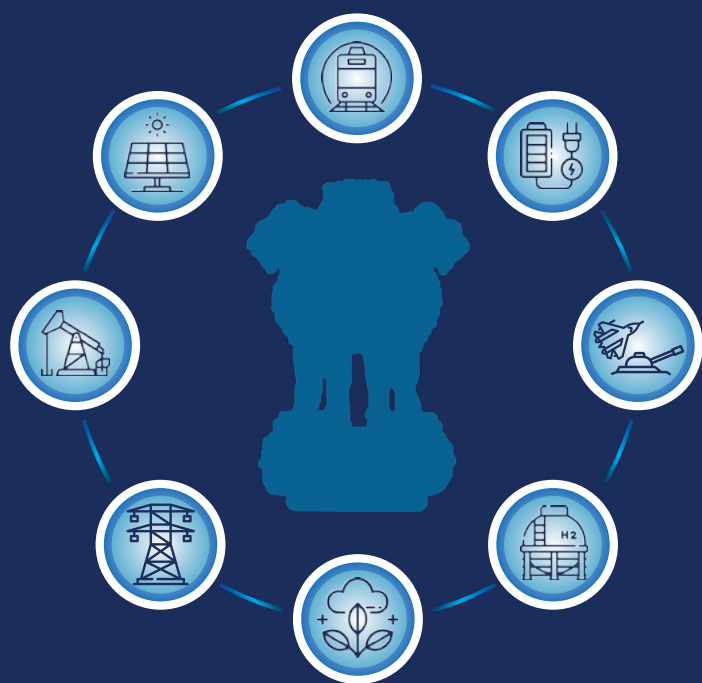


Board's Report



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Report of the Board of Directors

Dear Members,

The Board of Directors have pleasure in presenting the 57th Annual Report on the business and operations of your Company and the Audited Financial Statements for the year ended March 31, 2021.

Financial Results

(₹ Crore)

	For the year ended	
	March 31, 2021	March 31, 2020
Revenue	16296	20491
Revenue from operations	17308	21459
Profit/(loss) after tax	(2717)	(1473)
Total comprehensive income /(loss)	(2697)	(1747)
EPS (in ₹)	(7.80)	(4.23)

Note: Figures in () represent negative values.

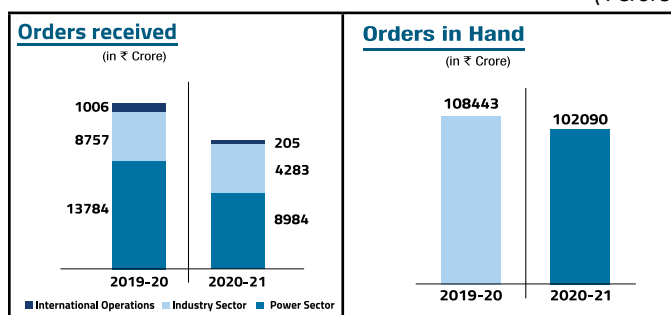
State of Company Affairs

The nationwide lockdown, consequent to spread of Covid 19 pandemic globally caused disturbance & slowdown of the economic activity. This impacted the Company's operations during the FY 2020-21, which then recouped progressively. Also, the issues arising out of the geo political situation across the globe severely disrupted the supply chains which further impacted operations. The production and supplies from units were also regulated in line with site progress status to maintain sequential supply and optimisation of working capital.

For FY 2020-21, the company has incurred a loss of ₹2717 Crore as against a loss of ₹1473 Crore in FY 2019-20, mainly due to lower revenue, higher material cost and additional merit based provisioning of about ₹1800 Crore. Based on comprehensive review, the provisioning was done as a matter of utmost financial prudence so as to strengthen receivables management process and improve quality of assets in the balance sheet. However, stringent budgetary control measures and reduction in operating expenses resulted in restricting the loss.

The Company secured orders worth ₹13472 Crore in FY 2020-21. This comprises orders worth ₹8984 Crore in the Power segment, ₹4283 Crore in the Industry segment and ₹205 Crore in International operations. The order book outstanding at the end of March 31, 2021 was around ₹102090 Crore against ₹108443 Crore as on March 31, 2020. The order book figures are inclusive of applicable taxes.

(₹ Crore)



Covid 19 not only impacted the topline of the company but also led to delay in tendering/ finalization of orders by customers. There is a significant decline in the new project proposals during FY 2020-21 which also impacted the company's order book. It is worthwhile to mention that there is a significant correlation between new project proposals (as per CMIE) and the company's order booking.

Transfer to Reserve

Due to the loss in the current financial year, the company has not transferred any amount to the Reserves.

Dividend

In line with the Dividend distribution policy of the company and the losses in the current financial year, the Board has not recommended any dividend for the year 2020-21 in its meeting held on June 11, 2021.

The Company has a dividend distribution policy in place in pursuance to the requirements of Regulation 43A of the Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015 ("LODR"). Dividend distribution policy is available on the Company's website at <https://www.bhel.com/dividend-distribution-policy-bhel-0>

Deposits

The Company has not accepted deposits from the public falling within the ambit of Section 73 of the Companies Act, 2013 during FY 2020-21.

Capital & Finance

During FY 2020-21, the company has met its CAPEX and operating fund requirements through internal accruals. As a treasury function, the company invests surplus funds in available investment opportunities maximising the interest income to the company. To meet any intermittent operational fund requirement, various short term borrowing options used by the company include commercial papers, PCFC, buyers credit etc. PCFC borrowings also provide a natural forex hedge to the company. Effective treasury management led to the closing cash & bank balance rising by 26% in the current financial year as compared to the previous period.

The commercial papers of the company are listed on NSE and BSE. The details of the commercial papers are available at Note [24] of the Standalone financial statements.

Loans and Investments

Details of loans and investments covered under the provisions of Section 186 of the Companies Act, 2013 form part of financial statement. Loan of ₹3 Crore towards working capital was given during 2015-16 to M/s BHEL EML, BHEL's subsidiary company, and has been already provided for impairment. The disclosure on loans and advances to subsidiary form part of note No [54] of the financial statements. There are no instances of investments by the loanee in the company or its subsidiary.

Credit Rating

The credit ratings of your Company are as follows:

Rating Agency	Date of Rating	Long Term Rating	Outlook	Short Term Rating
CRISIL	24-07-2020	CRISIL AA	Negative	CRISIL A1+
	18-06-2021	CRISIL AA-	Negative	CRISIL A1+
INDIA RATINGS & RESEARCH	06-07-2020	Ind AA	Negative	Ind A1+
	01-07-2021	Ind AA-	Negative	Ind A1+
CARE	27-06-2020	CARE AA	Stable	CARE A1+
	24-06-2021	CARE AA-	Stable	CARE A1+

The company's long term credit rating during the financial year was changed to "AA-" from "AA". The revision in ratings is primarily due to lower execution and losses, caused mainly due to Covid-19 pandemic. The company has taken stern measures to cut down its controllable costs to the extent possible. The efforts on the cash front have also borne fruit with cash & bank balances (net of short term borrowings) in the current financial year rising by about 26% and trade receivables reducing by about 38%. The funds released from working capital amount to ₹2620 Crore in FY 20-21, as against blockage of funds in the earlier years. The company is resolutely working to improve its execution levels and consequently achieve positive EBIDTA and improve profitability accordingly.

The company's short term rating stands affirmed at A1+ (Highest safety).

Material Changes and Commitments Affecting the Financial Position

There are no material changes and commitments affecting the financial position of the Company between the end of the financial year and the date of this report of FY 2020-21. There are no significant and material orders passed by the regulators or courts or tribunals impacting the going concern status and company's operations in future.

Suspension of Trading

The Equity Shares of the company are listed on NSE & BSE. None of the securities of the company have been suspended from trading during the FY 2020-21.

Directors' Responsibility Statement

Pursuant to section 134(5) of the Companies Act, 2013, the Board of Directors confirms that:

- In the preparation of the Annual Accounts, the applicable Accounting Standards (Ind AS) have been followed along with proper explanations relating to material departures;
- The Directors have selected such accounting policies and applied them consistently and made judgments and estimates that are reasonable and prudent so as to give a true and fair view of the

state of affairs of the Company at the end of financial year and of the profit of the Company for that period;

- The Directors have taken proper and sufficient care for maintenance of adequate accounting records in accordance with the provisions of this Act for safeguarding the assets of the Company and for preventing and detecting fraud and other irregularities;
- The Directors have prepared the Annual Accounts on a going concern basis;
- The Directors have laid down internal financial controls to be followed by the Company and that such internal financial controls are adequate and operating effectively;
- The Directors have devised proper systems to ensure compliance with the provisions of all applicable laws and that such systems were adequate and operating effectively.

Management Discussion & Analysis

This report conveys the Management's perspective on the external environment, as well as company's strategy for the future, operating and financial performance, risks and concerns, and initiatives taken in various areas such as revamping Project Execution, Cost optimization, Digitalisation, Quality, Development of Futuristic technologies, etc., during the financial year 2020-21.

The year gone by has been challenging for economies across the globe. Your company has taken these challenges as an opportunity to strengthen the core with focus on improving internal systems and processes. It has also been a year of consolidation wherein many of the initiatives started in the previous year have started maturing. For further details, please refer **Annexure-I to the Board's report**.

AatmaNirbhar Bharat

To capitalize on the opportunities arising out of our Hon'ble Prime Minister's vision of an AatmaNirbhar Bharat, BHEL has taken the lead for "Make In India" and has formed a new and dedicated business group—the "Make in India Business Development Group" with the following objective:

- In-house development and manufacture of items currently being imported by the company
- In-house development and manufacture of major items in the country's engineering imports basket.
- Working with global OEM's for manufacturing items for India as well as for exports, i.e., "Make in India, Make for the World"
- Collaborative working with PSUs for addressing their imports

The company believes in successful development of partners/ vendors, especially MSME's, which also forms an integral part of its growth strategy giving the twin benefit of lowering cost as well as speeding up the development process. Accordingly, your company is working towards supplier/ partner development (especially MSMEs), and has organized a workshop- SAMVAAD under the aegis of Department of Heavy Industry, for promoting collaborations between PSUs, private industry as well as R&D institutions & academia. BHEL identified items worth more than ₹3,000 Crore for import substitution through development of local suppliers and hosted an EOI on its website for the same. BHEL has conducted more than ten online workshops- during December 2020 to February 2021, with the support of Ministry of Heavy Industries (M/o HI), Department for Promotion of Industry and Internal Trade (DPIIT) and Ministry of MSME.

COVID Response

BHEL launched a speedy and comprehensive response to the COVID crisis on multiple fronts, including strict implementation of Government guidelines, support to employees and their families as well as the society at large and worked with local administration to ensure continuity of work across various manufacturing units and project sites. Your company also rose to the occasion to support the national efforts through monetary contributions as well as through development of multiple products for use by various govt. departments/ municipalities.

During the first phase of COVID-19, the company:

- Ensured strict implementation of Standard Operating Procedure (SOP) duly incorporating Government directives on social distancing, compulsory wearing of face cover in public places, hygiene, sanitization, etc.
- Conducted regular fumigation, sanitization, etc., at factories, offices, townships and nearby areas including ensuring distribution of essential supplies such as food, medicines, milk etc.
- Facilitated Work from Home through policy intervention as well as remote access through IT network for seamlessly carrying out office activities and conducting meetings through VC
- Quick implementation of eOffice to ensure continuity of work as well as speeding up the decision making process
- Swiftly transformed the training process and adopted online training methods including introduction of eModules to ensure continual learning of employees.
- Developed atomized liquid sanitizing equipment called BHEL MISTER. More than 150 Nos. of BHEL MISTERS have been delivered to various parts of the country.
- Developed Electrostatic Disinfection Machines (EDMs), also called Covid-Spray, based on CSIR technology, for sanitizing office spaces and hospitals. Apart from various other places, the EDM machines have also been deployed at MHI, NDLS Railway station, among others.

During the second wave of COVID-19, apart from the numerous activities as continued since the first wave, the company additionally supplemented the national efforts by:

- Supplying over 5,75,000 cubic meters (over 80,000 cylinders) of medical oxygen from its Bhopal and Haridwar manufacturing plants by enhancing capacities as well as logistics for filling oxygen cylinders from 200/300 cylinders per day to reach a maximum of 3,860 cylinders per day
- Developed prototype for oxygen generating plant of 500LPM (based on design by CSIR-IIP, Dehradun) in a record time of 40 days from signing of Transfer of Technology and delivered the first order within 35 days from receipt of the order
- Assistance Scheme has been introduced for extending support (financial, medical, housing) to families of employees who succumbed to COVID 19 Pandemic.

Corporate Governance

Pursuant to Regulation 34 of the SEBI (Listing Obligations & Disclosure Requirements) Regulations, 2015, a report on Corporate Governance (including Board/Committee meeting details) together with the following, is given at Annexure-II to the Board Report.

- (i) Certificate of Non-Disqualification of Directors under Schedule V of the Listing Regulations.
- (ii) Auditors certificate on Corporate Governance under Listing Regulations & DPE guidelines on Corporate Governance.
- (iii) Secretarial Audit Report under Section 204(1) of the Companies Act, 2013.

Department of Public Enterprises has graded BHEL as "Excellent" on the basis of their compliance with Guidelines on Corporate Governance of CPSEs for the Year 2019-20.

Declaration of Independence

Declaration under Section 149(6) of the Companies Act, 2013 pertaining to criteria of Independence has been given by the Independent Directors to the Board of Directors. All the Independent Directors, who are qualified Chartered Accountants, have registered themselves in the online database of Indian Institute of Corporate Affairs (IICA). Shri Manish Kapoor has qualified the online proficiency self-assessment test conducted by IICA (notified under Section 150). In the opinion of the Board, the Independent Directors possess integrity and necessary expertise & experience.

Compliances

In addition to focus on many other areas, the company has also relooked into its compliance of systems and processes and wherever, there was an opportunity for improvement, company further strengthened its finance and non-finance compliance process & systems for the better satisfaction of stakeholders. As regards preparation of financial statements, the company ensures that preparation and presentation are compliant with the Indian Accounting Standards (Ind AS), Guidance Notes and other authoritative literature issued by the ICAI, Companies Act 2013, CSR regulations and other applicable statutes. The Company discloses full information and fulfils its compliance obligations under applicable Taxation Laws. Being a listed company, Compliances with the SEBI Listing Obligations and Disclosure Requirement Regulations are also being ensured. There is no adverse comment from SEBI for the FY 2020-21 on any compliance related matter. The Company endeavours to transcend beyond the regulatory requirements of corporate governance and considers sound Corporate Governance as one of its core values and is committed to maintaining high degree of transparency in disclosures.

