

HIGH ENERGY BATTERIES (INDIA) LIMITED

Transcript of the Proceedings of the 63rd Annual General Meeting of the Company held at 11.00 A.M. on Saturday, the 08th June, 2024 through Video Conference (VC)/ Other Audio-Visual Means (OAVM).

1. Welcome Address – Mr. N. Gopalaratnam, Chairman

Dear Shareholders

Good morning to all of you. I extend a warm welcome to all of you for the 63rd Annual General Meeting of the Company. I hope the shareholders are able to hear us and the audio and video are clear. I am N. Gopalaratnam, Chairman of High Energy Batteries (India) Limited and by virtue of the Article number 71 of the Articles of the Association of the Company, I am the Chairman for this meeting. I have joined this AGM from my Office in Erode, Tamil Nadu.

As permitted by the Ministry of Corporate Affairs, we are now having this AGM through VC. I look forward to meeting our shareholders in person, in the next AGM.

2. Introduction

I am joining this AGM from the Corporate Office of the Company, at Erode. Before we start the main proceedings of the meeting, I request the other Board members, on the video conference, to introduce themselves.

Mrs. Lalitha Lakshmanan, Independent Director and Chairman of the Audit Committee and Nomination and Remuneration Committee:

Mrs. Lalitha Lakshmanan: I am Lalitha Lakshmanan, Independent Director and Chairman of the Audit Committee and Nomination and Remuneration Committee. I have joined this meeting from Thanjavur.



Dr. Vijayamohanan K Pillai, Independent Director, Chairman of CSR Committee:

Dr. Vijayamohanan: I am Vijayamohanan, Independent Director and Chairman of CSR Committee. I have joined this meeting from Tirupati.

Cmde. Saroj Kumar Patel, Independent Director:

Cmde. Saroj Kumar Patel: I am Saroj Kumar Patel, Independent Director participating from Nagpur.

Dr. Subrahmaniya Sivam, Independent Director:

Dr. Subrahmaniya Sivam: I am Subrahmaniya Sivam, Independent Director. I have joined this meeting from Bangalore.

Mr. N P Sinha, Nominee Director from Life Insurance Corporation of India (LIC):

Mr. N P Sinha: I am Navin Sinha, Nominee Director. I have joined this meeting from my residence at Patna.

Dr. G A Pathanjali, Managing Director of the Company:

Dr. G A Pathanjali: I am G A Pathanjali, Managing Director. I have joined this meeting from the Chairman's Office at Erode. I am along with my Chairman, Director (Operations) and CFO.

Mr. M Ignatius, Director (Operations):

Mr. M Ignatius: I am Ignatius, Director (Operations). I have joined this meeting from the Chairman's Office at Erode.

Mr. R Swaminathan, CFO:

Mr. R Swaminathan: I am Swaminathan, CFO of the company, participating in this meeting from the Chairman's Office at Erode.



Mr. V Anantha Subramanian, Company Secretary:

Mr. V Anantha Subramanian: I am Anantha Subramanian, Company Secretary and compliance officer of the company, participating in this meeting from the Chairman's Office at Erode.

Auditors:

Mr. N R Suresh, Partner M/s. Maharaj N R Suresh & Co LLP, Statutory Auditor

Mr. N R Suresh: I am N R Suresh, Partner, Maharaj N.R. Suresh & Co LLP. I am attending this meeting from my office in Chennai.

Mr. R Prakash, Internal Auditor, Partner M/s. R Subramanian & Co LLP, Internal Auditor

Mr. R Prakash: I am R Prakash, Partner, R Subramanian and Co LLP. I am attending this meeting from my office in Chennai.

Mr. V Suresh, Partner M/s. V Suresh Associates, Secretarial Auditor

V Suresh: I am V Suresh Partner, V Suresh Associates, Secretarial Auditor of the company. I am attending this meeting from my office in Chennai.

Mr. A S Kalyanararaman, Scrutinizer

Mr. A S Kalyanararaman: I am Kalyanararaman, Practicing Chartered Accountant & Scrutinizer for this meeting. I am attending this meeting from Chennai.

3. Quorum

52 Shareholders have now joined the meeting through video conference.

Hence, we have the requisite quorum present through video conference to conduct the proceedings of this meeting. Participation of members through video conference is being reckoned for the purpose of quorum as per the circulars



issued by the MCA with regard to Section 103 of Companies Act, 2013. The quorum being present, I call this meeting to order.

I now request Mr. Anantha Subramanian, Company Secretary of the company to provide general instructions to the members regarding participation in this meeting.

4. Instruction to Members

Mr. V. Anantha Subramanian, Company Secretary

Good morning to all

- (i) Shareholders may please note that this 63rd AGM is being held through Video Conference (e-AGM) in accordance with the Companies Act, 2013 and circulars issued by MCA.
- (ii) Facility for joining the meeting through Video Conference, Other Audio & Visual mode (OAVM) is made available for the shareholders on first come, first served basis. In the case of our Company, all our shareholders desiring to join the AGM would be able to do so.
- (iii) The facility for joining the meeting was opened at 10.30 A.M. which is 30 minutes before the time scheduled to start the meeting. It will be kept open for joining till the meeting is closed by the Chairman.
- (iv) The Register of directors, Key Managerial Personnel and the Register of contracts or agreements are made available electronically for inspection by the shareholders, during the AGM. Shareholders desirous of inspecting such documents may send their request to hebcnn@highenergy.co.in.
- (v) This being an e-AGM, physical attendance of shareholders is dispensed with. Attendance through Video Conference would be reckoned for the purpose of quorum. Further, the facility for appointment of proxies by the



shareholders is not applicable for this e-AGM. Hence, the proxy register for inspection is not available.

