



**Transcript of the 62<sup>nd</sup> Annual General  
Meeting held on June 24, 2023 @  
11:00 AM**

---

**HIGH ENERGY BATTERIES (INDIA) LIMITED**

**Transcript of the Proceedings of the 62<sup>nd</sup> Annual General Meeting of the Company held at 11.00 A.M. on Saturday, the 24<sup>th</sup> June, 2023 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 62<sup>nd</sup> 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 the Corporate Office in Erode, Tamil Nadu.

With the continued fear of resurgence of Covid-19 and the social distancing norms, we are compelled to have this AGM thro' 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.



**Transcript of the 62<sup>nd</sup> Annual General  
Meeting held on June 24, 2023 @  
11:00 AM**

---

**Mr. A L Somayaji, Independent Director and Chairman of the Audit Committee and Nomination and Remuneration Committee:**

Mr. A L Somayaji: I am Somayaji, Independent Director and Chairman of the Audit Committee and Nomination and Remuneration Committee. I am participating from my office at R.A. Puram, Chennai. I am alone in my room and audio and video are clear.

**Cmde. R P Prem Kumar, Independent Director:**

Cmde. R P Prem Kumar: I am Prem Kumar, participating from my residence in Chennai. I am alone in my room and audio and video are clear and also received all the papers.

**Mr. M Natarajan, Independent Director:**

M Natarajan: I am Natarajan, participating from my home in Thirunelveli. I have received all the papers and audio and video are good.

**Mrs. Lalitha Lakshmanan, Independent Director:**

Mrs. Lalitha Lakshmanan: I am Lalitha Lakshmanan, Independent Director, participating from my home in Chennai. I have received all the papers and audio and video are good.

**Dr. Vijayamohanan K Pillai, Independent Director:**

Mr. Vijayamohanan: I am Vijayamohanan, Independent Director. I have joined this meeting from Tirupati. I have received all the papers and audio and video are good.



**Transcript of the 62<sup>nd</sup> Annual General  
Meeting held on June 24, 2023 @  
11:00 AM**

---

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

Mr. N P Sinha: I am Sinha, Nominee Director. I have joined this meeting from my residence at Patna. I have received all the papers and audio and video are good.

**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 Corporate Office in Erode. I am along with my Chairman, Director (Operations) and CFO. I have received all the papers and audio and video are good.

**Mr. M Ignatius, Director (Operations):**

Mr. M Ignatius: I am Ignatius, Director (Operations). I have joined this meeting from the Corporate Office at Erode. I have received all the papers and audio and video are good.

**Mr. R Swaminathan, CFO:**

Mr. R Swaminathan: I am Swaminathan, CFO of the company, participating in this meeting from the Corporate Office in Erode. I am along with my Chairman, MD and Director (Operations).

**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 Corporate Office in Erode. I am along with my Chairman, MD and Director (Operations).



**Transcript of the 62<sup>nd</sup> Annual General  
Meeting held on June 24, 2023 @  
11:00 AM**

---

**Auditors:**

**Mr. R Babuji, Statutory Auditor**

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

**Mr. R Prakash, 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. K Karthikeyan, Secretarial Auditor**

K Karthikeyan: I am K Karthikeyan Partner, B.K. Sundaram & Associates, Secretarial Auditor of the company for FY 2022-23. I am attending this meeting from my office in Trichy.

**Mr. A S Kalyanaramanan, Scrutinizer**

Mr. A S Kalyanaramanan: I am Kalyanaramanan, Practicing Chartered Accountant & Scrutinizer for this meeting. I am attending this meeting from my office in Chennai.

**3. Quorum**

51 Shareholders have now joined the meeting thro' 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 62<sup>nd</sup> 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](mailto: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.



**Transcript of the 62<sup>nd</sup> Annual General  
Meeting held on June 24, 2023 @  
11:00 AM**

---

- (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 23<sup>rd</sup> June 2023 at 5.00 pm. 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 230524006 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 16 of our Annual Report.

Thank you Chairman.



**5. Video Presentation**

**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.

Before I go ahead with my address to the shareholders, for the benefit of the shareholder 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 was then 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**

**Chairman's Speech**

Dear Shareholders.

I extend a warm welcome to all of you to this 62<sup>nd</sup> 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's R&D Labs., over the years are well 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 Chloride, Cuprous Chloride and metal – Oxygen. 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).



**Transcript of the 62<sup>nd</sup> Annual General  
Meeting held on June 24, 2023 @  
11:00 AM**

---

In addition to the manufacture and supply of Battery Based Power Source, for commercial and Defence applications, our Company is currently equipping itself through development programs initiated, to provide the needed technological solutions and Electrochemical systems, meeting the requirements of the upcoming areas like Fuel Cell for In-situ Power Generation using Hydrogen as fuel and Long duration Energy Storage through Flow Battery.

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. Shareholders, I am confident, would be happy with the Results turned out by the Company and the Dividend declared at 175% for FY 2022-23.

#### **ECONOMY**

"World Economic outlook" report of IMF predicts: "global growth is expected to slow down significantly in 2023, largely as a consequence of the war in Ukraine, high inflation and consequent financial sector turmoil. A deep contraction is projected for Russia due to sanctions and the decision of European countries to scale back energy imports. Fuel and food price increases had already posed a severe global impact. The Cost of Living pressures are particularly acute in some developing economies, where domestic price dynamics are exacerbated by Currency depreciation.

Global growth is projected to slow down from an estimated 3.4 per cent in 2022 to 2.8 percent in 2023 before settling at 3.0 percent in 2024.

IMF's growth projections indicate that GDP of India was 6.8% in FY 2022 which got decelerated to 5.9% in FY 2023, but will again accelerate to 6.3% in FY 2024. This is mainly due to the prevailing high oil and food prices. There seems to be no immediate breather for India to contain its trade deficit, the reverse fall in and a sustainable solution to tame high inflation.



Nevertheless, in the prevailing global scenario, India is being regarded as one of the high growth economies of the world.