The company has endeavoured to constantly improve its disclosures and transparency standards and the statutory auditors have also commended the compliances and the quality of disclosures in the Financial Statements.

Contribution to the Exchequer

The Company, over the years, has been making a significant contribution to the Exchequer. During the current year, the Company contributed close to ₹2948 Crore. The Company has adopted guiding tax principle to maintain high standards of integrity with respect to tax compliances and reporting.

The company has been discharging all its GST and other dues on time and even before the due date [out of the GST liability for the month of March 2021 , ₹119 Crore. has been deposited on March 31, 2021 itself].

The Company participated in Direct Tax Vivad Se Vishwas Scheme (VsVs), 2020 promulgated by the GOI and exercised the option

by settling eight Income Tax appeals under VsVs, which ended ambiguity around the likely outcome of disputes, bringing an expeditious end to protracted litigation and helped in resolving legacy issues.

Audit Committee

The Company has in place a Board Level Audit Committee in terms of the requirements of the Companies Act, 2013 read with rules made thereunder and Regulation 18 of the SEBI (Listing Obligations & Disclosure Requirements) Regulations, 2015, the details in respect of which are given in the Corporate Governance Report. For the first time all the three independent directors being chairman/members of BLAC, are also members of Institute of Chartered Accountants of India having diverse experience. All the issues are fairly and transparently deliberated in the meetings which are held at regular intervals. The views and suggestions of BLAC members are positively taken into account and imbibed into the company's processes. Further, there has been no instance where the Board of Directors have not accepted the recommendations of the Audit Committee.

Compliance with Secretarial Standards

The Company has complied with applicable Secretarial Standards.

Details of changes in Directors & Key Managerial Personnel

Appointment

Shri Amit Mehta, Joint Secretary, Ministry of Heavy Industries was appointed as Part-time Official Director w.e.f. September 2, 2020. In line with Section 161 of the Companies Act, 2013 and Article 67(iv) of the Articles of Association of the Company, Shri Amit Mehta was appointed as additional director to hold directorship upto the ensuing Annual General Meeting. He was subsequently appointed as Director in the 56th Annual General Meeting of the Company.

Ms. Renuka Gera has been appointed as Whole Time (Functional) Director w.e.f. December 1, 2020 to take charge of the office of Director (Industrial Systems & Products).

Shri Jeetendra Singh, Joint Secretary, Ministry of Heavy Industries was appointed as Part-time Official Director w.e.f. June 18, 2021.

In accordance with Section 161 of the Companies Act, 2013 and Article 67(iv) of the Articles of Association of the Company, Ms. Renuka Gera and Shri Jeetendra Singh having been appointed as additional directors, shall hold directorship upto the 57th Annual General Meeting of the Company and are eligible for appointment as Directors at the Meeting.

Cessation

Shri Amit Varadan, Joint Secretary, Ministry of Heavy Industries, who was appointed as Part-time Official Director on March 27, 2019, ceased to be Part-time Official Director on September 2, 2020.

Shri Desh Deepak Goel and Shri Ranjit Rae, who were appointed as Part-time Non-official (Independent) Directors on September 23, 2017, ceased to be Directors of the Company on completion of their tenure on September 11, 2020.

Shri S. Balakrishnan, who was appointed as Director (Industrial Systems & Products) on June 1, 2018, ceased to be a Director of the Company on attaining the age of superannuation on November 30, 2020.

Shri Manoj Kumar Varma, who was appointed as Director (Power) on December 19, 2018, ceased to be a Director of the Company on attaining the age of superannuation on January 31, 2021.

Shri Amit Mehta, Joint Secretary, Ministry of Heavy Industries, who was appointed as Part-time Official Director on September 2, 2020, ceased to be Part-time Official Director on June 18, 2021.

Shri Kamallesh Das, who was appointed as Director (E,R&D) on March 1, 2019, ceased to be a Director of the Company on attaining the age of superannuation on July 31, 2021.

The Board of Directors place on record their deep appreciation for the valuable services rendered as well as advice and guidance provided by S/ Shri Amit Varadan, Desh Deepak Goel, Ranjit Rae, S. Balakrishnan, Manoj Kumar Varma, Amit Mehta and Kamallesh Das during their tenure.

Further, pursuant to Section 152 of the Companies Act, 2013 and Article 67(i) of the Articles of Association of the Company, Shri Subodh Gupta and Shri Shashank Priya will retire by rotation at the Annual General Meeting and being eligible, offer themselves for re-appointment.

In compliance with Regulation 36(3) of the SEBI (Listing Obligations & Disclosure Requirements) Regulations, 2015, brief resume of the Directors proposed for appointment and re-appointment along with the nature of their expertise in specific functional areas and names of companies in which the person also holds directorship along with the membership of the Committees of the Board are given in the explanatory statement/ annexure to the Notice.

CEO/CFO Certificate

CEO/CFO certificate as per Regulation 17(8) of the SEBI (Listing Obligations & Disclosure Requirements) Regulations, 2015 is placed at **Annexure- III to the Board's Report.**

Consolidated Financial Statements

The brief on consolidated financial statements prepared pursuant to section 129 (3) of the Companies Act, 2013 and Regulation 34 of the SEBI (Listing Obligations & Disclosure Requirement) Regulations 2015, is given in para 1.5.4 under Management Discussion & Analysis.

Sustainable Development

Sustainable Development tenets are ingrained in the business processes of BHEL and our mission statement – "Providing Sustainable business solutions in the fields of Energy, Industry & Infrastructure" bears the testimonial of the same.

Sustainability is a continuous journey which helps us in reaching newer summits of corporate excellence through implementing sound corporate governance framework, enhancing stakeholder value, reducing environmental footprint of our products & services as well as internal processes, promoting inclusive growth in the society, and enhancing brand equity.

The brief of these activities conducted during 2020-21 (including CSR policy - also available at [https:// www.bhel.com/csr](https://www.bhel.com/csr)) are given in **Annexure – IV** to the Board's report.

Business Responsibility Report

In line with the requirement of the listing regulations, Business Responsibility Report describing the initiatives taken by the company from environmental, social and governance perspectives as per the suggested format is enclosed at **Annexure V to the Board's Report.**

Achievements of R & D and Technological Development

BHEL has a robust innovation and R&D framework in place to address the technology challenges emanating from business requirements. The R&D expenditure of the company for 2020-21 was ₹726 Crore, approx. 4.45% of the revenue. The company filed 526 patent and copyright applications during the year, enhancing the company's intellectual capital to more than 5000. More than 24% of the company's revenue has been achieved from its in-house developed products.

Additionally, the company has also created a technology innovation platform (Sanrachna) for finding innovative solutions by involvement of students, academia, experts, etc., a step towards self-reliance in technology.

Further details are available in **Annexure-VI to the Board's Report.**

Implementation of Official Language

Official Language Implementation Committees are constituted in all units / divisions of BHEL and regular quarterly meetings were held in all units / divisions including corporate office. To speed up the pace of implementation of Official Language in the company, more than 30 nos. of Rajbhasha Chakra were formed across the Company. Various activities/ programmes on Rajbhasha implementation were held during the year. Company was awarded with many Rajbhasha awards for excellent efforts towards Rajbhasha implementation. Further details have been provided in **Annexure-VIIA to the Board's Report.**

Vigil Mechanism

Transparency, fairness and objectivity form the basis for all decision making processes for the company.

The Company has in place a full-fledged Vigil Mechanism consisting of Vigilance Department, Internal Audit, Whistle-blower Policy mechanism, Independent External Monitor(s), as well as Board Level Audit Committee.

The Vigilance function of BHEL is headed by Chief Vigilance Officer who acts as an extended arm of Central Vigilance Commission (CVC) in the Company. All units & divisions of BHEL have a Vigilance set-up headed by a Senior Officer reporting to the CVO.

Preventive Vigilance has been the focus area of BHEL as proactive vigilance is better than the re-active one and it reduces the chances of corruption. The main objective is to progressively reduce ambiguity and discretion in the process by plugging the loopholes in the system, thereby making decision making process more and more objective & transparent and also reducing the scope for engaging in malpractices. The audit reports (internal, statutory and CAG reports) relating to BHEL are regularly scrutinized so as to determine whether there is any vigilance angle involved in respect of the irregularities brought out in such reports.

A panel of two Independent External Monitors (IEMs) has been appointed to oversee implementation of Integrity Pact and address any concerns related to the same.

The company encourages reporting of unfair and unethical practices and has a Whistle-blower Policy mechanism which provides adequate safeguard against victimisation to the complainant.

The Board Level Audit Committee reviews the functioning of the Whistle Blower/ Vigil mechanism.

Further details have been provided in **Annexure-VIIA to the Board's Report.**

Health, Safety & Environment (HSE)

BHEL is committed to providing a safe and healthy working environment and achieving an injury and illness-free work place. BHEL conducts all its activities in a manner that is protective for the environment, and in ensuring the health and safety of its employees, contractors, visitors, and the community around which it operates.

In recognition of this, BHEL has been awarded the ISO 14001 Environmental Management Systems Certification and OHSAS 18001 / ISO 45001 Occupational Health & Safety Management Systems Certification.

It is our firm belief that safe and healthy workplace not only boosts people's morale but is also a precondition for greater productivity at workplace. BHEL has taken all possible preventive measures to ensure health of their employees in this pandemic situation i.e. guidelines were issued, SOPs were prepared, DO's and DON'Ts were circulated, regular hygiene audits were conducted etc. Also, BHEL has taken initiatives which helped not only its employees and their families but also proved boon for the society. Further details have been provided in **Annexure-VIIA to the Board's Report.**

Data and Cyber Security

BHEL deploys multi-layered protection for its IT assets and data, with state-of-the-art security features such as firewalls at Internet gateways, secured email gateways integrated with on premise sandboxing solution and end-point protection. All Internet traffic going in and coming out of BHEL is monitored through a Cyber Security Operations Centre (C-SOC), integrated with Global Threat Intelligence. User awareness and sensitization is continuously ensured through interventions like phishing simulation exercises, training programmes, communications etc. across the company. Compliance to security advisories from agencies like Indian Computer Emergency Response Team (CERT-In) and National Critical Information Infrastructure Protection Centre (NCIIPC) is ensured.

The overarching initiative in the field of information security in BHEL is the implementation of the Information Security Management System (ISMS) since 2005 to ensure the Confidentiality, Integrity and Availability of its information systems. Auditors from the Standardization, Testing and Quality Certification (STQC) Directorate, an organization under the Ministry of Electronics and Information Technology, Government of India, audit the information security infrastructure of the organization and certify it against ISO27001:2013 periodically in addition to internal audits. Integration of pan-India BHEL ISMS achieved in February, 2021 is a manifestation of the maturity of this initiative. All BHEL units are now certified against a common policy framework which will result in improved compliance & cyber security, enforcement of common policies, procedures & formats.

The Covid-19 pandemic and the resultant lockdown which required employees to Work From Home added a new dimension to the cyber threat landscape. Despite no prior experience of Work from Home culture and managing geographically spread IT operations on a huge scale, BHEL adapted quickly to the changed scenario and ensured security of the entire gamut of IT operations.

Other disclosures

Information in accordance with the provisions of Section 134(3)(m) of the Companies Act, 2013 read with Companies (Accounts) Rules, 2014 regarding conservation of energy, technology absorption and foreign exchange earnings and outgo is given at **Annexure-VII to the Board's Report**.

As per provisions of section 197 of the Companies Act, 2013 read with the Rule 5 of the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014, every listed company is required to disclose the details of the remuneration of the Directors etc. in the Board's report. However as per Notification No. GSR 463(E) dated June 5, 2015 issued by the Ministry of Corporate Affairs, Government Companies are exempted from complying with provisions of section 197 of the Companies Act, 2013. BHEL being a Government Company, such particulars are not included as part of Board's Report.

Statement pursuant to Section 129 of the Companies Act, 2013 (Form AOC-1) relating to subsidiary companies & joint ventures and Form AOC-2 pursuant to section 134(3)(h) of the Companies Act read with Rule 8(2) of the Companies (Accounts) Rules, 2014 is given at **Annexure-VIII to the Board's Report**.

Auditors

The Statutory Auditors of your Company are appointed by the Comptroller and Auditor General of India. Three firms of statutory auditors were appointed as joint statutory auditors and four firms were appointed as branch auditors. The names of audit firms appointed for FY 2020-21 are given separately in the Annual Report.

Auditors' Report on the Accounts

The Auditors' Report on Standalone and Consolidated Financial Statements for FY 2020-21 of the Company are given at **Annexure- IX** to the Board's Report. There is no qualification in the Auditors report on the Financial Statements of the Company. During FY 2020-21, there has not been any fraud reported by the Auditors of the company. The Supplementary Audit report under section 143(6) read with section 129(4) of the Companies Act, 2013 issued by the Comptroller & Auditor General of India also forms part of Annexure IX.

Secretarial Audit

In terms of Section 204(1) of the Companies Act, 2013, the Company engaged M/s P.P. Agarwal & Co., Company Secretaries in whole-time practice, as Secretarial Auditors for conducting Secretarial Audit for FY 2020-21 and their report is forming part of Corporate Governance section.

Secretarial Auditor in his Audit report has observed regarding the non-compliance in composition of the Board of Directors as per Regulation 17(1) of the Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015 and Para 3.1.4 of the DPE Guidelines on Corporate Governance as the Company did not have requisite number of independent directors including at least one independent woman director on its Board.

The Management noted the observation and explained that BHEL, being a Government Company, the independent directors are selected by Govt of India and the Company is in constant communication for the appointment of requisite number of independent directors including at least one independent woman director on its Board.

Cost Auditors

In terms of provisions of Section 148 of the Companies Act, 2013 and as per the Companies (Cost Records and Audit) Rules, 2014 and amendments thereof, the Board, on the recommendation of the Audit Committee, approved the appointment of seven firms of Cost Accountants as Cost Auditors for auditing the cost accounts of your Company for FY 2020-21. Cost accounts and records as specified by the Central Government under sub-section (1) of section 148 of the Companies Act, 2013 have been properly maintained and complied with.