- (vi) The company has received requests from a few shareholders to register them as speakers at the meeting. Accordingly, the floor will be open for them to ask questions or express their views. The moderator will facilitate this session once the Chairman opens the floor for the same.
- (vii) Shareholders can also post their views or questions on the 'chat box' of the Video Conference screen, at any time during the meeting. The Company would respond to them at the meeting and / or through e-mail. The Company reserves the right to limit the number of shareholders asking questions depending upon the availability of time at the AGM.
- (viii) The Company had provided Remote E-voting facility for shareholders to cast their votes electronically on all the resolutions set forth in the Notice. This was closed on 07th June 2024 at 05.00 P.M. Shareholders who have not cast their vote yet through electronically and are participating in this meeting, may cast their votes during the meeting through E-voting system provided by CDSL. They can cast their votes clicking the EVSN 240516005 which will be enabled during the proceedings of the AGM and also the link will be available for a period of 15 minutes after the conclusion of AGM.
- (ix) Shareholders are requested to refer to instructions provided in the AGM Notice, for seamless participation through Video Conference.
- (x) Shareholders are requested to refer to instructions provided in the AGM Notice, for seamless participation through Video Conference. In case they face any difficulty, they may reach out on the helpline contact provided in Page 12 of our Annual Report.



Thank you, Chairman.

5. Chairman

The Company has taken all feasible efforts under the current circumstances to enable members to participate through video conference and vote at the AGM. I thank all the members, colleagues on the Board and auditors for joining this meeting over video conference.

My whole-hearted thanks are due to all our Shareholders as their strength has now swelled to over 24,950 from about 10,460 after the stock-split in August 2022.

Before I go ahead with my address to the shareholders, for the benefit of the shareholders who have joined the meeting may be for the first time, I would like to play a short video presentation capturing the genesis and the growth stories of HEB over more than 4 Decades.

Video Presentation - Corporate Video Playing

[Corporate Video played to all the Participants]

Chairman: I hope the shareholders of the company were able to view and appreciate the efforts taken by HEB in developing a variety of batteries to meet the country's needs.

With that, I would like to deliver the customary "Chairman's Address" to the shareholders.

6. Chairman's Address

Dear Shareholders.

I extend a warm welcome to all of you to this 63rd Annual General Meeting of the Company. As I had said earlier, I welcome this opportunity to reach Shareholders, far and wide, through this Video Conference mode, though I will miss the warmth and personal interaction that I enjoy during physical meetings.



The video presentation that you witnessed just now, I am sure, would have given you an in-sight into the history of the company's successful pursuit of different battery types involving various electrochemical systems / technologies that are indigenously developed through in-house R&D, to support and meet our country's critical energy needs.

I am indeed proud that our company and its R&D Labs., over the years are fully equipped and focused, to take on the technical and technological challenges, in pursuit of meeting the stringent and complex requirements of many of the strategic Defence related high-power, high-energy batteries involving widely varying chemistries such as Silver Oxide Zinc, Nickel Cadmium, Magnesium Silver Chloride, Cuprous Chloride and Metal–Air systems. This enables the Company to design and manufacture batteries for Mission Critical platforms like Torpedoes, Fighter Aircraft, Supersonic Missiles, Army Battle Tanks, Unmanned Arial Vehicle (UAV), Drones, Autonomous Underwater Vehicle (AUV) and Satellite Launch Vehicles (SLV).

Our Company is currently equipping itself through development programs initiated to meet the requirements of the upcoming areas like Fuel Cell for In-situ Power Generation using **Hydrogen as fuel (HFC)** and Long-duration Energy Storage (LDES), to provide over ten hours of Un-interrupted Power to consumers, through Flow Battery systems.

Your Company has posted again a reasonable operational and financial result given the global situation prevailing and declared for the Fourth year in succession, a dividend of 150% for FY 2023 – 24. I am sure the shareholders would be happy at the Company's performance in the year under review.



The Company's Annual Report and Audited Accounts for the year under review, circulated through the Electronic Media, have been with you for some time and with your kind permission, I would like to take them as read.

ECONOMY

"World Economic outlook" report of IMF predicts: "Global economic activity is stalling with signs of slowdown in both the manufacturing and Service sectors. Tight financial conditions weigh on consumer and business sentiments, while fiscal and monetary policy-makers are assessing trade-offs and sequencing for careful policy calibration."

The economic backdrop is marked by protracted weakness in global growth and widening divergence. The International Monetary Fund (IMF) forecasts a slight decline in global growth to 2.9% in 2024, down from 3% in 2023. The relative resilience in global figures will continue to rely on the growth performance of emerging economies, while the momentum in advanced economies is fading.

The International Monetary Fund (IMF) has been optimistic in forging India's growth forecast for 2024-25 at 6.8%, on the back of strong domestic demand and a rising working-age population.

DEFENCE

Government allocated Rs 6.21 Lakh Crores to Defence sector in FY 2024 – 25 Interim Budget, a jump of 4.7% over previous year. Further, Defence R&D is opened up fully for Indian industrial sectors including startups and as part of "Atma Nirbharta" programs, many new systems are being developed with Battery playing the main role of Power Supply, to meet the requirements.



Out of the said allocation of Rs. 6.21 Lakh Crores, Rs. 1.72 Lakh Crores (around 28%), was earmarked only for capital acquisition. Further, Rs. 1 Lakh crore corpus created for "**Deep tech**" essentially to provide long term loan to companies.

THRUST IN DEFENCE ALLOCATION

Government is planning to impose restrictions on import of arms and ammunitions in a phased manner and such imports shall be substituted through the procurement from Domestic Industry, facilitated by a strong Indian manufacturing infra cum eco system. This will benefit our Company, having ample resources to take on the design, engineering development cum manufacture of energy related systems systematically, to get involved in related indigenization programs with the Defence Agencies.

COVID 19

Though the company did not face lockdowns in FY 2023 – 24 due to the pandemic aftermath, disruptions in supply chain and delays in receipt of imported materials continue till date.

PERFORMANCE REVIEW

The company achieved a turnover of Rs.77.23 Crores as compared to last year turnover of Rs. 92.54 Crores resulting in a decrease of around 16% compared to the previous year. The Company made PBT of Rs. 23.11 Crores, as against Rs. 27.49 Crores last year.