## **DEFENCE**

Government allocated Rs 5.94 Lakh Crores to defence sector in FY 2023 – 24 Budget, a jump of 13% over previous year. It also allocated a record 75% of capital procurement specifically ear-marked for domestic industry in 2023 – 24 when compared to 68% in 2022 – 23, which will have beneficial effect on our local industry.

Further, defence R&D is opened up fully for Indian industrial sectors including startups and as part of “Aatma Nirbhar” programs, many new systems are being developed with Battery playing the main role of Power Supply, to meet the requirements.

## **THRUST IN DEFENCE ALLOCATION**

Government is planning to impose a ban on imports of arms and ammunitions in a phased manner and such import shall be substituted through the procurement from Domestic Industry. This will benefit the Company because of the active involvement with the Defence Agencies.

The recent successful trials on the underwater weapons by the Indian Defence would benefit the Company due to increase in its supply of Batteries for underwater application.



## **CARBON CAPTURE AND HYDROGEN ECONOMY**

National Mission on Transformative Mobility and Battery Storage was set up in NITI Ayog aimed towards creation of an ecosystem of about 10 MMTPA (Million Metric Tonnes Per Annum) of green hydrogen production by 2030. The critical element in achieving this ambitious target is to create a vibrant Hydrogen Economy wherein the output cost is much less. Thus the said mission's aim is to reduce the investment cost through scaling up renewable technologies and provide assistance in the form of subsidies to manufacture electrolyzers.

## **SIGHT PROGRAMME**

The Cabinet through its official press release dated 04th January, 2023 approved National Green Hydrogen Mission with an initial outlay of Rs.19,744 Crores, including an outlay of Rs.17,490 Crores for the Strategic Interventions for Green Hydrogen Transition Programme (SIGHT) programme, Rs.1,466 Crores for pilot projects, Rs.400 Crores for R&D, and Rs. 388 Crores towards other Mission components.

Under the SIGHT Programme, two distinct financial incentive mechanisms will be provided such as targeting domestic manufacturing of electrolyzers and production of Green Hydrogen. The Mission will also support pilot projects in emerging end-use sectors and production pathways.

This programme would benefit the company's ambition of foraying into manufacture of Fuel Cell and Electrolysers in Green Hydrogen space.

## **COVID 19**

Though the company did not face lockdowns in FY 2022 – 23 due to the pandemic, disruptions in supply chain and delays in receipt of imported materials continue even now.



## **PERFORMANCE REVIEW**

The company achieved a turnover of Rs. 92.54 Crores as compared to last year turnover of Rs. 79.25 Crores resulting in an increase of 17% compared to the previous year. PBT for the year was Rs.27.50 Crores, as against Rs.24.75 Crores last year.

I am happy to inform that with this increase, the Company has achieved its highest Turnover in its 43 years of Journey.

Another accomplishment which is worth sharing was that the Company has become “Debt Free (Long Term)” Company during FY 2022 – 23.

The Company has developed Two (2) “Exercise Version” of Torpedo Batteries during FY 2022 – 23 for Russian Platform.

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

## **R & D**

Your company through a joint working with IIT, Madras over the last two years, had developed a 1kW / 10kWh Vanadium based Flow Battery and demonstrated its performance satisfactorily, over repeated usage and cycling. This is the first time design cum development pertaining to “Energy Storage System” is being pursued by our Company, while hitherto our focus was mostly on Battery for Defence, as Power Source for Electronics, Telemetry, Underwater Propulsion and so on.

Concurrently, proto level R&D efforts are put into Fuel Cells towards Hydrogen usage and also the 2nd life usage of Li Ion Packs/ Batteries.



**Transcript of the 62<sup>nd</sup> Annual General  
Meeting held on June 24, 2023 @  
11:00 AM**

---

The In-house evaluation of street lights using 2<sup>nd</sup> life LIB packs, put on charging during daytime through solar panels, is going on within the Company Campus. Our 62<sup>nd</sup> Annual Report contains the image of one such LIB pack installed in the factory campus, stands as a testimony to this fact. The company will be pursuing the scale - up of the systems to higher levels of Power and Energy, in a phased manner over the next 3 to 5 years, as the fund – level requirements clubbed with the technical challenges, are high.

**DIVIDEND**

Board of Directors have recommended payment of dividend at 175% for this year 2022-23 (150% for the years 2020-21 & 2021-22).

**SUB-DIVISION OF SHARES**

We are happy to inform that based on the approval obtained from the members in the last AGM, the Sub-Division of shares activity was completed by August 2022.

**CURRENT YEAR (2023-24)**

The company, it is hoped, will be able to maintain its physical and financial performance this year also on` similar levels. The company is free of all inter-corporate loans and our banking operations are at a comfortable level.

**DIVERSIFICATION**

As informed in the last Annual General Meeting, we continue to pursue R & D Programme for Li-Ion 2<sup>nd</sup> life batteries and other types of power sources like Fuel Cells and Flow Battery.

Globally and in India as well, the thrust for e-mobility and use of non-fossil fuel is on the increase. This calls for development efforts on green energy systems like Li-Ion and also Fuel Cells. This trend will continue to grow.



**Transcript of the 62<sup>nd</sup> Annual General  
Meeting held on June 24, 2023 @  
11:00 AM**

---

Conscious of the opportunities and the prevailing Tech – friendly atmosphere, the company is on the lookout for proposals for tie-up with emerging leaders, to enter into the latest energy based / power related systems and Hydrogen usage activities.

**DIRECTORS**

On the recommendation of Nomination and Remuneration Committee, the Board of Directors had re-appointed Dr. G A Pathanjali as Managing Director for a further period of 3 years from 01<sup>st</sup> April 2023 to 31<sup>st</sup> March 2026.