The detail of cost auditors appointed for FY 2020-21 are given separately in the Annual Report. The Cost Audit Report for FY 2019-20 has been filed under XBRL mode on September 24, 2020, well within the due date of filing and there was no qualification in the cost audit report.



Solar EV Charging Station at Karna Lake Resort, Karnal, set up by BHEL under FAME-I scheme, inaugurated by Hon'ble Union Minister of Heavy Industries, Dr. Mahendra Nath Pandey

Appreciation and Acknowledgement

Your Directors gratefully acknowledge all the support and guidance extended by Ministry of Heavy Industries and all other departments and agencies of the Government of India in the Company's operations and developmental plans. The Directors also express their gratitude to the Comptroller and Auditor General of India, Chairman and Members of Audit Board, Professional bodies, Statutory Auditors, Branch Auditors, Secretarial Auditor and Cost Auditors for constructive suggestions and continuous cooperation.

The Directors place on record their sincere appreciation towards the Company's valued customers in India and abroad and esteemed shareholders for the support and confidence reposed by them in the management of the Company and look forward to the continuance of this mutually supportive relationship in future.

The Directors also wish to place on record their appreciation for the continued cooperation received from all the technology collaborators, suppliers, contractors and for the support provided by the financial institutions, bankers and stock exchanges.

Your Directors also wish to place on record their sincere appreciation for the diligent efforts, hard work and commitment put in by all BHEL employees.

For and on behalf of the Board of Directors of

BHARAT HEAVY ELECTRICALS LTD.



Dr. Nalin Shinghal

Chairman & Managing Director

Place: New Delhi

Dated: 27.08.2021

Annexure-I to the Board's Report Management Discussion and Analysis

1.1 Economic & Business Overview

Global economy is estimated to have contracted by 3.3% in year 2020 as supply chains, production, trade and consumption suffered severely during the year on account of COVID-19. Future developments will largely depend on— extent and intensity of future waves of COVID-19, susceptibility of the new COVID-19 strains to vaccines, and the effectiveness of policy actions to limit persistent economic damage.

Domestic economic activity continued to shrink in first half of 2020-21 due to the lockdowns and restrictions. Industrial production activity also contracted by 8.7% in 2020-21 and overall, the country recorded contraction in GDP of 7.3% during the year. However, the pent-up demand during the lockdown also helped the economy expand in second half of the year once lockdowns and restrictions were eased. Going forward, the pace of growth may be uneven considering the uncertain impact of future waves of COVID-19.

The business activity in domestic power sector market remained mixed. Nuclear, Hydro and Solar PV were active with new orders while demand for coal based plants remained weak. Demand for emission control equipment is also expected to moderate as deadline for implementation has been extended for the power utilities. There is a continuous push for reform in distribution and retail side of the electricity value chain. Amendments in Electricity Act and distribution side modernization program hold the key.

Indian Railways is moving forward with initiatives to decarbonize its operation, upgrade & modernize infrastructure, and enhance quality of service. The Mumbai-Ahmedabad high-speed rail corridor - country's first bullet train project, witnessed several significant developments with signing of two big contracts for civil works.

In Defence, the new procurement policy – 'Defence Acquisition Procedure 2020' proposes to give impetus to domestic manufacturing including taking up projects of National importance such as aero engines, etc.

In Industrial business segment, customers are treading cautiously with their capacity expansion plans. Several state-owned and private refiners in Oil & Gas sector are in expansion mode with new refining and petro-chemical capacities being built or in pipeline.

In order to turn the pandemic threat to economy into an opportunity, Govt has announced 'AatmaNirbhar Bharat Abhiyan' to bolster economic growth and a special comprehensive economic package of ₹20 lakh Crore was announced. Further, to give a special thrust to capital expenditure, budget 2021-22 has also provided ₹5.54 lakh Crore as capital expenditure, which is 26% higher than revised budget of 2020-21. The majority of outlay is sanctioned for defence, railways, roads & highways, urban transportation, nuclear power. Moreover, to enhance the country's domestic manufacturing capacity, Production Linked Incentive (PLI) scheme was announced for 13 key sectors including Advanced Chemistry Cell Battery, Electronic/ Technology Products, Automobile & Auto Components, Pharmaceutical drugs, Telecom & Networking Products, Textile Products, Food products, High efficiency Solar PV modules, White goods (AC & LED) and Speciality Steel. Govt of India's thrust for

capital expenditure, especially in the infrastructure sector, will be further boosted by investments in these PLI schemes.

1.2 Opportunities & Threats

BHEL is a leading capital goods manufacturing PSU, with a proven track record of more than five decades, and vast asset base in the form of 16 technology intensive manufacturing establishments and a 32,000 strong pool of skilled and committed manpower, which includes over 9,000 engineers. The company has an unparalleled experience in the power equipment segment, where it has an installed base of 193,000 MW+ in India and abroad. Leveraging on its strong technical expertise, BHEL is also playing an active role in engineering and supply of critical equipment for the strategic sectors of Nuclear, Defence, Space and Transportation. The company has in place a pan India sales and service network to support its customers.

With a resolute focus on engineering excellence, BHEL has demonstrated its leadership by way of integration and development of advanced technologies, building system design capabilities and by being one of the consistently highest spenders on R&D in the engineering sector in India. When required, it has partnered with global technology providers, and has a long history of successful partnerships, and assimilation and indigenization of advanced technologies.

With nearly 150 project sites spread across the country as well as the world, BHEL also has a rich experience in project execution including EPC projects.

The above capabilities place BHEL in a unique position to capitalise on opportunities in the infrastructure sector as well as in the new emerging technology arenas.

Though the COVID 19 pandemic, and consequent disruptions, severely impacted Indian economy in FY21, the vaccination drive, along with the growth stimulating fiscal and monetary policy are expected to put the economy back on track. While the fiscal stimulus is expected to revive the demand, the monetary policy is expected to ease the liquidity problem on the supply side. The 'more than expected' recovery of the economy in Q4FY21 demonstrated the resilience of Indian economy, and has assured and enthused investors about its robustness.

Government of India's focus on infrastructure development through National Infrastructure Pipeline (NIP), with planned outlay of more than ₹14 Lakh Crore in power sector (from 2020-2025), structural reforms in distribution sector, and recovery-led prospect growth in electricity demand indicate towards positive developments in the currently beleaguered power sector.

Furthermore, as a silver lining the pandemic caused crisis has highlighted the importance of self-reliance, and consequently, Govt has put thrust behind the schemes like Make in India, AatmaNirbhar Bharat, PLI scheme etc. to make the country self-reliant in core sectors. Significant opportunities will pan out due to modernisation plan of Indian railways, and indigenisation of Indian defence procurements.

In the medium to long run, fundamental shift of electricity generation from fossil fuel based systems to renewable & green forms like solar, wind and hydrogen based systems presents a challenge to company's core business of equipment manufacturing of coal & gas based thermal power plants. In addition, timely project execution, inadequate diversification, increase in cost, declining margins and liquidity are the major areas of concern for the organisation. Cognisant to this fact, your company has embarked upon several initiatives to address each of these issues, as detailed later in the sections.

Resurgence of the pandemic in form of another wave/s, and emergence of more malignant mutations of the virus are some of the major threats to the recovery of the economy. Moreover, fiscal space with the government for rolling out the economic stimulus packages, and robustness of financial institutions for infusing credit in the economy shall also be critical factors determining the extent of economic recovery. The pace and scale of economic recovery is expected to have direct impact on our performance.

To overcome the threat of future waves of COVID-19, BHEL has also undertaken a massive vaccination drive for its regular employees and their families as well as contractual workers at its manufacturing units and project sites.

1.3 Future perspective

The company has taken the challenge of transforming itself to meet the rapid changes in the business & economic environment. This transformation is being attempted in multiple dimensions including, inter alia, business diversification, technology upgradation, manpower upgradation, IT enablement, revamp of project execution, quality first initiative, cost optimisation as well as receivables management.

1.3.1 Business initiatives

Defending the core

Determined to continue to assert its leadership in its core business areas, BHEL is focusing on revamping project execution, enhancing spares & services business, strengthening emission control business and development of environment friendly efficient technologies for power plants.

Building up on its prominence as the largest contributor to the domestic power generation capacity, the company maintained its leadership in domestic emission control business with an existing portfolio of 66 flue gas desulphurisation sets, 11 selective catalytic reduction sets and a significant number of orders where it is favourably placed.

BHEL, amongst the few organizations associated in all the three stages of Indigenous Nuclear Power Programme of the country (Primary as well as Secondary side), and sole Indian supplier of nuclear steam turbines, has geared up to address the 700 MWe 'TG Island' business on 'EPC basis' for the upcoming fleet mode ordering by NPCIL. This is in addition to the current offerings of Steam Generators, Reactor Headers, Turbine Generator Sets, MSRs, Heat Exchangers, Central Control & Instrumentation package etc. As a testament to BHEL's prowess in the sector, the company has already won the first order from NPCIL under its Fleet procurement mode for the supply of Reactor Header Assemblies for 700 MWe Pressurized Heavy Water Reactors (PHWRs), to be set up at four locations in the country.

The Company having a portfolio of ~21,000 MW in the hydro segment further retained its dominant position in this businesses area, booking highest-ever orders of more than ₹3000 Crore during the year.

Going forward, Spares & Services will be a major focus area with revamp of the business model which would be more responsive to customer requirements as well as cater to BHEL and non-BHEL sets. Efforts are underway to expand the range of IT enabled/ IOT based services offered by the company in this segment in times ahead. Flexible operation of power plants is another major focus area keeping in mind increased integration/ share of renewables in the energy mix in coming years.

Diversification

The company is transforming itself from being a primarily Thermal Power Equipment/ Project Company to an "Engineering Company" covering a wide spectrum of products & services for various sectors of the economy. It is exploring a range of opportunities in Oil & Gas sector as well as for expansion of its role and presence in Railways, Defence & Space sectors. The company is strategically working on opportunities arising out of the Govt of India's initiatives of AatmaNirbhar Bharat Abhiyan as well as Make in India.

A range of new products, systems and solutions including urban mobility, LSTK opportunities in oil & gas business, defence programs, ISRO related opportunities, energy storage solutions, among others are being developed to build new drivers of growth.

Under the 'AatmaNirbhar Bharat Abhiyan', the company is working on various opportunities including collaboration with a global OEM for leveraging opportunities in urban rail transportation; signing of a working protocol with Zorya Ukraine, and Indian Navy for localization of manufacturing of marine gas turbine aggregates in India; exploring setting up of GW scale upstream solar manufacturing, and leveraging Production-linked incentive (PLI) schemes.

Maiden successes have already been achieved in some areas. With the execution of the order for Sulphur Recovery Unit (525 TPD) from IOCL Paradip, BHEL will establish itself as an LSTK player for Process packages in the Downstream Oil & Gas sector. Company is also developing propulsion electrics, including 1200 KW 3-phase traction motors for 9000 HP WAG-9HH locomotives of Indian Railways.

1.3.2 Revamping Project Execution

BHEL has taken a major initiative for change of strategy from Revenue Centric to Project Centric execution, to ensure timely completion of projects and improvement in customer satisfaction.

In line with this change in strategy, the company has focused on sequential dispatch of erectable material from the manufacturing units as well as BOI's. This paradigm shift during FY 2020-21 facilitated expediting the deliveries in line with the Project schedule, besides leading to other concomitant benefits such as enhancement in realization from customers which is evident from highest liquidation of current year billing (82%) in preceding 10 years. This has also resulted in savings due to reduction in damages & rework for material/equipment lying at sites for long periods and also improving quality of material/equipment available for Erection & Commissioning.

This initiative is backed up by the successful launch of Integrated

Project Management System (IPMS) for real time monitoring of projects and Site Data Digitization initiative for direct capture of data from sites. Further, major initiatives including integrated project engineering, amendment in General Conditions of the Contract, empanelment of EPC civil agencies for pre-bid tie ups, etc., are underway to facilitate expeditious execution of Projects.

To overcome liquidity constraints at sites and to enable uninterrupted project execution, sufficient liquidity was channelized to vendors/sub-contractors, which also resulted in improved execution.

1.3.3 Quality First initiative

The Quality First initiative launched in the previous year has started yielding results with focus on inculcating quality mind-set in all spheres of company activities. Initiatives have also been taken for enhancing Quality system maturity as per "Quality 360" model, reviving Business Excellence journey as per EFQM2020, revitalising Quality Health through "QHI (Quality Health Index)", digitization of Quality systems, best practices sharing and rigorous pre-installation inspections. As a result, the company has won the "Golden Peacock National Quality Award" for the year 2020 and HEEP Haridwar unit has been recognized in the Platinum category of CII EXIM Bank Award for Business Excellence 2020 after a gap of 14 years. Further details have been included in Section 1.7.

1.3.4 Cost Optimization

Keeping in mind the need to control rapidly rising costs and at the same time to meet market requirements, a new "Cost Optimization Cell" has been formed to pilot initiatives in this area, which inter alia include, review & optimization of design for various products, improving procurement efficiencies, ensuring utilisation of surplus material at sites, clearance of non-moving/ old inventory, timely disposal of scrap, among others.

While enhanced thrust on cost reduction has resulted in achieving sustainable savings in various areas of operations, stringent enforcement of budgetary control has also led to cost curtailment in different elements of operating costs. Constant monitoring, course corrections and management advisories on different cost aspects of the operations have been resorted to drive sustainable cost reduction and improve cost-effectiveness in operations.

The adoption of strategic cost reduction methodologies has led to registering overall reduction of ₹694 Crore in other miscellaneous expenses during the year which has positively contributed to the financial performance, otherwise impacted and subdued by COVID 19. There has also been a saving of ₹134 Crore in the finance cost by driving efficiency in treasury and working capital management. The cost savings have contributed in minimizing the losses and conserving liquidity for the company.

1.3.5 Digital Transformation

BHEL has embarked on a journey to become an IT enabled organization to improve operational efficiencies and provide state-of-the-art customer centric solutions to enhance customer satisfaction.

Major digital initiatives for improving project execution include implementation of Integrated Project Management System (IPMS) for real time monitoring of projects, Site Data Digitisation (SDD) for direct capture of data from sites, Site Contract Management System, RFID system for tracking materials at site, etc.