Another accomplishment which is worth sharing is that the Company continues to be "Debt Free (Long Term)" Company since FY 2022 – 23.

Our efforts towards the revival of operations of Lead Acid Battery Division are yet to bear fruits.



CSR

The Company, by framing its CSR policy, is committed to the upliftment of rural area surrounding the factory and as part of the statutory obligation towards CSR, the Company spent Rs. 52.92 lakhs with impetus on promoting education (Rs. 22.04 Lakhs), Rural Development activities (Rs. 19.66 Lakhs) and Health Care (Rs. 11.22 Lakhs).

After my address, Dr. Pathanjali will make a short presentation, reviewing last year's performance.

R &D

Your company through a joint working with IIT, Madras and OECT, over the last two years, had developed a 1kW / 10kWh Vanadium based Flow Battery (VRFB) and demonstrated its performance satisfactorily. This development pertains to "Energy Storage System" for use in long endurance requirements, the battery being integrated with Renewable Energy (RE) sources like Solar and Wind.

As a continuation of the work and based on the satisfactory demonstration of a 5kW system, further work on the design, development cum supply of a VRFB based 10kW / 100 kWh storage system integrated with Solar PV for Charging of Two-Wheeler (2W) or Three-Wheeler (3W) EV – "a 24*7 Charging Station" as an application, is presently in progress.

The wrapper for our 63rd Annual Report contains the image of Integrated Solar with Vanadium Battery (VRFB) for one such EV – 2W Charging, exhibited during "India Energy Week" (IEW) – 2024 at Goa during February 2024, stands testimony to this fact.

The scale - up of the systems to higher levels of Power and Energy, will be addressed in a phased manner over the next two years, as the technical



challenges are high in terms of material availability, indigenization of components and cost effectiveness of overall system.

R & D efforts on the development of a 1 kW and 2.5 kW Fuel Cell system using Hydrogen and Air in our normal ambient conditions, is being pursued jointly with Centre for High Technology (CHT), Indian Oil Corporation Limited (IOCL) and Gas Authority of India Limited (GAIL).

On this, optimization of membrane, the catalysts, catalyst loading and evaluation of a small size 1kW proto type stack, are in progress. The Process flow and control parameters for proto development is established and this program will be completed including the testing cum evaluation of a scaled up 2.5 kW plus level unit, during the FY 2024 - 25.

DIVIDEND

As you are aware, Board of Directors have recommended payment of dividend at 150% for this year 2023-24, quite notably for the fourth year in succession.

CURRENT YEAR (2024-25)

The company, it is hoped, will be able to maintain improved financial performance this year also on similar levels. The company is free of debt and our banking operations are at a comfortable level. With good orders on hand and orders expected during the year, the company is expected to post better results barring unforeseen circumstances.

DIVERSIFICATION

As informed in the last Annual General Meeting, we pursue application-oriented development Programs in the field of Li-lon and other types of power sources like Fuel Cells and Flow Battery.



Conscious of the opportunities and the prevailing Tech–friendly atmosphere, the company is on the lookout for proposals towards diversification, to enter into the latest energy based / power related systems and Hydrogen usage activities.

DIRECTORS

During the year, Mr. A L Somayaji, Cmde. R P Prem Kumar and Mr. M Natarajan Independent Directors of the Company completed their Second Tenure of Five years as on 31st March 2024. Accordingly, Cmde Saroj Kumar Patel and Dr. Subrahmaniya Sivam were appointed as Independent Directors for a tenure of five years while Dr. Vijayamohanan K Pillai continues to be an Independent Director, for a Second term of Five years from 01st April, 2024, with the approval of the members through Postal Ballot.

ACKNOWLEDGEMENT

I am grateful to my colleagues in the Board, who display keen interest in the affairs of the Company and whose timely advice, counsel and guidance, many a time, helped the Company to steer clear off difficult situations.

I also wish to place on record the excellent support extended to our Company by Defence Services, VSSC, ISRO, RCI, ASL, DRDO Laboratories and Ministry of Defence (MOD), NSTL, NPOL, NMRL, BDL, BrahMos (BAPL), Skyroot, BEL, HAL, ADE, ADA, L&T, Mahindra Defence, Agnikul and other Defence based organizations such as DGONA, DAPI, CVRDE, MGO, Air (HQ), HQMC, Indian Army, Indian Air Force, Indian Navy, Overseas Customers, LIC and our consortium of Bankers Viz., UCO Bank and Punjab National Bank.

I further wish to place on record my sincere appreciation to all the employees of the company for their continued involvement and contribution towards the improved performance of the company.



And to you, our Shareholders, I am deeply grateful for the confidence and trust that you have always reposed on us and I take this opportunity to solicit your continued support.

My thanks are equally due to various departments and statutory bodies of Central and State Governments.

I now move for adoption of the Board's Report, Auditors' Report and the Accounts.

I shall be glad to furnish any clarification, as may be required by the Members on the Accounts of the Company.

Thank you, "Ladies and Gentlemen" for your patient hearing.

7. MD's Presentation

Chairman: I now request the Managing Director, Dr. G. A. Pathanjali to do a short presentation. He will cover a review of the Company's operational and financial performance.

Dr. G A Pathanjali: Thank you, Chairman.

Presentation made by Dr. G A Pathanjali, Managing Director:

<u>OPERATIONAL PERFORMANCE & FINANCIAL HIGHLIGHTS 2023 – 24</u>

PERFORMANCE HIGHLIGHTS

- 1. Turn over Rs.77.53 Crores.
- 2. Profit Before Tax (PBT) 30% same as last year.
- 3. Dividend of 150% for the year 2023-24.
- 4. Outlook for 2024-25 is positive.
- 5. Debt free company.
- 6. Lower Bank Interest Rates.



OPERATIONAL HIGHLIGHTS

1. 330kW Torpedo Propulsion battery development for HWT.