**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 of difficult situations.

I also wish to place on record the excellent support extended to our Company by Defence Departments, DRDO Laboratories and Ministry of Defence (MOD), ISRO, VSSC, NSTL, NPOL, NMRL, RCI, ASL, BrahMos (BAPL), BEL, HAL, ADE, BDL, ADA and other defence based organizations such as DGONA, DAPI, CVRDE, MGO, 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 contribution and 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.



**Transcript of the 62<sup>nd</sup> Annual General  
Meeting held on June 24, 2023 @  
11:00 AM**

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.

June 24, 2023

**(N GOPALARATNAM)**

Chairman

**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:**

**FINANCIAL & OPERATIONAL HIGHLIGHTS 2022 – 23**

**1. Turn over**

This year the Company made the highest turnover of Rs. 93.56 Crores which was an increase of around Rs.13.80 Crores compared to last year (i.e.) compared to 2021 – 22 and for 2023 – 24 also the position is good and we are hopeful of doing a good turnover as well as showing a better performance.



**2. Profit Before Tax**

The company made the highest ever PBT of Rs. 27.49 Crores despite the fact that the global position was volatile. We were able to achieve this level due to our regular orders and effective planning in production.

**3. Profit After Tax**

The Profit after Tax was higher at Rs. 20.50 Crores compared to the previous year's figure of Rs. 17.95 lakhs.

**4. Dividend**

This year the Dividend has been declared at 175%.

**5. Outlook for 2023 – 24**

The outlook that we have for the current year 2023 – 24 is also equally good and we are striving to get into a Turnover slightly much above the current level.

**6. Bank Borrowings**

The striking feature of this year was that the reduction in the utilization of Bank borrowings to the tune of Rs. 20.85 Crores from the level of Rs. 31.07 Crores during FY 2017 – 18. This was possible due to improved operations over the period of time.

**7. Bank Interest Rates**

Bank Interest rate was lower when compared to the earlier years. Due to the improved Credit rating, the Company expects that this trend will continue in future.

**8. Other Liabilities**

The Company is taking measures to reduce other liabilities by achieving increased operations and reduction in Bank borrowings.



**9. Net Worth**

The net worth has increased by about 3 times over the years and still we are confident that it should improve to a much higher level. Based on the performance these levels are also increasing and we are working towards putting up a much higher level of performance.

**Operational Highlights**

**1. 330 kW program Development completed**

The 330kW program Torpedo Propulsion Battery development using Silver Zinc technology was completed and this will be deployed in underwater heavy weight torpedo propulsion. The said battery acts as a motive power which provides very high power for a very short duration.

The Company is working on two new battery developments that are to go with some of the Russian weapon system wherein the development effort has taken place in the last year. The initial testing and the qualification tests are completed. Now, they will have to go for the actual firing trials and then will get inducted into the services during the upcoming years.

**2. Working on a new Silver based Battery for Sonobuoy**

The Company is working on a new platform which is One Shot primary type battery, but unlike the other batteries that work for a shorter duration, these batteries are needed for very long endurance. So, we are working towards that and we are getting good results.

The Company expects to get orders for this battery in the upcoming years. Sonobuoy is a system that can be used for mapping, getting the signals underwater and can also be used for transmitting signals to the ship. It can be used for survey and surveillance. Though they are not weapon systems, it is used for monitoring as well as data acquisition and are planted underwater. The Sonobuoys are used in



Oceanographic and other applications wherein they can be used for mapping and surveying as well.

### **3. Order finalized for two new Battery Development**

Flow Batteries are predominantly used as energy storage devices to harness the power from the solar through solar panels, wind and other energy sources and such stored energy can be used either immediately or it could be connected to the grid facilities. The Company is developing VRFB (Vanadium Redox Flow Battery) which is one of the prominent systems in view of its improved cycle life and the material is also very benign and environment friendly. Initially the Cost among other things is on the higher side, mainly due to the membrane and the carbon electrodes that are used. Hence the Company is taking steps to reduce the cost by working concurrently on the component level development as well.

The Company took up the development of 1kW VRFB with IIT Chennai for OECT (ONGC Energy Centre) and demonstrated satisfactory performance.

### **4. Navy initiated One shot (Mg based) Battery**

There is a possibility to get into Magnesium Cuprous Chloride based battery for one shot primary version. This is presently at the initial stage, since many of the parameters and the technical specification needs to be finalized. It is in the initial stage. This year we are hopeful of getting a development order materialized, which will run over to 2-3 years period.

## **DEVELOPMENT PROGRAMME**

### **1. Lithium Ion Battery for Drones and Second life**

The programme that we have in the next midterm period of around 3 – 5 years is on 2<sup>nd</sup> life usage of Lithium Ion Battery. Normally during EV application the battery will get limited in terms of the power output, though left with enough residual capacity. It can be used for any other application which is not so very demanding and usable



for low power applications. So this is one area we wish to concentrate and we have initiated the work in this area.

## **2. Hydrogen on demand (HOD) based Fuel Cells**

The Company is working on in situ or Hydrogen on Demand Fuel Cells which involves splitting of water using electrolyzers at site and then generating Hydrogen and feeding the same to Fuel Cells system. The Company is currently developing Polymer Electrolyte Membrane Fuel Cells (PEMFC). The distinct advantage is that it can cater from kilowatt level to multi kilowatt level which can be fitted onto a platform and if needed, moved from place to place.

On the energy storage requirement, the Company has done only upto the kilowatt level, which is a relatively small unit compared to the overall energy storage requirement. Based on the successful demonstration of the working of 1 kilowatt, the Company is now focusing on scaling up to multi kilowatt.

## **3. Vanadium based Flow Battery Scale up**

On Vanadium based Flow battery, the main area of work is on the scale up to the 10kW level. Then, as 10kW modules, it can be used for higher capacity both higher power levels as well as higher energy storage levels, depending upon the application.

## **4. Integrated Power Source cum Energy Storage for Remote area**

We are also working with the Indian Army for the integrated Power Source cum Energy Storage for Defence especially for remote areas or high altitude areas where it will become self-sufficient as the power source. For power generation fuel cell will be there and the entire power / energy generated during the day time or peak hours will be stored in a battery such as VRFB (Vanadium Redox Flow Battery) and on demand it will be used during the sharing period. This approach we will pursue and it might take a couple of years to materialize.