For manufacturing units, audit of existing ERP systems has been taken up, and centralized data centres as well as data warehousing solutions are being implemented across the Company. Further, for increasing shop floor efficiency, the company is in the process of implementing Industrial IT solutions for quality processes and material utilization, digital kiosks for making available drawings and process sheets on the shop floor, etc.

To enhance the employee experience, various additional work place solutions are also being created.

The company has leveraged COVID imposed constraints for ensuring full implementation of eOffice across the organization. This initiative has given the twin benefit of being environment friendly which is a step towards paperless office and dramatic reduction in file processing time, thus speeding up decision making.

1.3.6 Receivables Management

Maintaining liquidity in operations by inculcating a culture of cash consciousness and accelerating cash realisation from every element of debtors against ongoing as well as commissioned projects has continued to remain a high priority and key result area of the company.

Constant review by creating structural frameworks for monitoring of receivables resulted in cash collection of 123% of revenue. Expediting completion of projects by paradigm shift to project centric approach, sequential supplies and disciplined billing enabled 82% liquidation of current year billing against 73% in FY 20 which is highest in preceding 10 years. Efficient receivables management resulted in operating cash surplus in FY 2020-21 and reduction of Trade Receivables by 38% over previous year.

Total Receivables also reduced by 12% (₹4143 Crore) i.e. ₹31292 Crore in Mar'21 as against ₹35435 Crore in Mar'20. The above mentioned levels of Receivables are lowest in preceding 10 years. Company has also taken strenuous actions against defaulting customers in line with the Board approved Trade Receivables policy and initiated Arbitration/ NCLT/ AMRCD proceedings for expediting liquidation of receivables.

Renewed focus on the closure of punch points of all the technical/commercial issues of commissioned projects will help realize cash stuck up in these projects since many years. High level empowered cross functional teams are dedicatedly working on the same.

1.3.7 Employee Development & Engagement

Policy and structural changes are key focus areas for employee development. The Performance Management System has been comprehensively reviewed and revamped to link individual performance with the performance of the Company/ Unit. Other initiatives include focus on manpower development for re-skilling the workforce in this dynamic business environment, leadership development, strengthening of internal communication, development of e-Modules for continual online training, strengthening processes for knowledge sharing, simplifying policies for making them employee centric, etc.

1.3.8 Technology development

Technology development in core areas and new businesses remains a key priority. BHEL has completed development of Advanced Ultra Supercritical (AUSC) Technology, and is working towards development of critical technologies in the areas of Coal to

methanol, propulsion for locomotives, electrolyser technology for hydrogen production, and PERC cells, among others. Indigenization initiatives are also being implemented for critical components like propulsion equipment, Flue Gas Desulphurization plant components like oxidation blower along with its auxiliary system, wet ball mills etc., and other high-value bought out items.

BHEL is also building capabilities and making efforts to realize business potential from emerging technology areas like Additive manufacturing, hydrogen economy, Industry 4.0, upstream solar PV value chain (Mg-Si – polysilicon – ingot/wafer), Carbon capture and coal to methanol. Dedicated Emerging Technology Strategy desk and incubation teams have been constituted to explore these new areas, design suitable business models, develop technology, build partnerships and provide research support to government for effective policy making in these relatively nascent areas.

Multiple initiatives currently in progress as well as the ones envisaged, will make a strong foundation for company’s growth in the years to come.

Profile and Performance of Business Segments

POWER SECTOR



1.4 Profile and Performance of Business Segments

The company has two business segments i.e. Power & Industry. These segments are driven by the three business sectors i.e. Power Sector, Industry sector, International Operations.

The Power segment comprises thermal, gas, hydro and nuclear power plant businesses apart from new businesses of emission control equipment and spares for Non-BHEL sets. BHEL has been in this business for more than five decades, having commissioned its first coal-based set in 1969.

The Industry segment caters to major equipment supplies for a number of industries including transportation, transmission, defence & aerospace, Renewables, downstream oil & gas, Energy storage, and electric mobility, among others. and petrochemicals etc.

The company is moving towards greener non-coal businesses which is also reflected in its changing business mix. **(In the last couple of years, the company's share of industry segment business has moved to about 30% from about 20%).**

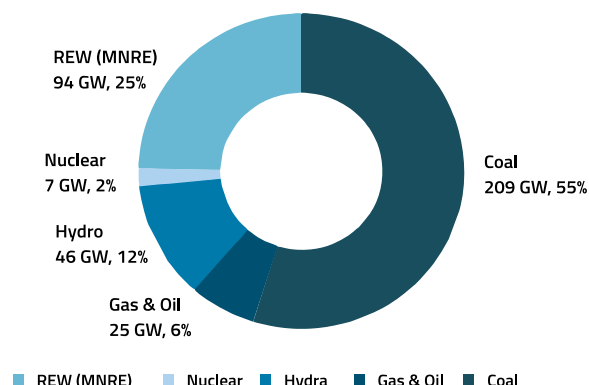
The detailed profile of these business sectors follows ahead.

1.4.1 Power Sector

Overview

High growth trajectory of the nation's economy requires large scale infrastructure development. The nation's economic growth continues to remain strongly correlated with the growth in the energy sector. Accordingly, availability of reliable and quality energy for all at affordable rates, becomes vital for sustained economic growth. India currently possesses an installed capacity base of ~382 GW and has an annual electricity generation of ~1,382 Billion Units (as on 31st March 2021). The nation witnessed a capacity addition of approximately ~5.4 GW from conventional sources in the year, most of which was from thermal power plants (TPPs). On the other hand, the capacity addition from Renewable Energy Sources (RES) was ~7.4 GW in the year, with solar power capacity addition contributing ~5.5 GW to it.

Installed Capacity : ~382 GW



As on March 31, 2021 Source: Central Electricity Authority (CEA), Ministry of Power

Current Business Environment

The nation's economic growth, and in turn, the demand for power have been severely impacted during FY21. Due to the nation-wide lockdown, electricity generation declined significantly in the first half of FY21. However, with the initiation of the unlocking process, the electricity generation posted a sharp recovery after August, 2020 and as a result, for the fiscal as a whole, the electricity generation growth rate was at par with previous year. Notably, while the generation from conventional sources declined by ~1.4% in the year, that from Renewable energy sources increased by ~6.4% in the year.

The government has taken various initiatives to kick-start the growth cycle of the infrastructure sector in general and the Power Sector in particular. To achieve the goal of GDP of \$5 trillion by 2024-25, the government has announced the National Infrastructure Pipeline (NIP) for FY 20 - FY 25, with Energy Sector (i.e. Power, RES, Atomic Energy and Petroleum & Natural Gas) comprising 24% of the total investment plan.

Over the past few years, the Power Sector has been dealing with various issues like fuel supply, delays in clearances and issues



2x660 MW Super critical power plant under commissioning by BHEL at Suratgarh, Rajasthan



Unit 1 of 4x270 MW Bhadradi Thermal Power Station commissioned by BHEL in Telangana

related to land acquisition, tying up of funds, and securing Power Purchase Agreements (PPAs) with the Distribution Companies (DISCOMs). The distribution segment, in particular, has been a major bottleneck in the power sector value chain and has acted as a constraint for the revival of the sector in the recent years. The government has launched various schemes for the revival of the power and infrastructure sector. In 2015, the UDAY scheme was launched to improve the financial health and the operational efficiencies of the DISCOMs. The Union Budget 2021-22 states that the government shall allocate ₹3.05 lakh crore for the power distribution, to be released over five years. Funds will be released based on financial performance and viability demonstration by the DISCOMs.

With a stable policy environment focused on infrastructure development and with an improvement in manufacturing industry outlook, the demand for power is expected to improve in the near to medium term, which makes capacity addition in power systems imperative. The Optimal Generation Mix report of CEA projects a likely gross generation in 2030 of ~2,500 BUs. Further, it envisages an installed capacity of ~267 GW from coal-based projects by 2030 (from current levels of ~209 GW) and a generation from thermal projects at ~1,393 BU by 2030 (from current levels of ~1,032 BU). This underlines the need for substantial augmentation of power generation, transmission and distribution capabilities from the current levels.

The Ministry of Environment, Forest and Climate Change (MoEF&CC) notified the revised emission norms for existing and upcoming thermal power plants in 2015, with an aim of making thermal generation more environment-friendly. This necessitated setting up of emission control equipment in thermal power plants. On 31st March, 2021, the MoEF&CC notified the revised timelines for establishment of Flue Gas Desulphurization Systems (FGDs) for thermal power plants, with different timelines put in place for plants in different locations. As a result of the Government's focus on lower emissions from power plants, significant opportunities are expected to arise in Renovation & Modernization (R&M) business, as new environmental norms for utilities are enforced in

the country for Suspended Particulate Matter (SPM), NO_x & SO_x in coming years. Ordering for emission control equipment by various utilities has gained further steam in 2020-21, and many tenders are in pipeline, both for central and state sector projects, for retrofitting of emission control equipment in existing power plants. Recent thermal power plant tenders have included emission control equipment as part of scope along with main plant equipment, a trend which is expected to continue in upcoming projects.

Recent Government policies have displayed a marked shift towards Renewable Energy Sources (RES) based power. In the past few years, RES based capacity addition has far outpaced the capacity addition from conventional sources of power. The government has given an ambitious target of 175 GW RES based installed capacity by 2022. However, the RES power segment has witnessed a slowdown in growth rate recently, due to factors like price escalation for solar modules, disruption of supply chains due to COVID-19, issues in land acquisition, re-negotiation and cancellation of Power Purchase Agreements (PPAs) between RES developers and DISCOMs, slower growth in demand for power in recent years, etc. On the other hand, coal based power plants are expected to remain the mainstay of India's power generating capacity in the coming years, in view of their suitability for continuous, round-the-year operation and the large domestic reserves of coal in our country. Also, significant improvements in efficiency and emission levels through technology advancements are enabling coal based power plants to generate cleaner and greener power. Capacity addition of RES based power generating systems also calls for significant enhancement of battery storage solutions, hydro-electric capacity, from conventional (both Large Hydro Plants & Small Hydro Plants) as well as pump storage generating stations, and gas based power plants, to meet the grid balancing and stabilization requirements necessitated by the inherent variability of RES based power systems.

Around 36% of India's huge hydropower potential of 145 GW has so far been harnessed, with future potential of approx. 93 GW yet to be utilized. Hydro Policy approved by Cabinet in March 2019 is likely to give impetus in medium term to hydropower development in India. Further, more than 30% of India's hydropower plants have

completed 30-35 years, thus providing potential for Renovation & Modernization (R&M) for life extension and performance & efficiency upgrades.

Nuclear power continues to remain an integral part of India's self-reliance mission for long term sustainability. Being a viable source for clean base load power, nuclear power continues to form an essential and integral part of country's overall power mix and is poised to grow substantially in the future. In addition to the 2x700 MWe Project at Gorakhpur Haryana Anu Vidyut Pariyojna (GHAHP 1&2), the Indian government, in 2017, sanctioned 10x700 MWe Nuclear Power Projects to be installed under the "Fleet Mode" implementation. The finalization of the above orders is underway and shall fructify into substantial business opportunities.

Offerings

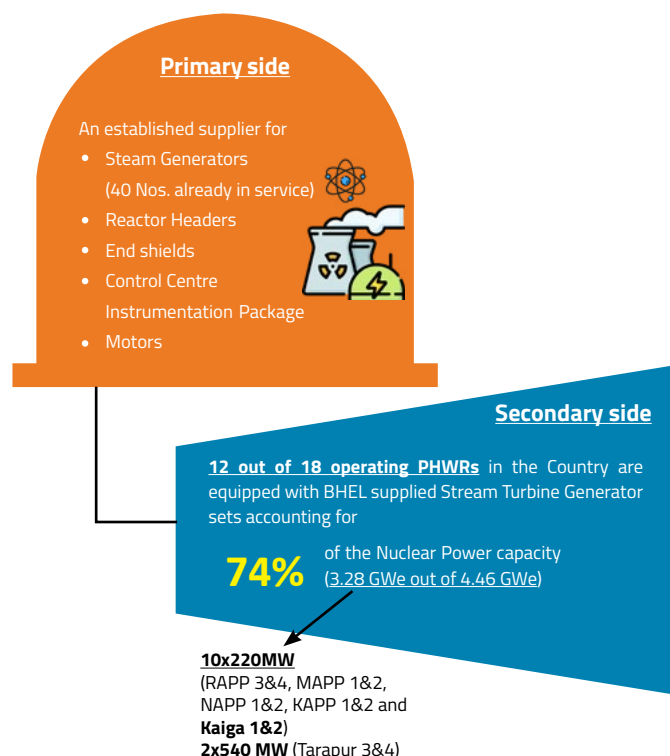
BHEL is one of the few companies in the world manufacturing the entire range of power plant equipment, with proven capabilities for executing thermal, gas, hydro and nuclear power projects.

BHEL has the capability from concept to commissioning of thermal power plants, encompassing steam turbines, generators, boilers and matching auxiliaries up to 1000 MW ratings. The Company has the experience of executing numerous prestigious projects with supercritical thermal sets of 660/700/800 MW ratings on EPC basis.

BHEL also supplies and executes Circulating Fluidized Bed Combustion (CFBC) boilers for thermal plants, suitable for wide range of low-calorific fuels like pet-coke, lignite, etc. BHEL offers gas turbines and matching generators upto 299 MW (ISO) rating, tailored to meet specific needs, for both open and combined cycle operation.

In nuclear power sector, BHEL is amongst the few organizations which are associated in all the three stages of Indigenous Nuclear

Power Programme of the country both on Primary and Secondary Side. Out of the 18 Pressurized Heavy Water Reactors (PHWRs) forming the base of Indigenous Indian nuclear power Programme, 12 PHWRs are equipped with BHEL supplied steam turbine generator sets (10x220 MWe and 2x540 MWe).



State-of-the-art control centres for power plant operations have been set up at all its commissioned units by BHEL



BHEL dispatched its 40th Nuclear Steam Generator to NPCIL for installation at Rawatbhata Atomic Power Project

For the country's first and highest rated 700 MWe Pressurized Heavy Water Reactor based Nuclear Power Project being set up by NPCIL at Kakrapar (Gujarat), BHEL's offerings include equipment in the primary as well as secondary sides of nuclear power plant, such as Steam Generators, Reactor Headers, Turbine Generator Sets, Motors, MSRs, Heat Exchangers, Central Control & Instrumentation package, etc.