This is an indigenous program developed by NSDL and the requirement is for underwater motive power which calls for high power to be expended within a short period. While the battery development pursued last year had achieved the said results and met the requirements based on the review by Navy and the users, indicates the need for further optimization of the overall size and weight of the system which in turn calls for modification of the battery design and supply. This requirement is expected to materialize into production orders during the current year.

2. Working on a new Silver Based Battery for Sonobuoy.

Sonobuoys are instruments which are used in the sea to collect acoustic noise and sends the signals by either transmitting or receiving the signals or vice versa, related to the mapping, surveying, data collection and reconnaissance activities.

Distinctly different from our high-rate, high power, low endurance requirement of batteries for strategic applications, this requirement is for underwater mapping and surveying purposes using Acoustic signals gathered. The application demands very low power in wattage level, uninterrupted for very long duration of the order of a year or even more. Further, they are expected to use Dissolved Oxygen available in the sea water itself, which is a challenging operation. Our battery is developed using Carbon material as cathode and magnesium-based material as anode.



The development efforts on this battery have been successful on proto stages and presently assembling of a full-scale unit is in progress. This will further undergo test and evaluation both at HEB premises using simulated synthetic sea water as well as out in the sea through oceanographic Labs at Chennai and Kochi. We are hopeful about the final product in the coming years.

3. Order received for the development of two new Battery types.

These are development orders under Import Substitution for which the articles are already available including the Decoy platforms, with the Navy. The Secondary version of practice torpedoes are also developed by Navy and these two batteries were developed within a very short duration of less than a year including the qualification.

These battery types are used in High power, high-rate torpedoes, based on Silver Zinc using rechargeable secondary type for 2 different platforms. These are to be used in underwater applications and were developed and supplied, meeting the customer requirements. These batteries are expected to be procured during the current year for Indian Navy usage.

4. Navy initiated development of High power (Mg Based) Battery.

This is a testing facility to check the technical parameters of a Naval based battery for which most of the details were not available beforehand posing a challenge.

The simulated testing of a Magnesium based battery, to generate the needed technical parameters was undertaken satisfactorily. Based on this test, the finalization of technical specification of the battery is in progress. To indicate the technical specifications, this battery typically uses around



5,000 to 6,000 liters per minute of Sea Water and for this, the company prepared synthetic water thereby pumping to the torpedo.

Appreciating the importance and the sincere efforts put in by HEB team towards this work, the Chief of Naval Staff (CNS) Commendation was received by Mr. M. Ignatius, Director (Operations).

The distinct feature of this commendation is that, they confer it either for the service personnel or the civilian personnel within the Defense services and for a company like ours, it has been given.

The initiation of a development cum supply order for this high-power sea water battery is expected during the current year.

5. Development work on Fuel Cell 2.5kW with CHT, IOCL & GAIL.

This development activity is on Fuel cells wherein, despite its presence for a long time, various issues mainly on Commercial aspects (cost effectiveness) not withstanding other technical challenges, posed a big challenge and requires further addressing. These include cost of membranes, need for platinum / noble metal-based catalyst, reducing the content of Platinum and pursuing alternates using binary catalyst, etc. Also, various indigenous programs on Fuel Cells are pursued within the Country to suit local requirements. Apart from this, component manufacturing process is also undergoing to make it more "mass productive".

During last year, work on the design, development and assembly of stacks for evaluation upto 1kW level was pursued with satisfactory results. Further work as per the scope of contract to develop a 2.5 kW unit using Hydrogen as fuel, is in progress. Hopefully, this will materialize during this year and



we can further look at scaling up to 5kW and 10kW levels, beyond which it can be accommodated as per customer requirement in a modular format.

6. VRFB unit 5kW demonstrated for EV Charging.

During February 2024, at the India Energy Week (IEW) 2024 Goa, we had the opportunity to demonstrate the charging of a Two-Wheeler using the energy harnessed through Solar Panels and kept stored in our 5kW VRFB Proto unit. This attracted the attention of many of the Oil and Gas majors such as ONGC, GAIL, IOCL and others.

The distinct feature of Flow batteries is that the electrolytes are kept outside separately compared to other battery types, where the energy flow is restricted by the active material within the battery. Also, in the case of flow batteries both catholyte or anolyte are in solutions form, which are actually kept outside the electrode compartment. Also, the electrode will only act as an electrolytic site, where the reaction takes place.

The advantage with Vanadium based Flow Batteries is that it gives enormous flexibility in increasing the energy content since the energy is kept separate from the design of the stack material.

These batteries using renewable energies, would operate at the minimum duration of 10 to 12 hours because the solar power will be available in the daytime and the rest of the period, the charge the power or the energy from the battery needs to be used. Further, this flow battery takes a better deal in terms of its performance and environmental compatibility and the long-life cycle around 10000 cycles, with a span of ten plus years.

A video presentation about the VRFB was played for better understanding on the concept.



The VRFB system is very challenging from the technical point, and these systems are to come in the upcoming two-to-three-year period, though the market potential *per se* as on date is not nearly full and adequate. However, the work is going on as these are all upcoming systems and mainly for the future long storage needs especially for use in tandem with the renewable energy like solar.

7. Scale-up work on Flow Battery, to 10kW/100 kWh with IITM & OECT.

We are happy to inform that last year we developed flow battery unit with 1kW and towards this, our company initiated the scale up activity to 10kW/100kWh. Also, this will become a standard and any further development in the future will be on a modular format.

The proposed design is of stack compaction for a 10kW module and our company propose to have it containerized, so that it can be transported and positioned. This stack caters mostly for stationary application, but it can be transported and positioned at wherever the site where the energy demand will be required.

This work needs further optimization of design especially with respect to the selection cum manufacture of components, technical parametric studies and overall cost effectiveness. Towards this scope, a scale up program on this with IITM & OECT is in progress since March 2024.

FINANCIAL HIGHLIGHTS OF FY 2023 - 24:

❖ The turnover stood at Rs. 77.23 Crores when compared to Rs. 93.56 Crores made last year. Major reason for the reduction was that our company was expecting one of the major orders from the Navy which got delayed for more than a year and half.