## **AGENDA FOR 2023 – 24**

For the agenda related 2023 – 24, as indicated earlier, the Company received development orders for couple of batteries and they are in the qualification stage and upon successful completion, they will enter production phase in this year. During this year we hope to get regular supply orders for these two batteries.

Apart from the above, there is another prospective development for a secondary battery, which is more for providing exercise / training to the Navy personnel. The other type is for war time application, as the One shot type using a primary battery. The Company pursues concurrently the development of both primary battery as well as the secondary battery.

The Company is also pursuing on the integrated power system which is at the inception stage and we are confident that we will be able to pursue the program.

Thank you

Over to Chairman.

**Over to Chairman**

## **8. Auditors' Reports**

**Chairman:** I now request Mr. Anantha Subramanian, Company Secretary of the Company, to provide a summary of the Auditors' Report.

**Anantha Subramanian:** The Statutory Auditor, M/s Maharaj N R Suresh and Co and the Secretarial Auditor, M/s. B K Sundaram & Associates, have expressed unqualified opinion in their respective audit reports for the financial year 2022 – 2023. There were no qualifications, observations or adverse comments on financial statements and matters. The Statutory Auditors' report on Standalone financial



**Transcript of the 62<sup>nd</sup> Annual General  
Meeting held on June 24, 2023 @  
11:00 AM**

---

statements is available on Page no. 65 - 75 of the Annual Report and the Secretarial Auditor report is enclosed as Annexure 6 to Board's Report on Page no. 62 – 64 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 5:00 PM on 23<sup>rd</sup> June, 2023.

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 2022 – 2023**

The Audited Financial Statements of the Company for the Financial Year ended 31<sup>st</sup> March, 2023 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.



**Transcript of the 62<sup>nd</sup> Annual General  
Meeting held on June 24, 2023 @  
11:00 AM**

---

**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.3.50 /- Dividend (Rupees Three Rupees and Fifty Paise only) per Equity Shares of Rs.2/- each for the Financial Year 2022 – 2023.

**3. Item No. 3 of the Notice – Re-appointment of Mr. M. Ignatius, who retires by rotation**

Mr. M Ignatius, Whole time director designated as Director (Operations), retires by rotation at this meeting and being eligible offers himself for reappointment.

**4. Item No. 4 of the Notice – Reappointment of Dr. G. A. Pathanjali as Managing Director**

Dr. G. A. Pathanjali, has reappointed as Managing director of the company for period of 3 years with effect from 1<sup>st</sup> April 2023 to 31<sup>st</sup> March 2026.

**5. Remuneration to Non – Executive Directors**

The approval was sought to extend the period for further tenure of 3 years (FY 2023 – 24 to FY 2025 – 26) to pay remuneration to Non – Executive Directors.

The text of the resolutions along with an explanatory statement has been provided in the Notice circulated to the members through email.

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.



**Transcript of the 62<sup>nd</sup> Annual General  
Meeting held on June 24, 2023 @  
11:00 AM**

---

We have received requests from 9 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 2022-23 and confine their observations / comments to preferably about 5 minutes. I need your co-operation.

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.

#### **10. Queries and Answers**

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

I request Mr. Rishikesh Chopra to Unmute himself and kindly proceed with his question.

Since he has not joined the meeting, I shall proceed to the next shareholder.

**Chairman**

I request Mr. Rupesh Tatiya to Unmute himself and kindly proceed with his question.

**Rupesh Tatiya**

I'm joining from Hyderabad and I have maybe 5 or 6 questions so let me get started. Sir, I think in the annual report, we said that order book was 55 Crores as of March another 50 – 60 Crores from March to next 6 months. What is the, what is the status? What is the order book as of today? How many orders are confirmed if you can talk about that that'd be very helpful?



**Transcript of the 62<sup>nd</sup> Annual General  
Meeting held on June 24, 2023 @  
11:00 AM**

---

The 2<sup>nd</sup> question, sir is if you can talk about how what how many tenders we are participated and what is the value of those tenders Like L1 and L2, where we expect to be able to win, and how many competitors are there in these tenders.

Question Number 3 is that you said that the secondary battery we put under water propulsion and torpedoes and we have completed the development and you said the qualification will take another 6 months. So, can we expect some commercial revenue in and also if, if you can talk about the size of opportunity, in terms of, what would be the annual order for 2023 – 24. I mean also some magnitude of order would it be 20, 30 or would it be 50 Crores? And also would it repeat year after year? Would it be 20, 30 Crores every year? Or maybe over 5 years if you want to talk about opportunity in this particular product that'd be very helpful.

Then another question, sir, is what proportion of defense batteries are not manufactured in India, or they are imported by some other partner. The reason I'm asking this question, sir, is that we are presenting all the critical products as we were present in Air Force, we're present in Navy, we're present in defense. Also India had so much tailwinds going on in Defense because of Russia, Ukraine war, because of the policy and still our revenue is only 93 Crores and you are only talking about 10 – 15% growth. You are saying that revenue next year will grow by 15 – 20%. So this I am not able to reconcile this because when I see other defense companies In India, everybody's extremely bullish. Everybody is talking about 30 40% growth and a paradigm shift in defense industry. So if you can talk about this that why our expectations are so low.

Next question is that of this revenue of 93 Crores revenue that we have got, could you please tell me how much is the product supplies and how much is the development order if you can split it?



**Transcript of the 62<sup>nd</sup> Annual General  
Meeting held on June 24, 2023 @  
11:00 AM**

---

And another, this is 1 question, and another way to look at this revenues can you split this revenue between army, Navy and Air Force if you can split this 93 Crores into army, Navy and Air Force that will be very helpful.