BHEL has the capability for engineering and manufacturing of custom-made conventional hydro turbines of Kaplan types upto 100 MW, Francis and Pelton types upto 400 MW, Bulb turbine upto 10 MW, Pump turbines upto 250 MW, high capacity pumps for Lift Irrigation Schemes upto 150 MW and Turbines for Small hydro power plants.

BHEL has capability for engineering, manufacturing, installation and commissioning of custom-made salient pole vertical synchronous hydro generator upto 400 MW, LIS (Lift Irrigation Scheme) motor upto 150 MW, Bulb generator upto 10 MW and horizontal generator upto 20 MW along with matching static excitation system/ Brushless excitation system.

In the emission control equipment business, BHEL offers customized equipment for controlling emissions from thermal power plants. BHEL has the capability to provide retrofit solutions of ESP, FGD, NOx control equipment and furnace modification solutions. BHEL has supplied Electro-Static Precipitators for control of particulate matter not only for BHEL boilers, but also for boilers of other manufacturers.

The company has proven expertise in plant performance improvement through renovation, modernization and uprating of a variety of power plant equipment, besides specialized know-how of residual life assessment, health diagnostics and life extension of plants. Retrofit packages for ESP and C&I with state-of-the-art technologies are also being offered by BHEL.

Achievements during the Year

Order Booking

The fiscal 2020-21 has been one in which BHEL has had to face various issues, in the form of intense competition in a limited market and also, and delays in finalization of orders where BHEL is favorably placed. The organization has been able to secure an order inflow of ~₹9,000 Crore in Power Sector.

Significant utility orders received in the year are:

Thermal

- **FGD Pkgs:** NTPL / Tuticorin and TANGEDCO / North Chennai Stg III
- **Boiler Modification Pkg:** TANGEDCO / Udangudi

Hydro

- **E&M Works:** 12 Units of Polavaram HEP
- **Pump-Motor works:** 8 Units of Palamuru Rangareddy LIS Stg-1 (Pkg.1), 5 Units of Palamuru Rangareddy LIS Stg-4 (Pkg.16), 5 Units of Kaleshwaram LIS link II (Pkg. 1), 4 Units of Kaleshwaram LIS link II (Pkg. 2), 6 Units of Kaleshwaram LIS link IV (Pkg. 2) and 4 Units of Kaleshwaram LIS Link IV (Pkg. 4)

Nuclear

- Supply of Reactor Headers: 32 nos. from NPCIL (Fleet Mode Procurement)

Spares and Services

- UPRVUNL Anpara-D (Complete set of Generator Stator, Generator Rotor & Exciter, LP Rotor, HPT Module and various turbine spares)
- Jindal Power Limited (ESP Restoration)
- DVC Mejia (Combustion Modification Package)

In the thermal sector, building on its noteworthy accomplishments in the emission control equipment business in previous year, BHEL has garnered orders of FGDs for 3 sets during 2020-21, totaling to ~1.8 GW. With this, BHEL has secured domestic orders of FGDs for 64 sets and SCRs for 11 sets and has maintained its status as the manufacturer with the single largest market share in this domain.

Till date, for Main plant packages of Thermal Projects, BHEL has secured orders for 56 sets of Supercritical Steam Generators (SGs) and 51 sets of Supercritical Turbine Generators (TGs) in the country, the highest by any single power plant equipment supplier in the country. Out of these, 25 Supercritical SGs and 20 Supercritical TGs have been commissioned till March 31, 2021.

BHEL has won the order from NPCIL under its Fleet procurement mode for the supply of Reactor Header Assemblies for 700 MWe Pressurized Heavy Water Reactors (PHWRs), to be set up at four locations in the country. Significantly, this is the first equipment order placed by NPCIL under the Fleet Mode Procurement program.

In the Spares and Services business, BHEL entered into a Long Term Spares Supply Agreements (LTSSAs) with one major private sector customer and has undertaken extension of 5 nos. LTSSAs with one major central sector utility.

In the Hydro business, 'Hold' on project execution was lifted for 5 machines each for Palamuru Rangareddy LIS Stage 2 and 3.

Project Execution

Since its inception in 1964, BHEL has added 457 coal based sets, 422 hydro utility sets, 103 gas based utility sets and 12 nuclear based utility sets in India upto 2020-21. Installed capacity of BHEL supplied utility sets in India stands at ~163 GW, including ~130 GW coal based and ~21 GW hydro based equipment.

In order to give thrust to project execution, BHEL's approach has witnessed a shift towards a 'project centric approach', with focus on sequential equipment supply to project sites which matches the site requirements and helps avoid/ defer dispatches of material which are required at a later stage. Focus is being given to carry out detailed engineering and initial procurement activities at pre-award stage itself. As a result of such efforts, BHEL was able to commence project activities at Sagardighi project from zero date itself. Integrated Project Management System (IPMS) coupled with Site Data Digitization has been implemented in major projects, so as to have better visibility of project progress and timely information about the constraints likely to affect the project schedule. Though the change in approach has adversely impacted the topline for current year, BHEL expects to reap long-term benefits from this approach in the years to come.

The ongoing pandemic has been a major dampener for project execution, with mass exodus of labourers and hesitancy to resume execution. BHEL motivated contractors and labourers to continue at site, so as to minimize the impact of the pandemic on project execution. Through its concerted efforts, BHEL achieved a capacity addition of ~2,400 MW in the power sector in 2020-21. In addition, synchronization of ~1,400 MW was achieved during the year. Deliberations and discussions regarding projects continued with the customers, consultants and vendors including inspection and approval of equipment, both physically as well as through virtual platforms, even during these Covid times. Notably, even during the initial national lockdown period, work continued at critical sites with the support of local authorities, which resulted in recommissioning

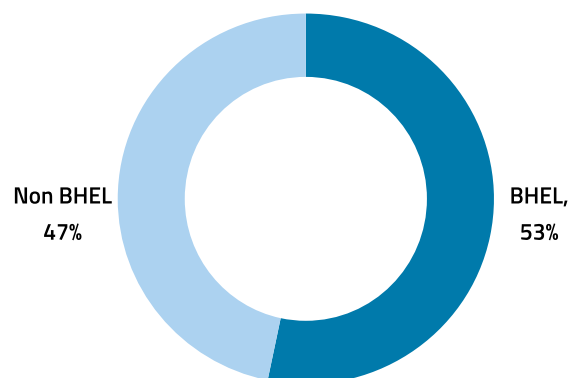
of 1x800 MW Kothagudem thermal project, commissioning of Bhadradi Unit-1, one unit of 106 MW and 3 units of 134.41 MW of Kaleshwaram Lift Irrigation Scheme in Telangana.

Your company has completed the Steam blowing of North Karanpura STPP- 1 in a record time of 13.5 days in an effort to reduce the commissioning time period which has also been well appreciated by the customer.

BHEL also focussed on closure of pending punch points for projects commissioned earlier which resulted in completion of Performance Guarantee (PG) Tests of total 54 packages during Financial year 2020-21 helping vacation of pending Bank Guarantees and realisation of dues.

With this, BHEL maintained its lion's share of 53% in the country's total installed capacity of Utility* power projects:

Installed Capacity - Utility* 3,07,109 MW (March 31, 2021)



*Includes Coal, Gas & CCPP, Diesel, Nuclear & Hydro; Excludes Renewables
Based on capacity at the time of installation

In addition to above, BHEL has achieved capacity addition/ synchronization of following projects having limited BHEL scope (SG/ESP/PCP aggregating to 4,240 MW and Lift Irrigation Scheme aggregating to 644 MW):

- Utility power projects capacity addition (where BHEL scope is SG/ESP) has been achieved for 1 Unit each of NPGCL / Nabinagar (SG & ESP Pkg), NTPC / Tanda (ESP Pkg) and NTPC / Lara (ESP Pkg).
- Utility Power Projects Synchronisation (where BHEL scope is SG/ESP/PCP) has been achieved for 1 Unit each of NTPC/ Darlipali (SG & ESP Pkg), NPGCL / Nabinagar (SG & ESP Pkg) and NTPC / Barh (PCP Pkg).
- Commissioning of Lift Irrigation Schemes(LIS) of 1 Unit of I&CAD, Telangana / Kaleshwaram (Pranahita Chevella) LIS Pkg-10 and 4 Units of I&CAD, Telangana / Kaleshwaram (Pranahita Chevella) LIS Pkg-11 has been achieved.

Some of the major project execution milestones for the year are:

- Kakrapar Atomic Power Project Unit-3 was synchronized in Jan '21. Kakrapar is India's first-of-its-kind, highest rated, 700 MWe Nuclear Power Plant with Pressurized Heavy Water Reactor (PHWR).



1x800 MW Kothagudem Thermal Power Plant

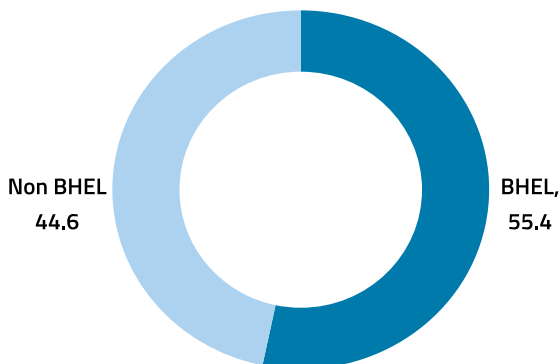
- With the capacity addition of Kameng HEP Units 3 & 4 during 2020-21, all the 4 units of the project have been commissioned. The 4x150 MW project has the largest unit rating (150 MW) for any hydro power project in the state of Arunachal Pradesh. The Francis turbine commissioned in the project is designed to operate at rated head of 501 meters, which is the highest head Francis type hydro turbine in the country.

Performance of Equipment

55.4% of the country's total generation of 981.443 BUs from thermal utility sets (coal & lignite based) contributed by BHEL supplied sets, a testimony to superior performance of BHEL sets.

Generation - Utility (Coal & Lignite)

981.443 BU (2020-21)



Among BHEL supplied supercritical sets, Kothagudem-12 (800 MW) achieved highest PLF of 87.2% and OA of 93.6%. Further, BHEL's first supercritical unit Barh-4 (660 MW) has clocked around 50,158 hours of operation since its first synchronization, with uninterrupted operation for 154 days in 2020-21 with Operational Availability (OA) of 98.2%. This demonstrates the remarkable performance of BHEL supplied supercritical sets.

As a testament to the performance & longevity of BHEL supplied sets, the 39 years old BHEL supplied subcritical unit for Singrauli-1 (200 MW) has clocked around 3,05,539 hours of operation, achieving a PLF of 100.5% and OA of 99.8%, which is the highest PLF achieved during the year by any coal based unit over ten years old in the country. Further, 3 BHEL supplied sets which were more than 37 years old, achieved PLF of more than 98% (Singrauli-1: 100.5%, Korba STPS-2: 100.1% & Singrauli-4: 98.9%).

In Nuclear Segment, BHEL supplied Nuclear Power Equipment continue to exhibit excellent performance. Nuclear sets registered OA of 82.4%, with 7 sets registering OA of 90% and above.

Notably, NPCIL's Narora Unit 2 where BHEL has supplied turbines in both units of 220 MWe (Unit 1&2), clocked uninterrupted operation for more than 852 days. It is the second highest among nuclear sets in India after the world record of uninterrupted operation of Kaiga-1 (962 Days), which has also been supplied by BHEL.

Focused approach and coordination have paid rich dividends to BHEL in completion of Performance Guarantee (PG) Tests of total 54 packages during Financial year 2020-21 (Power Sector - 45, Industry Sector - 9). Additionally, PG Tests were completed for 7 Units of R&M projects.

Major achievements in conducting PG test during year 2020-21:

- PG Test has been completed for all main plant packages (Turbine, Boiler, ESP & Mills as applicable) in 21 Units.
- First TG-PG test of 800 MW supercritical set completed at Wanakbori-8 and subsequently at Kothagudem-12.
- In a unique feat, PG test of Air Pre-Heater (APH) of Ropar-6, R&M was conducted remotely.

Power plants with BHEL supplied equipment continue to exhibit above par performance in respect of Operating Availability (OA), and Plant Load Factor (PLF). Major performance achievements of BHEL sets include:

- Thermal sets (above 250 MW) have consistently achieved significantly higher PLF than the national average.

- Super critical sets (660 / 700 / 800 MW) registered OA of 86.1%.
- Sub critical sets (195 - 600 MW) registered OA of 88.2%.
- 92 thermal sets achieved PLF above 70% out of which 18 thermal sets achieved PLF above 90% and 35 thermal sets achieved PLF between 80% and 90%.
- 3 Thermal sets clocked uninterrupted operation between 300 and 365 days and 18 thermal sets clocked uninterrupted operation between 200 and 300 days.
- 4 Nuclear sets clocked uninterrupted operation between 300 and 365 days and 3 Nuclear sets clocked uninterrupted operation between 200 and 300 days.

Renovation & Modernization (R&M)

During the year, BHEL completed Renovation & Modernization milestones of various projects for Boiler Turbine-Generator (BTG), ESPs, Hydro Sets, De-NO_x System (Combustion Modification), Air preheater and C&I Pkg.

Acknowledgements & Recognition of Excellence

BHEL's efforts for providing higher value to customers through timely project completion, improvement in equipment performance and Service After Sales (SAS) support have been appreciated by various customers:

- NTPC appreciated BHEL for Completion of Steam Blowing of North Karanpura STPP- 1 in record time of 13.5 days.
- Jindal Power appreciated BHEL for Restoration of generator in record time of 67 days.
- TANGEDCO appreciated BHEL for Successful completion of retrofitting of 210 MW LMW surface condensers for the "First Time" in Tuticorin project.
- NPCIL appreciated BHEL for Successful completion of TG stator replacement for the "First Time" in Kudankulam Nuclear power plant.
- APGENCO appreciated BHEL for resolving long pending issue of high conductivity and high Dissolved Oxygen (DO) in primary water system at Vijaywada Unit-7.
- NTPC appreciated BHEL for best performance in the field of Safety and contribution leading to zero accident at Singrauli R&M site.
- CSPGCL, NTPC, DPL and IOCL appreciated BHEL for various Rectification works.
- NTPC, KBUNL, NPGCL and BRBCL appreciated BHEL for various Overhauling works. Some of the overhauling works have been carried out during Covid period.