- ❖ The PBT (Profit before Tax) was 23.11 Crores against Rs. 27.49 Crores of the previous year. However, the percentage comparisons are similar like previous year and thus the reduction in value was only due to dip in turnover.
- ❖ The Bank borrowings was Rs. 4.77 Crores against the previous year's amount of Rs. 20.85 Crores. Conscious efforts are made to reduce the utilization of Bank borrowings.
- ❖ Other liabilities were Rs. 15.83 Crores against Rs. 20.53 Crores for the previous year. This was achieved by increase in operation with reduction in both Bank Borrowings and other liabilities.
- ❖ We are happy to inform that our Net-worth at Rs. 87.70 Crores has increased over 6 times in the last 8 years.
- The CAGR details for the past 7 years are as follows: -

(i) Revenue - 4.54% (ii) EBITDA - 11.95% (iii) PBT - 25.82% (iv) PAT - 26.67% (v) Networth - 25.14%

These details imply that our company as a whole is in a better position on all these parameters.

❖ As stated by the Chairman in his address, the number of Shareholders has increased to over 24,950 from about 10,460 after the stock-split in August 2022. As of March 2024, it stood at 17,877 compared to the previous year figure of 12,194.



AGENDA FOR FY 2025 - 25:

- 1. Production orders Expected based on successful development during 2023-24.
 - a) 270 kW Twin cell Secondary Battery Production order from NSTL.

The product development got completed along with the qualification, and our company is through with the 270kW twin cell. Negotiations and other things are in place. We have to get the order and this has been planned for this year operations.

b) 100 kW Sea water activated Battery Production order from NSTL.

On similar lines, order for 100 kW magnesium silver-chloride based batteries are placed and the qualification is going on. The order is expected in next two to three months period and these batteries are used for Defense applications.

Though the quantity in each type will be far and few, the value and the criticality of the challenges will be very high. Further, this is the first time that our company is making battery at 100kW level out of Magnesium Silver Chloride.

2. 270 kW Primary Battery development cum supply order from NSTL.

This primary battery development is unique in nature and this is an outcome of the 330kW primary development with respect to reduced weight and size, but this is a separate program our company will be doing this year and development of a high-power seawater battery based on trial conducted earlier.



3. Development of High-Power Sea Water Battery for HWT.

As mentioned earlier, we received commendation from CNS (Chief of Naval Staff) for developing this battery. There is a good amount of possibility that we will be taking up this battery development further and it might be for a minimum of two-year development period with subsequent orders.

4. Integrated Power Source cum Energy Storage for Remote Area – To pursue as New Program.

Our Company is working on the integrated power systems using the solar or pinned as the source and then storing the energy using flow battery and also as an alternate to source of supply hydrogen, and this is for some of the remote area applications. Our Company is looking at the remote defense locations and all these are still in the nascent stage and lot more needs to be done throughout this year.

Thank you

Over to Chairman.

8. Auditors' Reports

Chairman: I now request Mr. Swaminathan, CFO of the Company, to provide a summary of the Auditors' Report.

Swaminathan: The Statutory Auditor, M/s Maharaj N R Suresh and Co and the Secretarial Auditor, M/s. V Suresh Associates, have expressed unqualified opinion in their respective audit reports for the financial year 2023 – 2024. There were no qualifications, observations or adverse comments on financial statements and matters. The Statutory Auditors' report on Standalone financial statements is available on Page no. 64 - 75 of the Annual Report and the Secretarial Auditor report is enclosed as Annexure 6 to Board's Report on Page no. 61 – 63 of the Annual Report.



Thank you, Chairman.

9. Resolution

Chairman: As the Notice is already been circulated to all the members, I take the Notice convening the meeting as read.

Before we proceed, I am pleased to bring to your notice that, as required under the Companies Act, 2013, the Company had provided you all the facility to cast your vote electronically, on all resolutions set forth in the Notice. The period for 'Remote E-voting' had concluded by 05.00 P.M. on 07th June, 2024.

Members who have not cast their vote electronically and who are participating in this meeting will have an opportunity to cast their votes through the e-voting system provided by CDSL. Members may please note that there will be no voting by show of hands.

Let me now briefly introduce the resolutions in seriatim.

1. Item No. 1 of the Notice – Adoption of Financial Statements for the FY 2023 – 2024

The Audited Financial Statements of the Company for the Financial Year ended 31st March, 2024 including the reports of Board of Directors and Auditors have already been provided to the members. As earlier mentioned, there is no qualification or adverse comment in Auditor's report.

2. Item No. 2 of the Notice – Declaration of Dividend for the FY 2022 – 2023

The Board of Directors has recommended payment of Dividend at Rs.3.00 /-Dividend (Rupees Three Rupees only) per Equity Shares of Rs.2/- each for the Financial Year 2023 – 2024.

I now request Dr. G A Pathanjali, Managing Director to take up the next resolution, as I am interested in the same.



3. Item No. 3 of the Notice – Re-appointment of Mr. N. Gopalaratnam, who retires by rotation

Mr. N Gopalaratnam, Non-Executive Director retires by rotation at this meeting and being eligible offers himself for reappointment.

Thank you.

Over to Chairman.

Chairman

Members who have not cast their vote through remote e - voting may cast their votes now through the e-voting system facility provided by CDSL. The platform is already open to the shareholders to cast their vote.

We have received requests from **15** shareholders to be "Speaker Shareholders". I will now call out their names one-by-one. The Speaker shareholders are requested to restrict their queries to the accounts for the FY 2023-24 and confine their observations / comments to preferably about 5 minutes. I need your cooperation.

10. Queries and Answers

Before we go live with the Q&A, here are some points to note for your convenience. Kindly turn on your video when you are projected on the broadcast screen, kindly unmute yourself, and proceed to ask the question. Please mention your name, Folio Number, and the location from where you are joining.

Chairman: Now I'm opening the floor for Q&A.