The final question sir I had asked last time also is that when we some development work for primary batteries and some other projects we're working on. Please talk about the visibility of the company to achieve hundred Crores revenue in next 2 or 3 years.

These are my questions, sir.

Thank you.

**Chairman**

I will answer you at the end the session after compiling all these questions to avoid repetition.

I request Mr. Santosh Kumar Saraf from Kolkata to Unmute himself and kindly proceed with his question.

**Santosh Kumar Saraf**

Sir this is my Third time meet with you in the last 8 days in this year.

Respected gentlemen and board members, my name is Santosh Kumar Saraf and speaking from Kolkata. I am happy that the company and all our shareholders are doing very fine. I am also happy to note that your company in the last 4 years grew day by day and well done for that.

I am also happy to receive the Dividend declared this year.

The next government also will be Modi Ji and hence the defence sector in India will grow. I believe that all companies require your batteries. Under your leadership the



**Transcript of the 62<sup>nd</sup> Annual General  
Meeting held on June 24, 2023 @  
11:00 AM**

---

Company is doing very well. I want your company's shares to grow like MRF where the price should be in 5 digits.

My next request is you need to increase female employees because we want to involve Indian females. If they grow then our family will grow, our country and status will grow and our society will also grow. If they earn, then the next generation children will also do very well.

I further noticed that your debt is decreasing day by day and I further request you to concentrate on reduction of other expenses as well. Next year also, we expect you to conduct the meeting in VC mode. Even if you conduct Physical meeting, keep 10 to 15 minutes for VC so that many shareholders can participate. Thank you for giving me the opportunity.

**Chairman**

We will meet certainly next year and please take care of your health.

I request Mr. Saurabh Ajaya Jain from Mumbai to Unmute himself and kindly proceed with his question.

**Saurabh Ajaya Jain**

I had already shared my list of ten questions through email in the best interest of time. Do you want me to repeat those questions, or you will you cover those questions?

**Chairman**

I will cover those questions with my answer.



**Saurabh Ajaya Jain**

Just one more request, if you can also provide me an opportunity later. So that I can ask if I have any follow up questions after you answer my questions.

**Chairman**

I find the, your questions are fairly right to the point of interest and what is your background if I may ask?

**Saurabh Ajaya Jain**

So we are an investor only so we have been planning for companies.

**Chairman**

Your questions seem to reflect domain Knowledge, that's the reason why I asked about the background.

I will answer those questions at the end of the session. Thank you.

I request Mr. Munjal Amitbhai Shah from Ahmedabad to Unmute himself and kindly proceed with his question.

**Munjal Shah**

Thank you for the opportunity and congratulations to the entire management for, good year in these turbulent times.

Sir, I have a shared a list of questions on email. So there are 9 questions and do you want me to repeat the same?

**Chairman**

I will cover them with my answers and kindly wait for some time.



**Transcript of the 62<sup>nd</sup> Annual General  
Meeting held on June 24, 2023 @  
11:00 AM**

---

I request Mr. Mani Sundaram from Salem to Unmute himself and kindly proceed with his question.

**Mani Sundaram**

I welcome all the shareholders, directors, particularly Chairman, CFO and CS on behalf of other Directors.

In Page 24, I noticed that Shares are sub-divided to 2 Rs. and also this year you have given good dividend. Your company is doing great service to the nation.

In page 34, EPS details were provided and the same was very satisfactory.

In page 43, Whistle Blower Policy details were found to be good.

My request for the Company and management was to issue Bonus shares to small investors.

In page 49, what are the steps taken to convert physical shares to demat shares?

In page 58, the details on Foreign Exchange details were satisfactory

In page 77, the details of Other expenses increase to be explained?

Under your guidance Chairman, Seshasayee Paper, Ponni Sugars and High Energy Batteries are doing well.

I request the Board to arrange for a plant visit as well. Also please conduct one Extra Ordinary General Meeting to ensure physical attendance.

**Chairman**

I request Mr. Abhishek from Chennai to Unmute himself and kindly proceed with his question.



**Transcript of the 62<sup>nd</sup> Annual General  
Meeting held on June 24, 2023 @  
11:00 AM**

---

Mr. Abhishek, how are you?

**Abhishek**

I am fine sir. Thank you.

My best wishes to the management on the team of 62<sup>nd</sup> Annual General Meetings. Our company deserves more than the current market capitalization. After completing 4 decades of successful operations, our company is one of the strongest brands in our respective segment.

The company has done a remarkable performance and my sincere thanks for the stock split and increasing the shareholder value and the equity in the market.

So, it is a very good initiative being done by the management and in future, trying to consider 1 is to 1 liberal bonus for the investor fraternity as well as the previous shareholders. I also thank the management for a Fantastic dividend of 175 percentage so, in your leadership, we are getting, uh, the shareholders are being rewarded and the enormous numbers, even during the Covid, the company has given a marvelous performance. I have no questions to ask because the annual report is perfect and the numbers are excellent.

I wish the company and the board of Directors great success and prosperity in the coming future and thank you for giving the opportunities that kindly give us an opportunity to meet you as I have prepared a memento even for 60<sup>th</sup> AGM and still lying in my show case. Hence let's meet in person to give that to the company.

**Chairman**

Thanks for the same.



**Transcript of the 62<sup>nd</sup> Annual General  
Meeting held on June 24, 2023 @  
11:00 AM**

---

I will now try and answer the questions raised by the shareholders sent in writing through email and also raised during the meeting.

**1. Mr. Rupesh Taitya**

**Question No 1.** Order Book Position of the Company

**Chairman:** - The Orders on hand would be around 50 to 60 Crores and we have received another 20 Crores of Orders during Q1 of FY 2023 – 24. We further expect another 30 Crores of Orders to be received in Q2, Q3 and Q4 of FY 2023 – 24. We also expect that the Turnover would cross 100 Crores in FY 2023 – 24.

The key features of all these orders are that our products undergo lot of inspection at various stages and therefore, it needs the cooperation of the various departments to come on time and then do this and also give clearance for dispatches.