Future perspective

Utilizing its vast and varied experience, BHEL has been at the forefront of the development of power sector equipment manufacturing industry of the nation. The organization has not only been indigenizing technology from world leaders in various domains, but also been building up state-of-the-art in-house manufacturing infrastructure and capabilities. BHEL has the capabilities to maintain its techno-commercial leadership and successfully address the opportunities and challenges created by the evolving dynamics of Power Sector.

Substantial activities have been initiated in the emission control equipment business, with the developers aiming to meet the

revised timelines issued by MoEF&CC for meeting the emission norms. BHEL possesses the capabilities to offer customized emission control solutions for new projects as well as for sets which are already in operation. Through continuous improvements in its processes and technologies, BHEL is poised to extend its market leadership in the FGD domain to the entire spectrum of emission control equipment business.

CEA's National Electricity Plan (CEA), released in 2018, envisaged a retirement of older thermal power plants to the tune of ~48 GW from 2017-2027. While the government's focus on providing greener and cleaner energy has resulted in retirement of some of these older and inefficient power plants, a potential for retirement of ~40 GW still exists, which will entail their replacement with new supercritical capacity having higher efficiencies and lower emissions. BHEL is providing optimum techno-economic solutions to developers to meet such requirements from concept to commissioning for replacing such power plants with supercritical technology, including dismantling of old power plants.

Further, a requirement for lower rating supercritical projects may also come up in future projects, given the space constraints in upcoming expansion projects, need for replacement of older & inefficient subcritical sets and need for flexible operation of projects. In addition, with the large scale influx of RES based power systems in the grid, a need for grid balancing solutions is expected to come up for conventional power systems. Hence, flexibilization solutions for thermal power plants may be needed, which may have to work in consonance with the gas and hydro based projects. BHEL has developed solutions to meet these requirements and is working towards further optimization of such solutions to provide more value to the customers.

BHEL is already at the forefront of the indigenous development of nation's first Advanced Ultra Supercritical Technology based plant, which is a pioneer R&D project undertaken jointly with NTPC and Indira Gandhi Centre for Atomic Research (IGCAR). The design phase of project has been completed and BHEL has already signed an MoU with NTPC for installation of the Technology Demonstration Plant for the same. Development of this technology shall not only help in achieving a quantum jump in efficiencies, but also reduce the coal consumption and Carbon Dioxide emission levels.

Leveraging its huge installed base of over 1,93,000 MW+ globally, BHEL is focussing on growing its Spares and Services business through a comprehensive revamp of its business model. This strategy includes expansion of its offerings for BHEL as well as non-BHEL generation sets, performance improvement services and customized solutions through a range of IT enabled/ IOT based services. Capability building measures include additive manufacturing for suitable components, advanced manufacturing actions for speedy deliveries, resource augmentation, and greater customer outreach.

Drawing on its rich experience of over five decades, BHEL is also offering customized solutions for Renovation & Modernization and Life Extension for existing plants under operation to developers for improving their performance.

Other fuel sources, like Hydro and Gas, shall also play crucial role in maintaining the grid stability in the future, given their faster start-up and ramping capabilities. In hydropower segment, the organization has enhanced its capabilities to manufacture up to 400 MW hydro

sets. Development of efficient runner profiles and reduction of hydro turbine weights have been instrumental in BHEL's recent successes in the segment. BHEL has also emerged as a leading player in large size Pump-Motors required in Lift Irrigation Scheme projects. Further, BHEL is developing the requisite capabilities to cater to the upcoming demand for Pumped Storage Projects, that is expected to increase with the larger share of Variable RES in the energy mix.

In the nuclear Segment, BHEL is fully geared up to address the 700 MWe 'TG Island' business on 'EPC basis' for the upcoming PHWRs which are being procured by NPCIL under Fleet Mode and has emerged as the lowest bidder for the 6x700 MW Turbine Island Package Projects. For Primary Side Equipment, BHEL with its unmatched Engineering and Technical Strength has fully

supported NPCIL and has already started further consolidation of its manufacturing capabilities at its flagship manufacturing plant at Trichy for ensuring timely implementation of Fleet Mode installation of the 700 MWe plants. BHEL is also geared to supply 12 Steam Generators ordered (Q1 FY 21-22) under the fleet procurement mode by NPCIL. BHEL is also expanding its offerings in nuclear projects being set up under Russian co-operation at Kudankulam 2x1000 MW Units 3&4.

The Indian economy & the Power Sector is in a state of transition, which is creating challenges as well as opportunities for the major players in the sector. BHEL is tirelessly striving to ensure its preparedness on all fronts, so as to provide higher value propositions to its customers.

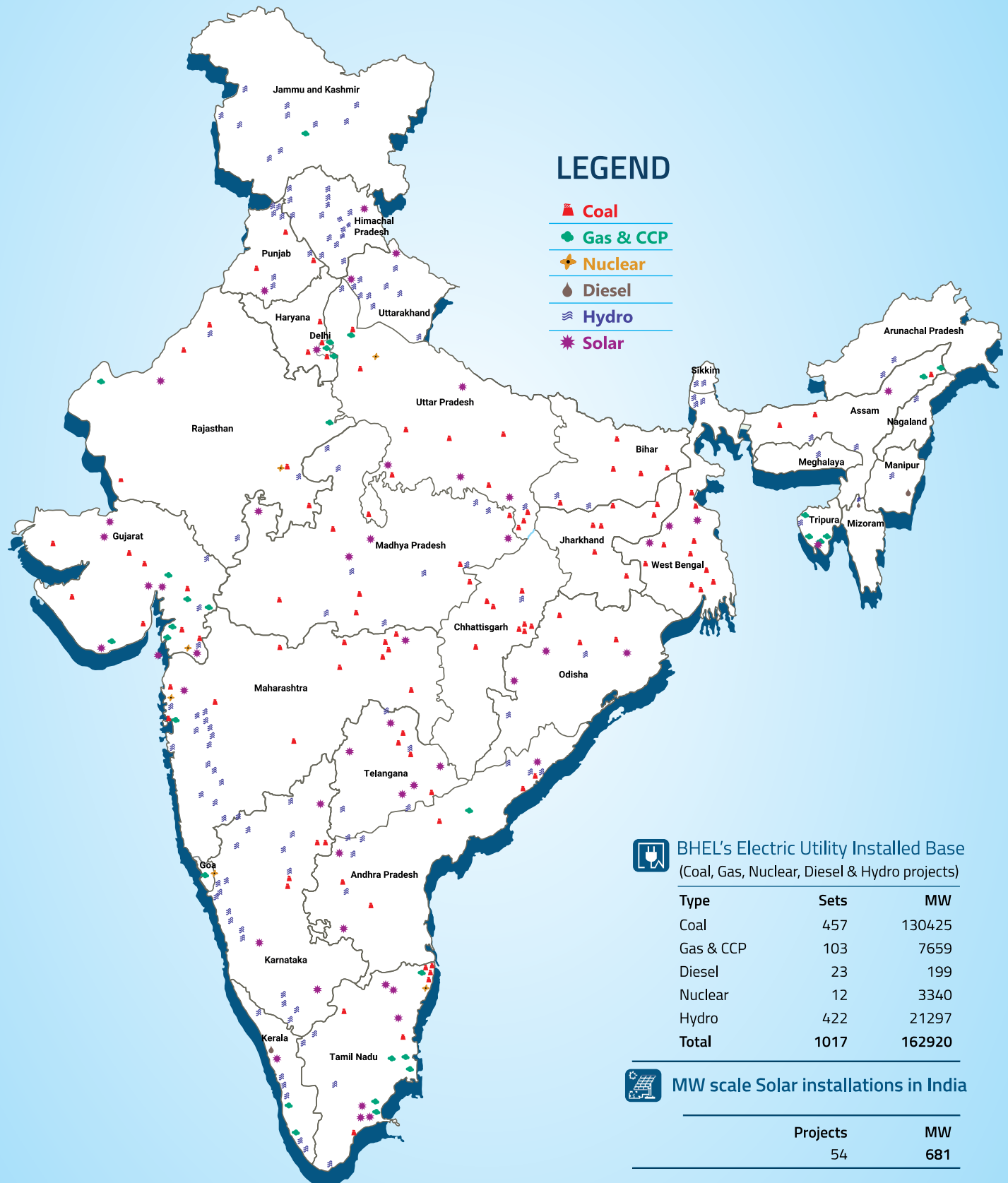


BHEL has commissioned the pumping units for Kaleshwaram Lift Irrigation Scheme, Telangana - world's largest LIS project

BHEL

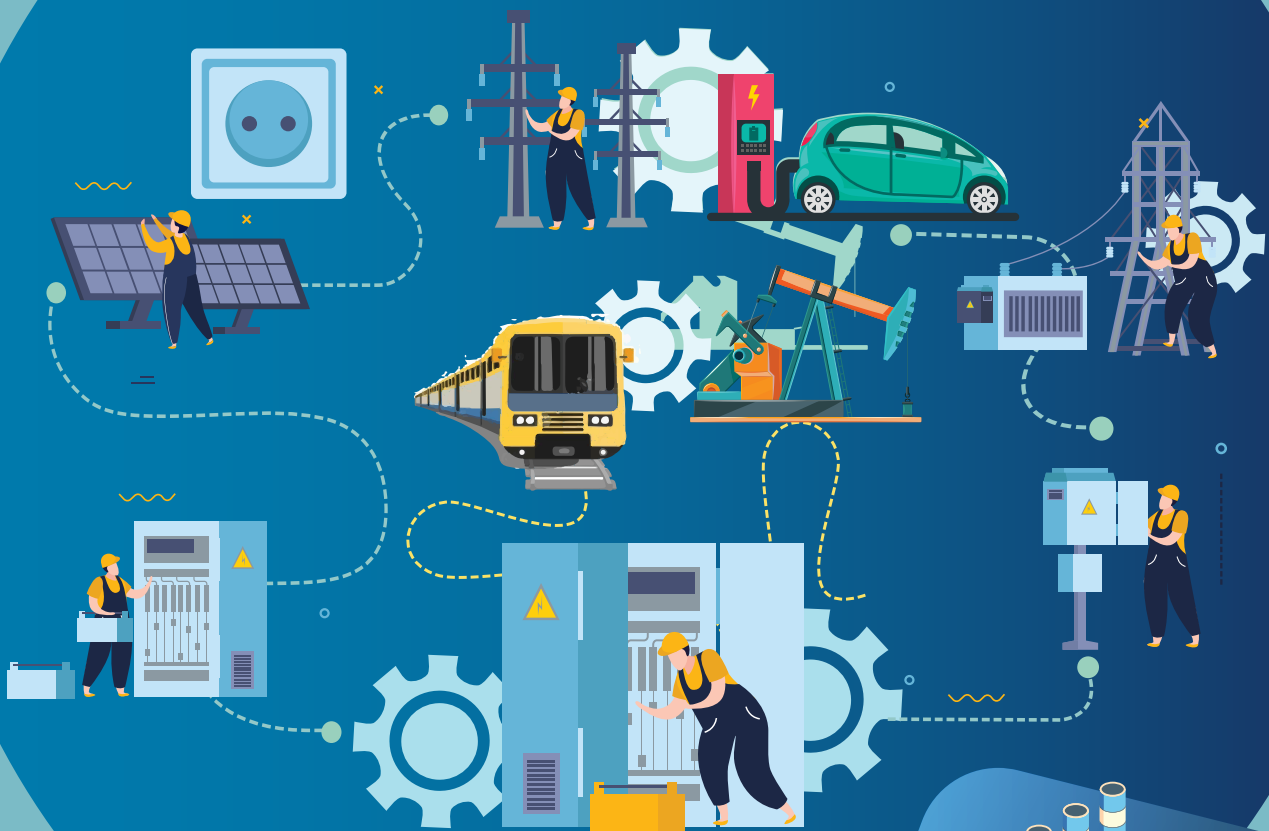
Make Electric Utility Installations

Commissioned as on 31.03.2021



Profile and Performance of Business Segments

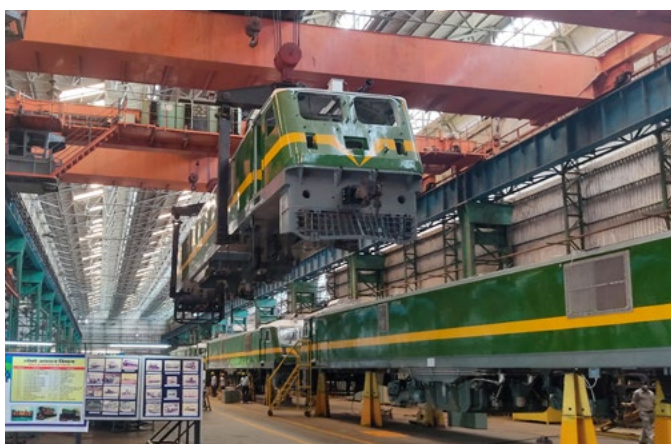
INDUSTRY SECTOR





1.4.2 Industry Sector

Industry Sector offers a broad range of industrial systems and products for the major sectors of the Indian economy. With focus on growth of non-coal based business of the company, Industry Sector comprising of market-focused groups, offers comprehensive solutions for transportation, transmission, renewables, defence & aerospace, energy storage, process industries, e-Mobility, oil & gas and medical oxygen plant and water management. During 2020-21, Industry Sector secured orders worth **₹4,283 Crore** in a challenging business environment.



WAG 9H locomotives under manufacture for Indian Railways at TP, Jhansi

1.4.2.1 Transportation

BHEL has been working with Indian Railways for the last six decades to meet their requirements and has been providing world class solutions in the field of electric propulsion equipment for rolling stock and mainline electric locomotives.

Govt of India envisages modernization of Indian Railways and the transportation sector, which is creating opportunities for the major players in the sector.

Domestic transportation sector is embracing faster, safer and more reliable technologies. With the Indian Railways upgrading its systems, growth in the capital investment outlay of the Indian Railways has provided a thrust towards electrification, upgradation of tracks, signalling, station development, etc. There is also visible increasing trend towards privatization of train operations, station development and dedicated freight corridors. With state authorities pursuing mass rapid transit projects in cities having a population of over two million and light rail/ monorail being explored in small cities, the urban transportation segment is also poised to grow. Metro projects have already been announced in more than 50 cities and an average requirement of 500-600 metro coaches every year is expected.