10A. List of Speaker Shareholders:

SI. No.	Name of the Shareholder	Location
1.	Mr. SANTOSH KUMAR SARAF	KOLKATA
2.	Mr. PRANEETH BOMMISETTI	HYDERABAD
3.	Mr. G R BALAJI	CHENNAI
4.	Mr. DEEPAK BHIKHALAL JOSHI	MUMBAI
5.	Mr. HARDIK INDRAMAL JAIN	MUMBAI
6.	Mr. ABISHEK	CHENNAI
7.	Mrs. VASANTHA PADMANABHAN	CHENNAI
8.	Mr. N PRAKASH CHAND	CHENNAI
9.	Mr. P JAICHAND	CHENNAI
10.	Mr. MANI SUNDARAM A V	SALEM
11.	Mr. NIKHIL UPADHYAY	AHMEDABAD
12.	Mr. K BHARAT RAJ	GUNTUR
13.	Mr. PARIMAL MITHANI	MUMBAI
14.	Mr. PRABHJOT SINGH SAHNI	DELHI
15.	Mr. SAURABH JAIN	MUMBAI

10B. Shareholders who have sent their questions

SI. No.	Name of the Shareholder	Location
1.	Mr. HARDIK INDRAMAL JAIN	MUMBAI
2.	Mrs. VASANTHA PADMANABHAN	CHENNAI
3.	Mr. NIKHIL UPADHYAY	AHMEDABAD
4.	Mr. PRABHJOT SINGH SAHNI	DELHI
5.	Mr. G R BALAJI	CHENNAI



1. SANTOSH KUMAR SARAF, KOLKATA

Board member and my fellow shareholder. My name is Santosh. I'm speaking from Kolkata. Hope all of you are in good health and shape. This is your third and last meeting this year. I hope next year will be continued the same way for us to meet.

Your presentation and your speech are very nice. So, there's no questions from my end. As stated by myself during previous meetings, you asked Dr. G A Pathanjali to read out the resolution which involves your reappointment and I am happy to see that in this AGM, that was implemented.

I convey my thanks to your company Secretary as he called me and gave the link for attending this meeting.

I hope all our workers and all staff will work to improve our company day by day.

- Q1. How much amount order in our hand 1st order book condition in our hand?
- Q2. What are your steps to shape our environment because battery is some problem anytime leakage and this type?
- Q3. Request Chairman's update on AI technology?

Chairman: Mr. Saraf, I shall answer to these questions after collating all other shareholders' questions.

Thank you, Mr. Saraf.



2. PRANEETH BOMMISETTI, HYDERABAD

This is my first meeting and I'm very happy to see everyone here. I'm a recent shareholder of your company and I've learned a lot and it's quite interesting that we have made a lot of progress in indigenization and been essential part for the entire navy.

- Q1. Please update on the raw material, a significant part such as silver is procured by the Government for the Company? Explain the rationale behind the same? Does other companies like HBL (Hyderabad Batteries Ltd) has the similar arrangement?
- Q2. What is the usual percentage of the cost of the battery in the overall missile we provide?
- Q3. In our Annual Report, we have added Mahindra Defense and Agnikul and please elaborate on the activity planned with them?
- Q4. what is the existing order book of the company and what can we expect by the end of the year?
- Q5. I am curious to know on the exports opportunities we have in future?
- Q6. The Company gets significant revenue from Development orders which has higher margins and I am curious to know what activities we make on those orders (like R&D, etc.)?

Chairman: Mr. Bommisetti, I shall answer to these questions after collating all other shareholders' questions to avoid repetitions.

Thank you.

3. G R BALAJI, CHENNAI

I have emailed my set of questions, so it would be ideal if you respond to those questions.



Chairman: Mr. Balaji, thank you for the same and I shall provide my answers at the end.

4. ABHISHEK, CHENNAI

My DPID is 301637 and client ID is 41359155. First of all, I congratulate the management for the 63rd Annual General Body meeting. So, trust all is well with you and your family in this challenging situation, a company deserves much more respect than the current market cap after completing more than a decade of successful operations, profitability and becoming one of the strongest brands in the respective segment.

We are really glad and proud that the company is progressing and rewarding the minority shareholders from time to time and we have also taken steps for stock split before two years and now the shareholders are getting the benefit of that. Our company can also take some vital steps to acquire other battery companies through acquisition.

I wish the company and the board of directors a great success and prosperity in the coming future and thank you for giving the opportunities. I hope to see you in the future.

Chairman: Mr. Abhishek, thanks a lot for your wishes.

Thank you.

5. HARDIK INDRAMAL JAIN, MUMBAI

Hi sir, thanks for the opportunity and I have already mailed the questions.



Chairman: Mr. Hardik Jain, thank you for the same and I shall provide my answers at the end.

6. MANI SUNDARAM A V, SALEM

I am very much happy to attend this meeting. Lot of companies are conducting the meeting in "Hybrid" mode and next year please consider conducting the meeting in Hybrid mode next year. Also, consider making batteries for electrical vehicles. I also request a factory visit.

I pray for all the shareholders, directors and chairman, for healthy and wealthy life.

Chairman: Mr. Mani Sundaram, thank you for your feedback.

7. BHARAT RAJ, GUNTUR

I thank our secretary department for sending the link and I appreciate the CSR activities taken by the Company. I also thank our chairman for the nice presentation. Please update whether there are any plans for expansion of the company sir? Please let me know your plans to start up any company in Andhra. Nowadays the future is about EV batteries so why not to enter into the commercial batteries sir? We're in industry as the best batteries, but a lot of companies are batteries and everybody is engaging with the commercial bat. I also request a factory visit.

Chairman: Mr. Mani Sundaram, thank you for your feedback.



8. PARIMAL MITHANI, MUMBAI

- Q1. I would like to know how do you see your company over next two to three years in terms of what areas are going to contribute majorly going ahead since you're in an ideal space in terms of e-mobility defense battery?
- Q2. With defense CAPEX going increasing over the years, how do you see yourself in in terms of, you know, army Navy as well as space?
- Q3. If you can elaborate in terms of, you know, the opportunity size, your competitors in that space and especially in terms of storage batteries in solar and wind and hydrogen?
- Q4. You're tied up with IOC and GAIL for that initiative. It would be better for us to understand the company in detail?
- Q5. Also, if you can organize a six-monthly analyst meet or once a year analyst meeting, it would be much better for a company like yours to be understood by the investors who are serious about the investment?