We certainly work very closely with them and they are also very helpful.

I do think that we will be able to put up better show this year than what we have done.

**Question No 2.** Tenders Participated details

**Chairman:** - In a year there'll be about 20 tenders of which 10 or 12 would be participative with 2 or 3 more participants. Around 7 or 8 tenders will be single tenders where our Company supplies proprietary items. Last year for instance there were around 25 tenders in which for 8 tenders we are the proprietary.



**Transcript of the 62<sup>nd</sup> Annual General  
Meeting held on June 24, 2023 @  
11:00 AM**

---

- Question No 3.** Secondary Battery  
**Chairman:** - We expect about 6 batteries during the next 2 years to the tune of around Rs. 15 Crores.
- Question No 4.** Slow pace of Growth  
**Chairman:** - The quality of the product is a key factor as it's got longer life thus making replacement cycle to delay when compared to other products. Also the shelf life of the products would range 5 to 6 years. Also the Government suggests increasing the shelf life by another 1 or 2 years under Life extension program. All these factors are resulting in not achieving huge jump in order book values.
- Question No 5.** Breakup between Navy, Army and Airforce  
**Chairman:** - Navy is our Single largest customer whose share on the total revenue would be around 60%. Missiles and Weapon systems batteries would constitute 30%. Airforce constitutes remaining 10%.
- Question No 6.** Ratio between Development and Production Supplies  
**Chairman:** - Development ratio would be 20% and Production Supplies constitute 80% of the total orders the company receives every year.
- Question No 7.** Target to achieve 200 Crores  
**Chairman:** - We may achieve the said target in another 3 to 4 years.



**Transcript of the 62<sup>nd</sup> Annual General  
Meeting held on June 24, 2023 @  
11:00 AM**

---

**2. Mr. Kirti Shah**

**Question No 1.** Why Price To Book Value Is So Low? After So Many Year Old Company?

**Chairman:** - The Company started with a motive to Serve for the Indian Defense. All along, the Company has worked only with that motive. Only during the last five years, we are working on high end products, which are fetching better pricing and profitability. That is why the price / Book value is low.

**Question No 2.** Kindly send Valuation Report & Brand Value Report of Our Company?

**Chairman:** - At present no valuation & Brand value report is available.

**Question No 3.** Kindly Send Me Full Contact Details Of KMP- Add, E.Mails, Mob-No, Telephone No.

**Chairman:** - All the Contact details are available in the website of the Company and also it will be shared as a separate e-mail.

**Question No 4.** Kindly Send First 100 - Share Holders List -- Name & Shares Qty. In Public Share Holdings.

**Chairman:** - Our Company Secretary will send the details as a separate e-mail.



**3. Mr. Saurabh Jain**

**Question No 1.** What is our current order book? Split in terms of Torpedo batteries, Aircraft batteries, other batteries? Can you give the same split for FY23 revenues?

**Chairman:** - Current order book is Rs. 50 Crore and Rs. 50 Crores is in pipeline. For 2022-23, the split was Rs. 58 Crores for Naval and Rs. 3 Crores for Aircraft requirements. This keeps changing based on Government of India/Ministry of Defence ordering requirements.

**Question No 2.** Are we supplying batteries to Heavy Weight Torpedo-Varunastra? The Picture in Annual report High Power, 250 kW, Silver Oxide Zinc Secondary Battery for Deep Sea Underwater Armament if for the same? What is the size of development orders and order book we have received for Heavy Weight Torpedo? Who are the other suppliers? BDL had won 1200cr orders for supplying Varunastra - Are we supplying to BDL? What is the cost of battery as cost of Heavy weight torpedo?

**Chairman:** - AgO-Zn 250kW is into production mode now. Quantity requirement will be less since deployed for Armament purpose. We are supplying one type of battery to BDL, for Varunastra. If they expect different size, obviously we can supply increased quantity to them.

**Question No 3.** What is the size of development orders we have received for Light Weight Torpedo? Who are the other suppliers? What is the cost of battery as cost of Light weight torpedo?



**Transcript of the 62<sup>nd</sup> Annual General  
Meeting held on June 24, 2023 @  
11:00 AM**

---

**Chairman:** - Regularly we work on the development of battery for both Light weight torpedo (LWT) and Heavy Weight Torpedo (HWT). Battery cost varies, based on technical specification cum system requirements.

**Dr. G A Pathanjali:** - The Battery cost of Heavy Weight Torpedo is Silver which will be supplied in case of Naval applications and the usage would be around 90 Kg in some of the Batteries and 100 to 150 kg in other type of Batteries. Silver will be in various forms like powder, foil and so on. Barring that cost, the cost of each battery will be around 100 – 150 lakhs depending upon the specification. For Light Weight, the cost will vary between 30 to 50 Lakhs.

**Question No 4.** Recently NSTL had successfully done hover drop for Advance Light Weight Torpedo from a Seaking 42B? Did we supply the batteries for the same? If not us who had supplied?

**Chairman:** - We are working with NSTL for the development cum supply of batteries. (We are to maintain other details as confidential since defence-related).

**Question No 5.** What is the current annual requirement for Lightweight and heavy weight 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?

**Chairman:** - Battery requirement exists for both LWT and HWT in India. Order value and order position are dependent on, “Stock replenishment need and/or battery replacement cycle” of Defense Services and so will vary on year-on-year basis.



**Transcript of the 62<sup>nd</sup> Annual General  
Meeting held on June 24, 2023 @  
11:00 AM**

---

Some of the orders are for training purposes and some of the orders are meant for “One Shot” purposes meaning they will be deployed on a combat like situation.

**Question No 6.** On Aircraft batteries? What is the size of business today and how is it growing? What is our market share?

**Chairman:** - Market share for Ag-Zn Aircraft battery is tapering down, as MIG fighters are grounded/getting phased out. Nickel Cadmium battery usage will be there, at the same size of business today.

**Question No 7.** On Missile batteries? Are we supplying or developing the same? When can we expect commercialization of the same?