Offerings

- **Rolling Stock**
 - » Electric locomotives up to 9000 HP
 - » Diesel-Electric locomotives up to 3000 HP
 - » Diesel Electric Tower Cars (DETCs)
- **Traction Machines**
 - » Traction Motors and Alternators
- **Traction Drive System & Controls**
 - » Insulated-Gate Bipolar Transistor (IGBT) based propulsion system for rolling stock comprising of traction & auxiliary converter
 - » Train control management system & vehicle control unit
 - » Hotel load converter and composite converter

- » Control gear equipment for conventional rolling stock
- » Regenerative braking system for conventional rolling stock
- **Traction Transformers for Electric Locos and ACEMUs/ MEMUs**
- **Conventional Traction Electrics for Rolling Stock**

Achievements during the year:

- Order for 75 sets of Propulsion & Electrics for AC MEMUs from RCF, Kapurthala and 87 sets of IGBT based Traction & Auxiliary Converters from CLW, Chittaranjan.
- Largest order for 6531 KVA Traction Transformers from BLW, Varanasi and CLW, Chittaranjan
- 9000 HP Electric Locomotive having propulsion system developed by BHEL for the first time, rolled out from CLW Chittaranjan.
- First ever order for 700 HP Diesel Electric Locomotive from ArcelorMittal Nippon Steel India
- First time manufactured and supplied Traction Alternators type TA9906AZ and Traction Motors type TM4504AZ for 3000 HP Cape Gauge Locomotives, exported to Mozambique against order from RITES.

Future perspective

BHEL has launched a multi-dimensional transformation strategy in transportation sector focussing on converting challenges of rapidly changing business environment into opportunities. This will ensure technology self-sufficiency and strengthen in-house capability for designing & manufacturing all types of rolling stocks.

In line with the Indian Railways' latest National Rail Plan (NRP), "Railways plans to increase the share in freight transportation from 30% to 45% by year 2030". BHEL with latest technological advancements and a greater thrust on Research and Development (R&D), is fully geared up to cater to the growing needs of Indian Railways including providing high powered locomotives for Dedicated Freight Corridors.

Your company is at the forefront of indigenous development of IGBT based propulsion equipment for locomotives and electric multiple units (EMUs). The company has already developed composite converter and Head on Generation (HOG) for 3-phase electric locomotives and developing under-slung equipment for EMUs. A state-of-the-art Centre of Excellence for R&D in transportation technology has also been established.

BHEL is focussing on new business opportunities like Metro, Monorail, Metrolite, Maglev, Fuel Cell locomotive, Battery powered locomotive and High Speed Rail (HSR). Company has established collaboration with various global technology leaders for leveraging opportunities in urban transportation and is committed to bring world class urban transportation technology to India.

Further strengthening the vision of "Make in India" and "Aatma Nirbhar Bharat", BHEL with Kawasaki Heavy Industries Limited (KHI), is gearing up for indigenous manufacture of Mumbai-Ahmedabad HSR trains. Additionally, BHEL is also exploring collaboration with a Global OEM for leveraging opportunities in Urban Rail transportation.

1.4.2.2 Transmission

An efficient and reliable Power Transmission system is key to the ever increasing demand of a growing nation like India. Today, India is the third largest power producer and second largest power consumer in the world. The Power Transmission sector in India has grown significantly over the past few years spurred by the growing load demand and need for connectivity to generation projects. India in July 21, has crossed a major milestone of 200 GW of peak demand.

The pace of expansion of the transmission network is expected to continue to match with the enhanced Renewable Energy capacity addition targets of 450 GW of power by 2030 at national level. There is a need for up-gradation of the existing transmission networks and addition of new Extra High Voltage (EHV) systems & associated lines to cater to the evacuation and transmission of Power to the



Aerial view and HVDC hall of Raigarh substation of the ± 800 kV, 6000 MW Raigarh-Pugalur HVDC link commissioned by BHEL

load centres. There is an increasing and continued trend of demand for transmission projects (substations, transmission lines) under the TBCB (Tariff Based Competitive Bidding) route. Gas Insulated Substation (GIS) projects are likely to continue witnessing robust demand due to optimized land requirements and reduced O&M expenditures.

Under the National Green Energy Corridor projects, advance technology-based systems are planned for implementation to maintain Grid Stability. Multiple HVDC projects are in various stages of planning for power evacuation from far flung generation centers, mainly RE based.

In recent years, a sharp increase in the CAPEX related to Transmission projects (Substations and Transmission Lines) has been witnessed. The power transmission segment is having an estimated planned capital expenditure of about ₹3,040 billion between 2020-2025.

A robust transmission infrastructure is the need of the hour and BHEL has a strong presence in the Indian Power Transmission space.

Offerings

- **Turnkey transmission Solutions** including Extra High Voltage Substations (both Air Insulated Substation (AIS) & Gas Insulated Substation (GIS) types) upto 765 kV and High Voltage Direct Current (HVDC) converter stations upto +/-800kV on EPC basis.
- **Power Transformers upto 1200kV & Shunt reactors** upto 765 kV, Capacitive Voltage Transformers (CVT) upto 1200 kV Instrument transformers (CT, PT) upto 400kV, traction power transformers, dry type transformers, vacuum switchgear, capacitor banks, control & protection equipment, HVDC Converter Transformers upto 800kV, thyristor valves, etc.
- **Gas Insulated Switchgear (GIS)** upto 420 kV.
- **Ceramic and Composite Insulators.** BHEL has a range of disc insulators for EHV and UHV AC/ DC applications upto 1200 kV AC, ±800 kV DC, solid core insulators upto 400 kV and hollow porcelain insulators upto 765 kV AC.
- **Flexible AC Transmission System [FACTS] Solution:** Fixed Series Compensation for 400 kV lines, Controlled Shunt Reactor (CSR) and Phase Shifting Transformer (PST) for controlling and balancing power flow upto 765 kV applications.

Achievements during the year

- Largest single order of Cast resin Dry Type Transformers for replacement of Polychlorinated Biphenyl (PCB) Transformers from Bhilai Steel Plant, Bhilai.
- First ever standalone orders for MV Switchgear from BGR Energy for Switchyard extension works at NPCIL Tarapur ; and Electrical Balance of Plant (eBoP) from NHPC

Future perspective

Power systems of the future will promote Digitalization, thus paving the way from a conventional to a digital substation environment. Digitalization at all levels of power flow - Generation, Transmission and Distribution are underway with the sole aim of transforming the conventional Power Grid into a Smart Grid. The technology adoption for grid modernisation like Digital Substation Solutions, Phase Shifting Transformers (PST), and Dynamically Controlled Shunt Reactors (CSR) will play crucial role in this direction.

The company has also made considerable efforts in the

development of key products and systems in the digital Substation domain. BHEL has successfully commissioned, a Digital Substation as a collaborative project with POWERGRID wherein indigenously developed products, including Fibre Optic Current Transformer (FOCT), Merging Unit (MU), Switchgear Control Unit (SGCU) & Bay Control Unit (BCU) have been deployed.

BHEL has successfully developed a wide range of EHV & UHV class transmission equipment including Power Transformers upto 1200kV class and reactors upto 765kV. BHEL-make 400kV Controlled Shunt Reactor (CSR) and Phase Shifting Transformer (PST) operating successfully at POWERGRID's Itarsi substation and TSGENCO's Kothagudem switchyard are first of its kind technology solutions in India.

BHEL has also remained the first Company in India having successfully supplied innovative technology solutions like PST, CSR for improving quality of Power Transmission. These have been developed through in-house R&D as fully indigenous technologies.

With an emphasis on sustainable development, inter-changeability, etc., the technologies and specifications of key electrical assets in transmission lines and substations, have undergone major revisions. With the advancement of technologies and advent of Industry 4.0 solutions, Transmission and Distribution (T&D) space would also witness enablement for remote condition monitoring, health assessment and management of transmission field assets. Accordingly, company has made enhanced efforts to keep its Transmission segment product and system offerings updated to meet the market requirements.

1.4.2.3 Renewable Energy

Out of the 100 GW capacity of Solar Photovoltaic Power Plants planned till 2022, over 40 GW capacity has already been installed in the country as on March 31, 2021. Despite Government of India's impetus on boosting domestic manufacturing through various schemes, imports still continue to be cheaper compared to indigenously manufactured solar PV value chain components. Supply chain disruptions due to the pandemic and unprecedented price rise in commodities leading to all solar value-chain components showing upward trend have visibly impacted the pace of solar project execution in the country.

Offerings

- EPC solutions from concept to commissioning of Solar PV Power Plants with or without BESS (Battery Energy Storage System).
- Ground mounted, Roof Top, Canal top and Floating solar power plants.
- Solar-based irrigation and drinking water pumps
- Solar Inverters for utility as well as traction applications
- Loose Solar PV Cells and Modules meeting Domestic Content Requirement (DCR) of MNRE

Achievements during the year

- Repeat order from M/s REIL for Supply of 5 MWp SPV modules.
- Received the prestigious order for EPC of a 5 MW Ground mounted solar power plant at Nalanda University, Bihar. Notably this project has been sanctioned through Viability Gap Funding by MNRE under the CPSU Scheme- Phase II.
- Over 170 MW solar PV plants commissioned during FY



5MW AC Grid Connected Floating Solar PV project at Sagardighi Thermal Power Plant commissioned by BHEL

20-21 including, 50 MW SPV plant for GSECL at Dhuvaran, Gujarat; 39MW & 30MW SPV plants for SCCL at Yellandu and Ramagundam, Telangana; and 5 MW Floating SPV for WBPDC at Sagardighi, among others.

Future perspective

Targeting agility in project execution and optimum utilisation of resources, company has Consolidated all the solar business operations, viz., Marketing, Engineering, Manufacturing, Project Management & Execution, and Project Closure under one umbrella with the formation of Solar Business Division at Bengaluru. As an established EPC player in solar energy market in the country with a portfolio of 1.2 GW, BHEL is poised to contribute actively in achieving the national targets of 100 GW by 2022 and 280 GW by 2030. BHEL is contributing in realizing Gol's AatmaNirbhar mission of self-reliance by manufacturing in-house, major components of solar power plants, viz., Solar Cells, Modules, PCUs (Power Conditioning Unit), Transformers, HT Panels, SCADA ,etc.

BHEL has a dedicated industrial R & D centre for PV where in-house research is being carried out in close coordination with various Govt. agencies and research institutes. This is aimed to indigenize the technology of high-efficiency solar cells in line with best standards. Focussed R&D efforts are underway for development of increased efficiency Mono- Passivated Emitter and Rear Cell (PERC), higher rating modules using larger size cells ,and higher rating 2.5 MW PCU. BHEL is also exploring new business opportunities in developer mode through strategic tie-ups with SJVNL and GAIL in various proposed solar power parks.

Ever increasing pressure on land in the country has resulted in exploring usage of water bodies viz. Reservoirs of thermal/hydro power plant, lakes, irrigation ponds etc. for development of floating and canal top power plants. BHEL is strongly placed to cater to this emerging requirement with rich experience of 220 MWp in canal top and floating solar projects.

Government is giving increased thrust on the indigenization of manufacturing of solar cells and modules by stimulating demand through various tenders which require deployment of DCR (Domestic Content Requirement) cells and modules viz. CPSU Scheme (12 GW), KUSUM Scheme (around 25 GW), various Indian

Railways tenders (around 1.1 GW). BHEL, being one of the few manufacturers in the country which has both, a fully automated solar cell (105 MW/annum) and module (226 MW/annum) manufacturing facility has been targeting the requirements.

1.4.2.4 Defence & Aerospace

India plans to spend 130 billion on military modernization in the next 7-8 years to strengthen its security apparatus To encourage self-reliance, the government in August 2020 created a "negative list" that restricts the import of 101 weapons and military systems in a phased manner. Changes made in the Defence Acquisition Procedure (DAP) 2020 focuses on hastening the procurement process, revision of existing procurement categories, prioritization for Indian solution & Reservation in categories for SME, enhancement of Indigenous Content under various categories, and new concepts of defence procurement e.g. leasing of Equipment are intended to promote Make in India.

Offerings

- Super Rapid Gun Mounts (SRGM), the main gun for warships of Indian Navy, and its entire range of product support including Major Overhaul, health audit and training.
- IPMS (Integrated Platform Management System) for naval ships
- Compact Heat Exchangers for defence & aerospace applications
- Proven capability for indigenous manufacture of complicated and advanced defence equipment/ systems based on Transfer of Technology from OEMs.
- Hot forming of spacecraft propellant tank, Forming of Titanium Shell/Domes, welding & machining of Titanium sheet and tubes.
- State-of-the-art facility for assembly and testing of Space Grade Solar Panels & Batteries
- Space grade Lithium ion cells

Achievements during the year

- Order for Two SRGM's and additional items from Indian Navy
- Completion of manufacturing & supply of Propellant Tank Pressure Vessel parts to Liquid Propulsion Systems Centre (LPSC) for Chandrayaan-3 Project much ahead of schedule.
- Successful Proof firing of 01 Nos. 76/62 mm Super Rapid Gun Mount (SRGM) and dispatch to Indian Navy well before schedule.
- Successful development, manufacture, timely completion of Endurance Trials (2500hrs) and dispatch of First Indigenous Reserve Propulsion Motor and Main Motor Generator developed in the country.
- Delivery of 100th Space Battery to U R Rao Satellite Centre (URSC)-ISRO
- Recommendation received from IN for BHEL to undertake Long Term Repair/Maintenance of Russian origin equipment (Boilers, Steam Auxiliaries and Arrestor Gear) fitted on-board INS Vikramaditya Aircraft Carrier with ToT from M/s Sevmas.

Future perspective

BHEL is resolutely focusing on strengthening its Defence and Aerospace portfolio. The company is extensively working on strategic equipment required by Indian Defence Forces to achieve self-reliance.