Chairman: Mr. Parimal Mithani, thank you for the same and I shall provide my answers at the end.

9. PRABHJOT SINGH SAHNI, DELHI

Hi sir, thanks for the opportunity and I have already mailed the questions.

Chairman: Mr. Prabhjot Singh, thank you for the same and I shall provide my answers at the end.

Now the Speaker shareholders have spoken, I hereby collate the answers as follows:



1. Mr. G R Balaji from Chennai

Question 1.

We had guided for 110Cr revenue in FY24 but only managed to do 78Cr. What led to this slowdown? Other peers like HBL Power have seen strong growth even in core battery segment & defense players have seen strong growth too. Are we losing market share to others?

ANS: - We have not lost any Market share. Major order to be received for execution delayed beyond one year by the Navy was the major reason for reduction in Turnover.

Question 2.

What is the present order book & outlook for the next 3-5 years? How do we expect to scale growth?

ANS: -Present Order book is Rs. 60 Crores. Since it is Defense business and there is a new Government in place, based on their policies only outlook for the next year will be known. However, we expect 10 to 15% growth on an average.

Question 3.

How long will it take us to get to 200Cr of revenue?

ANS: -We are working towards it. Hopefully, in about 3 years, we can achieve Rs. 200 Cr business, if all our new ventures take shape.

Question 4.

What are the peak revenues we can achieve from existing manufacturing base? Are we looking at a new factory?

ANS: -Present Revenue will be Rs. 125 Crores. New factory is not required. Only additions on Plant will be required.



Question 5.

We have spoken about a variety of new products in the annual report. When are they expected to get commercialized and start contributing to revenues? Please provide an update on Fuel cells, energy storage products?

ANS: -All these are new and upcoming areas and market transition towards green cum Hydrogen based systems, is happening gradually. Our development efforts will also fructify within 02 years.

Question 6.

Silver batteries are used in torpedoes and have 5-year life cycle so other than fleet expansion what can drive up demand will it be a war or new application?

ANS: -Most of our batteries are for Strategic stock piling. New system developments pave way for new battery requirements.

Question 7.

We have spoken about product obsolescence in annual reports being the reason for reduction in exports. Can this happen in India as well? Are there other products which can replace our product like Aluminium oxide batteries?

ANS: -This is not in Near future in India. However, we are working on all new developments of Navy's future Programs also. Aluminium Oxide Technology requires a Technology Partner.

Question 8.

Gross Margins – have risen from 40-45% to 60-70% over the past 8 years. What has led to this drastic improvement?



ANS: -New products, new developments and high-end batteries are the reasons.

Question 9.

No of People in R&D and how many people we have added during last financial year?

ANS: -Around 25 to 30% of our overall strength constitutes R & D cum New development areas. We keep including personnel with Domain expertise and as expert consultants, as needed regularly.

Question 10.

What are our selection criteria for product development both in terms of scale, profitability and capability?

ANS: -It is based more on our area of expertise viz. Silver based, Nickel Based and Energy related.

Question 11.

Any new senior member addition during last financial year and how the top management is incentivized?

ANS: -Upgradation of personnel with home-grown experience cum knowledge is done regularly and are well taken care of, through new additions for Senior level management.

Question 12.

Which segment of business we are very excited about for next 2-3 years?

ANS: -Nickel Cadmium, VRFB.



2. Mr. Hardik Indramal Jain from Mumbai

Question 1. How much growth you expect in next few years?

ANS: -Around 10 to 15% on year-on-year basis, from Aerospace and Naval Segment.

Question 2. What kind of margins do we expect on a sustainable basis?

ANS: -On similar lines, viz. PAT of around 20% plus.

Question 3. What challenges do you foresee in the biz?

ANS: - Over the next 05 years, newer systems with alternate battery Chemistry will get introduced, making some of the present systems obsolete.

Question 4. What is the current order book and timeline to complete it?

ANS: -Current order book is Rs. 60 Crores. Rs. 45 Crores for FY 2024 – 25 and balance in the subsequent year. Orders in pipeline is Rs. 60 Crores.

Question 5. How much revenue do we target for this year and what margins are we expecting?

ANS: -We are trying to achieve Rs. 100 crore plus with more or less margins on similar lines.

Question 6. Can you please elaborate on new initiatives which we are doing with scope, revenue potential and by when we would be getting revenues from the following –



- a. Under water propulsion battery
- b. One shot battery
- c. Long life sea water battery
- d. Vanadium Redox Flow Battery
- e. Lithium-ion battery
- f. Scaling up of Hydrogen units Initiative with Centre of High Technology (CHT) and ONGC Centre Trust
- g. Power Fuel Cell stack for power generation of Hydrogen and Air - Initiative with CHT, IOCL and GAIL?

ANS: -For items (a) to (c), request for proposal (RFP) and order placement is possible in an year's time.

Items (d) to (g) are presently pursued as R&D stage. We can expect commercialization, in about 2 to 3 years, on achieving design optimization and cost effectiveness.



3. Mrs. Vasantha Padmanabhan from Chennai

Question 1. In the media it was reported that you are contemplating to reward shareholders of our COMPANY by way of demerger. Whether it is true.? please enlighten us. This is my query. time, method, ratio swap and listing details, etc.?

ANS: - Not true.



4. Mr. Prabhjot Singh Sahni from Delhi

Question 1. We are majorly catering the Defense and we are mostly dependent on budget allocations.

a. What kind of growth in sales are we looking for in this sector in coming years?

ANS: -Around 10 to 15% on year-on-year basis for Aerospace and Naval segment.

b. How much we are investing to look into the challenges of Tech Change?