**Chairman:** - Our Company is getting regular orders for Missile batteries and are effecting supplies as well. For strategic reasons, we are restricted to provide further details on quantity, value, system nomenclature and so on.

For BrahMos our orders may be expected to increase in future. We further expect an export opportunity from Philippines and in this case we are the Single Source for supplying Batteries.

**Question No 8.** Update on Li ion batteries for Underwater applications? Have mentioned in annual report that we are continuing on a low volume level and at a slow pace? Reasons for the same?

**Chairman:** - Work on Li-Ion for underwater (submarine) use is a much involved work, held as “Classified” and so cannot comment. As our Managing Director explained in his



**Transcript of the 62<sup>nd</sup> Annual General  
Meeting held on June 24, 2023 @  
11:00 AM**

---

presentation, we have initiated work on Second Life (2<sup>nd</sup> life) for low power usage.

**Question No 9.** Vanadium based flow battery we have already completed 1 kW/ 10kWh and now will pursue 10 kW / 50kWh system? What is the opportunity size for such batteries? When can we see commercial supplies for the same?

**Chairman:** - For Vanadium Redox Flow Battery (VRFB), requirement towards energy storage solution (ESS) is on the increase.

At this stage, we are focusing on making scaled-up size and technical parametric studies to understand the system capabilities, which might run through the next 18 to 24 months. Hence the commercialization of this battery will be initiated after 2 years.

**Question No 10.** CHT Program is a 2 years program. Can we expect revenue from FY25 or FY26? What can be our revenues from this segment in coming 3-5 years?

**Chairman:** - CHT programmes are in the upcoming new areas of system development, pertaining to Green Energy. It is too early to comment, as we are in the preliminary work stage though we are confident of coming up well in this area also, in the next 3 to 5 years.



4. **Mr. Munjal A. Shah**

**Question No 1.** After subdued growth in FY22, FY23 saw a decent growth of 17%, going forward how do we see our revenue growing and what will be the factors behind the growth – if you can throw some light on the same. Considering we being in a niche segment and operating predominantly in to a B2G (Business to Government) how are we planning to scale up our operations will really help us in understanding the future road map.

**Chairman:** - Business to Defense (Government) will continue as Core activity of HEB. However, we are looking for some new avenues through some product development in Energy Storage System. We will communicate the road map based on the outcome of those developments.

I bring your attention on the presentation we made in this meeting where we mentioned that our network increased when compare to the past few years.

**Question No 2.** How are we approaching towards increasing exports and in case if we get an opportunity to cater will export realizations be better than domestic ones’.

**Chairman:** - We are working on certain markets like Vietnam, Italy etc., for the Silver Zinc Batteries. We are approaching South American and other market through Agents also for Export Business.



**Transcript of the 62<sup>nd</sup> Annual General  
Meeting held on June 24, 2023 @  
11:00 AM**

---

**Question No 3.** In last 10 years there has been substantial improvement in the Gross Margins and EBITDA margins have also remained north of 30% in last 3 years – so 2 questions here do we expect to sustain the same Gross Margins and for EBITDA margins in Annual Report we have mentioned that 25% margins would be sustainable so can you please help us understand why were the EBITDA margins north of 30% for last 3 years and why are we saying that sustainable margins can be around 25% going ahead.

**Chairman:** - The margin of 30% in the last 3 years was due to some development orders. The realistic margin % is around 25% only on Production orders and Product mix of more of Naval Batteries than others.

**Question No 4.** Considering that management is exploring getting into new products i.e. Fuel Cells and Flow Battery for targeting the EV and Energy Space – so here are we targeting the private space or will this be for Defense sector only. Can you throw some light on how do we plan to move ahead in this new segment and what can be the revenue and margin potential if we are able to make a breakthrough in this technology?

**Chairman:** - Items like Fuel Cells and Flow Batteries need not be confined only to Defence. The New Projects will be catered to the needs of Private Sector and wherever required in Defense Sector also.



**Transcript of the 62<sup>nd</sup> Annual General  
Meeting held on June 24, 2023 @  
11:00 AM**

---

**Question No 5.** Do we intend to supply to private sector as well – as we have a high dependency of our sales on Government and in case of any change in policy it might affect our sales so any plans on diversifying on customer basis?

**Chairman:** - New Projects are inclined towards Private Sector only to counter the high dependency on Government.

**Question No 6.** With various projects at R&D level if you can please guide which projects would be in priority for commercialization within next 2-3 years (say we are working on Reserve Battery for Aerospace, Vanadium Redox Flow Battery, 2<sup>nd</sup> Life Lithium Ion battery, Hydrogen Electrolyzes and PEM Fuel Cell Battery and Long Endurance Battery with few others in line as well)?

**Chairman:** - We have started the initial development on these systems and the electrolyzer fuel cell, VRFB can be used together as an integrated system. It will be too early to propose a broader production outlook on this now.

**Question No 7.** The order book that we have on hand is around INR 55 crores which is expected to be executed in 18-24 months and we are also anticipating further orders tuning to INR 50 to 60 crore to be realized within next 6 months – Considering the execution period of 18-24 months do we also get any orders where the turnaround time is less than a year and how is the revenue arrangement with the government in terms of payment cycle and passing on of any increase in raw material cost – if you can guide us on the modus operandi of how are we dealing with the Government Defense agencies.



**Transcript of the 62<sup>nd</sup> Annual General  
Meeting held on June 24, 2023 @  
11:00 AM**

---

**Chairman:** - Main Raw Material is Silver and it is supplied by Govt for 70% of our Business. Balance Silver price is protected by Price Variance Clause. Other materials are fixed price Terms only.

**Question No 8.** Our working capital cycle has been around 200 days – any plans or any progress on rationing it going ahead.

**Chairman:** - Order to Delivery program is 180 days only and that is the nature of the Business. Since the process has to be started only after receiving the order, involvement of inspection Agency, and reduction in Working Capital cycle is difficult.

