (previous year 5,945 MT), Aluminium Standard & Sow ingots shortage of 66 MT (previous year 47 MT). Corresponding insurance claims are lodged in respect of transit shortages of standard and sow ingots.



## 8. Social Amenities :

Expenses	Township	Education	Medical	Social/Cultural	Canteen	Total
Payments to employees	1.92	0.10	8.22	—	1.25	11.49
Welfare expenses	—	6.43	5.41	0.96	1.01	13.81
Materials consumed	0.10	—	1.10	—	—	1.20
Repairs & maintenance	4.21	0.02	—	—	0.01	4.24
Power, fuel & water charges	4.83	—	0.01	—	—	4.84
Depreciation	4.78	0.16	0.11	0.16	0.04	5.25
<b>Total</b>	<b>15.84</b>	<b>6.71</b>	<b>14.85</b>	<b>1.12</b>	<b>2.31</b>	<b>40.83</b>
Less : Recoveries	1.44	—	0.12	—	—	1.56
<b>Net Expenditure</b>	<b>14.40</b>	<b>6.71</b>	<b>14.73</b>	<b>1.12</b>	<b>2.31</b>	<b>39.27</b>
For previous year	13.26	6.50	15.80	1.73	8.76	46.05

## 9. Balance Sheet Abstract and Company's General Profile :

### i) Registration Details :

Registration No.	1500920
State Code	15
Balance Sheet Date	31st March 2003

### ii) Capital raised during the year :

	Current Year	Previous Year
		(Rupees in crores)
Public Issue	Nil	Nil
Rights Issue	Nil	Nil
Bonus Issue	Nil	Nil
Private Placement	Nil	Nil

### iii) Position of mobilisation and deployment of Funds :

Total Liabilities	4,634.48	4,788.69
Total Assets	4,634.48	4,788.69
Sources of Funds :		
Paid-up Capital	644.31	644.31
Reserves & Surplus	2,665.73	2,580.93
Secured Loans	1,324.44	1,563.45
Unsecured Loans	Nil	Nil
Application of Funds :		
Net Fixed Assets	5,011.61	4,810.43
Investments	200.00	50.00
Net Current Assets	(5.10)	419.25
Deferred tax liabilities	(573.17)	(492.13)
Misc. Expenditure	1.14	1.14
Accumulated losses	Nil	Nil

### iv) Performance of the Company :

Gross Turnover	2,739.67	2,385.74
Total Expenditure	2,011.03	1,855.30
Profit/Loss before Tax	751.43	525.61
Profit/Loss after Tax	520.92	409.35
Earning per Share (In Rupees)	8.08	6.35
Dividend rate (%)	60.00	40.00

### v) Generic Name of Principal products/services : (Disclosed as per Licence)

Item Code No.	335000000 and 76.06
Product	Aluminium Ingots and cold rolled aluminium strips/coils/sheets

## 10. Segmentwise Information

(Rs. in crores)

	Chemicals		Aluminium		Unallocated Corporate		Consolidated Total	
	Current Year	Previous Year	Current Year	Previous Year	Current Year	Previous Year	Current Year	Previous Year
<b>BUSINESS SEGMENTS</b>								
<b>A. Revenue</b>								
External sales	810.08	502.59	1,754.22	1,722.51	—	—	2,564.30	2,225.10
Inter-segment transfers	342.85	302.63	15.31	10.88	—	—	358.16	313.51
Total Revenue	1,152.93	805.22	1,769.53	1,733.39	—	—	2,922.46	2,538.61
Less : Elimination							-358.16	-313.51
Net Revenue							2,564.30	2,225.10
<b>B. Result</b>								
Segment result (Profit before Interest and Taxes)	429.91	254.88	453.01	422.77	-45.93	-54.05	836.99	623.60
Interest expense							111.32	108.72
Interest income							25.76	10.73
Income taxes							230.51	116.26
Profit from ordinary activities							520.92	409.35
Extraordinary items							—	—
Net Profit							520.92	409.35
<b>C. Other Information</b>								
Segment assets	2,028.03	2,166.93	4,117.65	3,653.30	72.43	178.65	6,218.11	5,998.88
Segment liabilities	133.38	153.19	422.32	279.57	455.90	286.44	1,011.60	719.20
Capital expenditure	54.81	154.93	466.28	903.72	2.19	0.51	523.28	1,059.16
Depreciation	167.52	126.39	191.03	185.01	1.60	1.67	360.15	313.07
Non-cash expenses (other than depreciation)	12.56	4.18	16.96	13.97	0.80	0.21	30.32	18.36

## GEOGRAPHIC SEGMENTS

	India		Outside India		Consolidated Total	
	Current Year	Previous Year	Current Year	Previous Year	Current Year	Previous Year
<b>A. Revenue</b>						
External sales	1,063.65	1,019.78	1,500.65	1,205.32	2,564.30	2,225.10
<b>B. Other Information</b>						
Segment assets	6,168.92	5,920.77	49.19	78.11	6,218.11	5,998.88
Capital expenditure	523.28	1,059.16	—	—	523.28	1,059.16

In terms of our report of even date attached.