ANS: -We are working on Energy Storage and Hydrogen Economy on 02 to 03 years programs with CHT, OECT and IOCL with an investment of around Rs. 20 Crores.

c. Are we investing into new Tech too, if yes what is the Quantum of the said Research and any update to it?

ANS: -Same as above.

Question 2. What does Management think about the company reducing its dependence on Defense and exploring new avenues too?

ANS: -Development work on Energy Storage and Fuel Cell, will have non-Defense / commercial requirements. Possibly in the next 02 to 03 years, expansion to non-Defense applications is possible



5. Mr. Saurabh Jain from Mumbai

Question 1.

What is our current order book? Split in terms of Torpedo batteries, Aircraft batteries, and other batteries? Can you give the same split for FY24 revenues?

ANS: -Current order book is Rs. 60 Crores. Torpedo Rs. 50 Crores, Aircraft and Others Rs. 10 Crores. Revenue split – Navy 70 Crores and others Rs. 30 Crores.

Question 2.

Are we supplying batteries to Heavy Weight Torpedo-Varunastra?

ANS: -We are now identified as an alternative source for development.

Question 3.

What is the size of the development orders we have received for Light Weight Torpedo? Who are the other suppliers? What is the cost of battery as a % of the cost of a Lightweight torpedo?

ANS: -Battery is the main propulsion source in a torpedo. Cost of torpedo is mostly classified.

Question 4.

What is the current annual requirement for Lightweight and heavyweight torpedo in India? What is the opportunity for battery suppliers like us? Can this business alone be worth 200-250cr business for us in coming years?

ANS: -Requirement of battery is cyclic in nature and dependent upon Defense policy and hence the quantum / its value.



Question 5.

Will we be supplying batteries for electric heavy-weight torpedoes? When will the supply start and opportunity size?

ANS: -We are already qualified and are regularly supplying.

Question 6.

On Aircraft batteries? What is the size of business today and how is it growing? What is our market share?

ANS: -Around Rs. 10 crores in a year for both Silver Zinc and Ni Cad batteries.

Question 7.

On Missile batteries? Are we supplying or developing the same? When can we expect commercialization of the same?

ANS: -We are the only battery supplier for BrahMos. We have supplied for Indian Missile programs also.

Question 8.

Update on Li-ion batteries for Underwater applications?

ANS: -It is at an infant stage, as safety issues predominate.

Question 9.

Update on Vanadium-based flow battery? 10 kW / 50kWh system? What is the opportunity size for such batteries? When can we see commercial supplies for the same?

ANS: -Update on Vanadium Based flow battery is covered in MD's presentation. Energy storage needs are in the offing and now the market potential in India is only low to NIL.



I think as you would see there have been a lot of interest from shareholders from Bombay, from Delhi everywhere.

SUCCINCT OF ANSWERS PROVIDED BY CHAIRMAN:

- ❖ The order book on hand is about Rs. 60 Crores and the company expects that the similar quality will be able to receive in the subsequent months.
- ❖ Regarding application of AI in operations, the company does not have immediate plans to implement the same, however in future depending upon the requirements, it will be using some of AI and IoT (Internet of Things) related applications.
- The details on the cost of vehicles or torpedoes being classified, the same could not be provided.
- The Company is taking necessary efforts to revive the LAB (Lead Acid Battery) division and hopeful of getting some business in the years to come.
- ❖ Regarding Exports, efforts are in progress through Government agencies as well as directly by the company to explore markets in Vietnam and Algeria.
- ❖ The Company expects that the margins on our products will be on the similar range of previous years.
- ❖ For Lithium Battery in EV segment, our company is currently confined with Defense and in future will explore the opportunities for that segment since it is highly competitive. Steps would be taken to supply batteries for EV 2-Wheeler (Small vehicles) in the years to come.



- Regarding market share and turnover reduction, the company has not lost any share and the reduction was mainly related to the delay in order from Navy for the FY 2023 – 24.
- ❖ Regarding the Torpedoes, which is an underwater system fired from a ship or a submarine and it is propelled by the battery. Though there are many ways, the electrical propulsion is widely used since it is more advantageous and also it does not require any signal or a signature to track a torpedo. Hence, in an electrical torpedo, the battery unit itself acts a propulsion system.

Our company is already supplying batteries to such torpedoes and also improvements are happening both in Battery segment and also on the propulsor in terms of speed, coverage, endurance and range.

QUERY FROM CHAT BOX

A query was raised on the revenue dip, corrections in margins and Competitors' performance through "Chat box" option which was already covered in the aforementioned questions.

I think we have covered to the best of my ability the questions that came by Email and Chat box raised during this meeting. If I had omitted anything, I think the shareholder concerned will duly correspond by email and we will definitely respond to the same.

I think that concludes the question-and-answer session and we move on to with the concluding session.

11. Concluding Remarks

Members may note the voting on the CDSL platform will continue to be available for about 15 minutes after the closure of the meeting. The initial quorum was 52 and the Number was increased to 93. I am very happy. Normally the number



tapers down, in our case it has gone up. As of now about <u>93</u> shareholders are present and participated in this meeting and remained so for most part of this meeting. I am thankful to all the shareholders for their sustained interest and support. I take note of the concerns that are expressed in today's meeting by shareholders. We will work on these points and see how to benefit by your advice.

Members who have not cast their vote are requested to do so. The Board of Directors has appointed Mr. A. S. Kalayanaraman, practicing Chartered Accountant as the scrutinizer to supervise the e-voting process. I hereby authorize Dr. G. A. Pathanjali, Managing director to declare the result of the voting and place the result on the website of the company at the earliest.

Resolutions as set forth in the notice shall be deemed to be passed today, subject to receipt of requisite number of votes. The recorded transcript of the AGM Proceedings will be received from CDSL and thereupon will be uploaded on the website of the company. We are grateful to all our shareholders from across the country who have participated in the AGM through Video Conferencing and I hereby declare the proceedings as closed. Kindly Take Care of your health and Stay Safe. Thank you for the trust posed on our Company and your sustained support to the Company.