**Question No 9.** Sir it would great if you can throw some light of what can be the major growth triggers going ahead where we can discover significant growth potential for our company and are we in advance stage of any such technology which can boost of sales, visibility and profitability as a company.

**Chairman:** - Using Silver Zinc and Sea Water based Silver Chloride Magnesium, we have developed a couple of batteries, which may come up for regular supply, during the Financial Year.

As possible growth areas, we have initiated work on Green Energy related programmes, which might need 2 to 3 years to proceed to next stage.



**5. Mr. Happy Walia**

**Question No 1.** I would be very grateful if the company can provide insights to their future growth prospects.

a. Forays into Lithium-Ion batteries

**Chairman:** - We are now working on 2nd Life LIB. Since the investments are too high for HEB's range, we are of the opinion that the company may not foray towards LIB.

b. Expansion plans if any

**Chairman:** - HEB is working on 3 New Projects. PEFMC, VRFB & Green Hydrogen with Development Agencies. Based on the successful outcome of these projects, Expansion plans will be decided.

**Question No 2.** Details of pending orders with Indian Navy, Airforce and Army.

**Chairman:** - Pending Orders and Orders finalized in April and May'23 was Rs. 70 Crores.

**Question No 3.** The outcome of the development orders placed by the Defence Department and how it is likely to boost the manufacturing in the coming quarters if the developmental orders are cleared.

**Chairman:** - Two Development orders for NSTL and DAPI have been completed.

Secondary Battery orders received from NSTL Development. Primary orders are under process for modified version.

One development out of DAPI for Russian Torpedo), there is a possibility of production order during this year.



**6. Hemangi Sushil Bheda**

**Question No 1.** Details about new product development and their usage applications.

**Chairman:** - We have initiated development work on Solar PV based Energy Storage using VRFB and Hydrogen as fuel based Fuel cell (PEMFC). Both are as part of CHT programme towards Green Energy.

**Question No 2.** Is your order book recurring in nature?

**Chairman:** - Yes

**Question No 3.** What is the current order pipeline? Do we expect any significant inflow of order with current Govt. focus shifting towards Naval Defence?

**Chairman:** - Rs. 50 Crores in pipeline.  
Yes we expect significant inflow of order.

**Question No 4.** Can you share some details on the opportunity size here and whether indigenization is benefiting us here or not?

**Chairman:** - Cannot be quantified right now and it will be beneficial to the Organization once the development activities are completed.

**7. Mr. S. Viswanathan – Sent through “Chat Box” option**

**Question No 1.** I don't have any specific question and would like to convey my best wishes to the Company for achieving many more success in the years to come.



**Chairman:** - Thanks for your wishes

**8. Questions received through “Chat Box” option**

**Question No 1.** What is the Order Book value of the Company?

**Chairman:** - Hope you have noted my answer to the same.

**Question No 2.** I request the Chairman to consider issuing Bonus Shares

**Chairman:** - Bonus issue will be decided at the appropriate time.

**Question No 3.** I would like to know the Electric Kit for Two Wheeler and Four Wheeler ICE. I would also like to know the Company's stand on Sodium Ion Battery.

**Dr. G A Pathanjali:** - Sodium Ion, Magnesium Ion is upcoming systems hinted more as an alternative to Lithium Ion Batteries. All these systems are worked in parallel and there is a long way to go in terms of R&D to match with the performance of Lithium Ion Systems. All these systems are competing with Lithium Ion mainly on EV applications. However their performance is limited when it comes to higher power requirement.

Though Sodium is benign and environment friendly by not using precious items like Lithium, Cobalt, Nickel, the development of such battery will take time. We have also proposed this as an alternate system to DRDO through our agency.



**Question No 4.** Currently at what % the batteries are imported?

**Chairman:** - For Strategic Weapon systems which we cater, import is restricted. Nearly all the requirements of our Country are met by Domestic players. Hence, indigenization per se will not improve the order position. Additional revenue will have to be generated from new systems.

Hence to develop these new systems, the Company needs to tie up with emerging leader for which the company is taking necessary steps.

**Question No 5.** Since revenue is high, the Company can reward the shareholders with Bonus shares.

**Chairman:** - We would discuss the matter internally and take appropriate steps.

**Question No 6.** What are our Long Term objectives?

**Chairman:** - There are 3 different types of Battery Systems we are working on currently. We hope that all these new developments will improve our growth trajectory. Can you further explain this Dr. Pathanjali?

**Dr. G A Pathanjali:** - We are currently focusing on Energy Storage i.e. VRFB (Vanadium Redox Flow Battery), which is a conducive system for storing energy. The quantity of energy stored could be increased based on the increase in the quantum of electrolyte.



**Transcript of the 62<sup>nd</sup> Annual General  
Meeting held on June 24, 2023 @  
11:00 AM**

---

The other area is the electrolyzer in the area of Green Hydrogen where the energy from Solar would be harnessed to produce Hydrogen which in turn could be stored in VRFB.

The third area is the in situ or Hydrogen on Demand Fuel Cells which will form part of Hydrogen Generation and Storage.

I think we have covered to the best of my ability the questions that came by Email, Chat box raised during this meeting. If I omitted by anything, I think the shareholder concerned will always advises by email and we 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 of about 15 minutes after the closure of the meeting. The Number has increased from the beginning we started at 51 closed at 78. I am very happy. Normally the number tapers down, in our case it has gone up. As of now about 6 shareholders are present participated in this meeting and remained so in the most of this meeting. I am thankful to all the shareholders for their sustained interest and support. I take some of the concerns that are expressed in today's meeting by shareholders. We will work on some of 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.



**Transcript of the 62<sup>nd</sup> Annual General  
Meeting held on June 24, 2023 @  
11:00 AM**

---

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 has participated in the AGM through Video Conferencing and I hereby declare the proceedings as closed. Kindly Take Care for your health and Stay Safe. Thank you for your sustained support to the Company.

-----