For and on behalf of  
Tej Raj & Pal  
Chartered Accountants

For and on behalf of Board of Directors

**P. Venugopala Rao** New Delhi  
Partner 23rd June, 2003

**K. N. Ravindra**  
Company Secretary

**S. K. Banerjee**  
Director  
(Projects & Technical)

**C. Venkataramana**  
Chairman-cum-  
Managing Director

## 11. Cash Flow Statement

(Rupees in crores)

	Year ended March 31st, 2003	Year ended March 31st, 2002
<b>A. Cash Flow from Operating Activities :</b>		
Net Profit before tax and Extraordinary Income	751.43	525.61
Adjustments for :		
Depreciation	360.15	313.07
Interest & Financing charges	110.52	107.60
Provisions (Net)	19.13	2.49
Claims/Recoverables written off	0.05	0.02
Stores and spares written off	11.14	15.85
Interest income	(25.76)	(10.73)
Income from forward contract	(1.41)	—
Exchange variation gain	(2.42)	(0.49)
Debenture issue expenses	0.80	1.12
Loss/(Profit) on sale of assets (net)	0.03	0.05
	<u>472.23</u>	<u>428.98</u>
Operating Profit before working capital changes	1,223.66	954.59
Adjustments for :		
Inventories	(16.02)	(92.81)
Trade & other receivables	(66.62)	(1.55)
Trade payables	77.26	(20.68)
	<u>(5.38)</u>	<u>(115.04)</u>
Cash generated from Operations	1,218.28	839.55
Direct taxes paid net of TDS	(156.45)	(119.35)
	<u>(156.45)</u>	<u>(119.35)</u>
Cash flow before Extraordinary Items	1,061.83	720.20
Extraordinary Items	—	—
<b>Net cash from operating activities</b>	<b>1,061.83</b>	<b>720.20</b>
<b>B. Cash Flow from Investing Activities :</b>		
Purchase of Fixed Assets	(483.89)	(1,035.65)
Sale/write off of Fixed Assets	0.53	0.49
Interest received	6.99	9.76
<b>Net cash used in investing activities</b>	<b>(476.37)</b>	<b>(1,025.40)</b>
<b>C. Cash Flow from Financing Activities :</b>		
Redemption of Debentures	(215.21)	—
Foreign currency loan	(145.91)	(18.89)
Medium term borrowings	—	440.00
Short term borrowings	124.07	333.99
Debenture issue expenses	(0.80)	(1.12)
Income from forward contract	1.41	—
Interest & financing charges paid	(156.19)	(117.22)
Dividends including dividend tax paid	(257.72)	(284.01)
<b>Net cash used in Financing activities</b>	<b>(650.35)</b>	<b>352.75</b>

	(Rupees in crores)	
	Year ended March 31st, 2003	Year ended March 31st, 2002
<b>D. Net changes in Cash &amp; Cash equivalents (A+B+C)</b>	<b>(64.89)</b>	<b>47.55</b>
<b>E. Cash &amp; Cash equivalents — Opening balance</b>	<b>114.23</b>	<b>66.19</b>
<b>F. Cash &amp; Cash equivalents — Closing balance</b>	<b>49.34</b>	<b>113.74</b>

Note : a) **Cash & Cash equivalents :**

Cash on hand and balances with banks	<b>49.56</b>	<b>114.23</b>
Effect of exchange rate changes	<b><u>(0.22)</u></b>	<b><u>(0.49)</u></b>
Cash & Cash equivalents as restated	<b>49.34</b>	<b>113.74</b>

- b) Balances with bank includes Rs.46.16 crores (Previous year Rs.0.40 crores) not available for use by the Company.
- c) Bonds received from GRIDCO amounting to Rs.150 crores on account of partial conversion of debtors has been excluded from Cash Flow statement being non cash adjustments.
- d) Against working capital borrowing facility of Rs. 600.00 crores (Previous year Rs. 400.00 crores), sanctioned by SBI, the Company has been availing Export Packing Credit (EPC), Preshipment Credit in Foreign Currency (PCFC), Working Capital Demand Loan (WCDL) at CP related cost and FCNRB Demand Loan during the year depending upon actual requirements. At the end of the year, total balance under above heads is Rs.456.11 crores (Previous year Rs.334.24 crores).
- e) Figures in brackets are cash outflows/incomes as the case may be.

In terms of our report of even date attached.

For and on behalf of

Tej Raj & Pal

*Chartered Accountants*

For and on behalf of Board of Directors

**P. Venugopala Rao**  
Partner

New Delhi  
23rd June, 2003

**K. N. Ravindra**  
Company Secretary

**S. K. Banerjee**  
Director  
(Projects & Technical)

**C. Venkataramana**  
Chairman-cum-  
Managing Director