First 'Made in India' aircraft carrier warship, INS Vikrant, equipped with BHEL-GE Avio supplied IPMS (Integrated Platform Management Systems), has successfully completed its maiden sea-trials

BHEL has also been a trusted partner of Indian Navy and is working on critical areas like indigenous manufacturing of Marine Gas Turbines for propulsion and utility applications, indigenous design & development of Li Ion Battery System for Defence & Aerospace sector including for Submarine Application. BHEL offers its experience in Renovation & Modernization and Life Extension to Indian Navy by introducing the Upgraded version of SRGM, Service Life extension cum Overhauling of existing SRGMs, etc.

Government under AatmaNirbhar Bharat Mission focuses on making India a global manufacturing hub in Defence Sector via policy support initiatives. Defence spending and investment are expected to increase as India fast-tracks its military modernization. BHEL is poised to provide customized solutions in this new landscape.

BHEL is one of the select few firms in the world having the capability to design and manufacture compact heat exchangers for military aircraft and is currently developing variety of compact heat exchangers for Indian military aircraft and helicopters.

Efforts are being made to enhance business through engagement with ISRO and its centres for business enhancement in aerospace sector. Company is focusing on several opportunities in development of aero structures for various applications. Collaboration with global OEMs is being actively pursued to address the opportunities in this sector. BHEL is also exploring manufacture of precision parts and other components through additive manufacturing.

1.4.2.5 Captive Power & Process Plant

Expansion in various sectors of economy is expected to push the demand for captive power and steam. Refinery Sector capacity is likely to undergo expansion from existing 250 MTPA to 440 MTPA by 2030 including expansion at IOCL Barauni, Numaligarh & IOCL Koyali, among others. Aluminum Sector is also likely to see expansion of upto 7 MTPA in next 5 years. NALCO is planning to invest ₹30,000 Crore by 2027 for expansion of alumina refinery at Angul. Similarly cement sector expansion from existing 540 MTPA to 800 MTPA is also likely to happen. STG demand will continue to grow in this sector. Though these sectors do present new opportunities, delays due to ongoing pandemic might affect the timelines.

Offerings

- Standalone Steam Turbine Generator (STG) sets
- Boiler Turbine Generator (BTG) package Pulverized Fuel (PF), Circulating Fluidized Bed Combustion (CFBC), Atmospheric Fluidized Bed Combustion (AFBC), Utility Boiler (UB) / gas fired boilers
- Gas Turbine based Open, Cogeneration and Combined Cycle Captive Power Plants
- Process packages of Downstream Oil and Gas sector

Achievements during the year

- BHEL made entry into LSTK Business of Process package in Downstream Oil & Gas Refinery segment by bagging the



BHEL has made an entry into the downstream oil & gas process package business by securing an order for setting up 525 TPD Sulphur Recovery Unit at IOCL's Paradip Refinery in Odisha

milestone order for setting up a 525 TPD Sulphur Recovery Unit (SRU) at IOCL's Paradip Refinery.

- Supply and E&C of 18.5 MW STG, 300 TPH PF Boiler, Flue Gas Desulfurization (FGD) and Selective Catalytic Reduction (SCR) from NALCO Damanjodi amid stiff competition.
 - » First Order of Industry Sector with FGD and SCR in scope.
 - » With this order, CPPP not only maintained its track record of supplying all of NALCO's power plants, for both their smelter plant (10x120 MW) at Angul and alumina refinery plant (5x18.5 MW) at Damanjodi, but will also be contributing to 'Make in India' initiative.

Future perspective

Downstream Oil and Gas segment (DSOG) in India offers tremendous business opportunities in next 8-10 yrs. BHEL has had significant presence in refinery sector in form of CPPs and equipment like compressors, columns, heat exchangers etc. However, now the company aspires to leverage its EPC capabilities to execute complete turnkey projects for refineries and petrochemical projects, and establish itself as a leading contractor with both manufacturing and erection & commissioning capabilities. Industry specialists have already been on boarded as enablers for addressing this business. A remarkable start has already been made in form of maiden order from IOCL for SRU Paradip.

1.4.2.6 Industrial Products (including Oil & Gas and Electrical Machines)

Oil & Gas Sector is poised to grow in upcoming years through various planned capacity expansions in Oil drilling, Refinery and Petrochemical plants. This provides enhanced business opportunities for BHEL to manufacture Centrifugal Compressors, Motors and static equipment such as Fired Heaters, Columns & pressure vessels.

Additionally demand for HT motors is also expected from lift irrigation schemes, FGD plants, cement, steel and process industries. NPCIL had floated tender for Primary Coolant Pump (PCP) motor packages, which is likely to be finalised in current FY.

Offerings

- **Oil Rigs** - A variety of on-shore drilling rigs with AC-VFD (Variable Frequency Drive) and AC-SCR (Selective Catalytic Reduction) technology for drilling upto depths of 9,000 meters, work-over rigs for servicing up to depths of 6,100 meters, mobile rigs for drilling up to depths of 3,000 meters. Draw works, mast & substructure, AC & DC Power Control Room (PCR), motors. Refurbishment and up gradation of oil rigs.
- **Well heads and X-mas Trees** - Upto 10,000 psi, Mud Line Suspension System, Choke and Kill manifold, coalbed methane (CBM) Wellheads, DSPM H- Manifold Assembly, Mud valves, Hangers for Electric Submersible Pump, Block type X-mas Trees and Landing Bases for Casing Heads
- **Compressors** - Multi-stage Centrifugal Compressors as per API 617 Chapter-2 for application in Fertilizers, Refineries, Petrochemicals, Pipelines, Gas processing, Steel industries etc.
- **Mechanical Packages** - Equipment like Cryogenic Air separation units, Fired Heaters, Columns, Reactors, Pressure Vessels, Heat Exchangers and Purge Gas Recovery Unit.
- **Electrical Machines**- AC squirrel cage, slip ring, synchronous motors for safe and hazardous area applications, variable speed motors, industrial alternators, special purpose machines and LT VFD.
- **COVID 19 products:** High volume sanitizer spray (BHELMISTER) and electrostatic disinfectant machine (EDM)

Achievements during the year

- Secured milestone order for single largest Fractionator Column (9.5 m Dia, 60 m long and 650 MT weight) from HRRL, Barmer. Execution of this order shall help BHEL to meet Qualification requirement for future Crude Distillation Unit (CDU)/ Vacuum Distillation Unit (VDU) Columns tenders
- First ever order from Wuhan Engineering Corporation Limited for Compressors for Coal Gasification Plant at TFL, Talcher
- Motor orders of various makes from L&T Howden, HRRL, Xylem Water Solutions, L&T MHI Power Boilers Pvt. Ltd, Flowserve Control India Pvt. Ltd
- Repeat orders for 10 nos. GTs totalling to 587.5MVA from NEEPCO

Future perspective

Pursuing Government of India's AatmaNirbhar Abhiyan, BHEL has made substantial efforts to indigenise the 15000 psi Well Head & Xmas Trees Valves for oil drilling operations and Axial blowers for blast furnace application in steel plants and equipment for oil drilling rigs.



Net Gas compressor package of BPCL Kochi MS block project commissioned by BHEL

BHEL has strong presence in Electrical Machines segment in the country and is fully geared up to meet the requirement of Industries, be it Petroleum, Cement, Steel, Irrigation, Nuclear, etc. To facilitate faster technical clearances in Oil and Gas sector projects, an MOU with leading engineering consultant has been executed for standardized HV motor specifications for both Induction and Synchronous Motors.

BHEL is exploring to enhance its offering for Compressors in petrochemical sector and for Subsea Well Heads & X-Mas trees for oil & gas exploration through suitable technology collaborations.

1.4.2.7 Electric Mobility, Energy Storage, Railway Electrification, Water Business

To tap the upcoming opportunities in the areas of energy storage and e-mobility by building capabilities through in house developments and strategic tie-ups, multiple opportunities in electric mobility and battery energy storage systems (BESS) are being addressed. Railway track electrification and oxygen medical plants are also being focused upon as new business areas.

National Electric Mobility Mission Plan (NEMMP) 2020 was launched in 2013 by Government of India with an ambitious target to achieve sales of 6-7 million hybrid and electric vehicles in the country year on year from 2020 onwards. Under the FAME-1 scheme launched by Ministry of Heavy Industries under NEMMP, some State Transport Undertakings procured and deployed around 400 Nos electric buses with supporting chargers. EV charging stations with DC001 (15KW) & AC001 (10KW) chargers were also setup by various nodal agencies under the scheme. FAME-2 scheme was notified in April 2019 for 3 years with an outlay of ₹10,000 Crore to incentivize EVs and develop charging infrastructure. The FAME-2 scheme has now been extended to 31st March 2024. So far, MHI has sanctioned 2877 EV Charging Stations in 69 cities. Another 1544 charging stations are planned for sanction by MHI for development of EV Charging Stations along Expressways / Highways. MHI has sanctioned 6265 E-Buses for deployment in various cities through respective state transport undertakings.

With increase in the share of renewable energy in the electric grid, energy storage is set to become an integral part of the power system to ensure grid stability and power quality. As per CEA Report



The Delhi-Chandigarh Highway has become the first e-vehicle friendly highway in the country, with a network of Solar-based Electric Vehicle Charging stations (SEVCs) set up by BHEL under the FAME- 1 scheme of the Ministry of Heavy Industries

on optimal generation capacity mix, the expected market for BESS is likely to be 108 GWh by 2030. With various other developments, Gol has also announced the Production Linked Incentive (PLI) Scheme 'National Programme on Advanced Chemistry Cell (ACC) Battery Storage' for achieving manufacturing capacity of Fifty (50) Giga Watt Hour (GWh) of ACC and 5 GWh of "Niche" ACC with an outlay of ₹18,100 Crore. This is a major step towards indigenous development and will pave the way for domestic industry set up.

Electric Mobility

Offerings

- EV Charging Stations
- E-Buses
- EV Components – Power train

Achievements during the year

- Entered in a MoU with IOCL for co-operation in setting up EV Charging stations at IOCL retail outlets across India. Under this MoU BHEL has set-up EV charging stations at 6 IOCL retails outlets along Delhi Chandigarh Highway.
- Delhi-Chandigarh highway is the 1st highway in the country which has been made e-vehicle friendly with successful commissioning of Solar Based EV Chargers by BHEL.
- In-house developed 122KW EV charger has been tested and certified at ARAI.

Battery Energy Storage System (BESS)

Offerings

- Power Conditioning System: in-house developed PCS of

rating-630 KW and 1250 KW.

- Energy Management System
- Complete EPC solutions for BESS

BHEL is executing its maiden BESS project of TERI having a cumulative rating of 410kWh, located at three different sites in the NCT of Delhi. This will be one of its kind project in India as it caters



BHEL is executing its maiden order of setting up of a cumulative 410 kWh Battery Energy Storage Systems (BESS) for TERI

to multiple applications including Energy time shifting, power backup, DT overload management, Peak shifting, Energy Arbitrage. The batteries under this BESS project are also equipped to test the

high discharge rates. The knowledge and experience gained will strengthen the BESS design and engineering at BHEL.

Future perspective

With its commitment to the nation's e-Mobility mission, BHEL has taken up several in-house developments and also entered into strategic partnerships with renowned companies.

An outlay of ₹1000 Crore is earmarked under the FAME-2 scheme for development of EV charging infrastructure in the country. With successful development and certification of 122 kW charger, BHEL is geared up to address the requirements by offering EPC solutions in the segment. Also, initiatives to develop higher rating 150 kW charger have been undertaken to cater future requirements.

Railway Electrification

BHEL offers complete EPC solution for Railway Electrification.

BHEL is presently executing Birla Nagar - Etawah Project (440 TKM) section. The Commission of Railway Safety (CRS) inspection for Gr 240 (130 TKM) from Etawah to Bhandai (Udi to Bhandai and part of Etawah to Udi sections), was successfully carried out in March 2021. Commercial operation started on this line on 28th March 2021, within 10 days of CRS. BHEL is now actively participating in new tenders of M/s CORE and M/s IRCON totalling to 8000 TKM.

Medical Oxygen Plants

Amidst the oxygen crisis faced by the country during the second wave of the pandemic, BHEL worked on a war footing to address the oxygen demand through its various manufacturing facilities across the country. Additionally, keeping in view the prevailing situation and on account of the anticipated third wave, BHEL has now acquired technology for manufacturing of Pressure Vacuum Swing adsorption (PVSA) oxygen plants from CSIR-IIP Dehradun. BHEL has started offering PVSA based Oxygen Concentrators (500 LPM & 1000 LPM) and the first order for the same has been delivered in June 2021. Subsequently, an order for 10 nos. PVSA plants of 1000 LPM capacity has also been received from State Disaster Management Authority, Government of Maharashtra.



BHEL has set up a 7 MLD capacity Sewage Treatment Plant (STP) based on Sequential Batch Reactor technology, for its factory premises and suburb at Haridwar

Water Business

Offerings

Complete water management solutions for power plants, industries and municipal applications with comprehensive solutions for

- Pre Treatment Plants (PT)
- Sea Water Reverse Osmosis (SWRO) and Demineralization (DM) Plants
- Effluent Treatment Plants (ETP)
- Sewage Treatment Plant (STP); Tertiary Treatment Plants (TTP)
- Zero Liquid Discharge (ZLD) Systems
- Eco Friendly solutions for water bodies purification

Efforts are being made to address Municipal Water business comprehensively through strategic partnerships. BHEL is exploring business opportunities in large scale sewage treatment plants, water treatment plants, desalination plants and Industrial (Power, Petrochemical & Refinery, Fertilizers etc.) water treatment systems.



BHEL's first Medical Oxygen plant developed and manufactured using CSIR-IIP technology, in a record time of less than 35 days from receipt of order, was flagged off by CMD, BHEL

Harnessing *the* **Hydro Power !**

BHEL is one of the leading players in the hydro power segment with a portfolio of over 500 hydroelectric sets, and a cumulative capacity of more than 31,000 MW globally. With 45% of Nation's installed hydro power capacity equipped with BHEL supplied electro-mechanical equipment, BHEL is the market leader in the Indian hydro power segment.

During the year, BHEL commissioned the 4x150 MW Kameng Hydroelectric project- the largest unit rating (150 MW) hydro power project in Arunachal Pradesh. With first two units commissioned in 2020, all four units of the project have been successfully commissioned and are under commercial operation. The Francis Turbine commissioned in the project is designed to operate at a rated head of 501 meters, making it Nation's highest head Francis Type Hydro Turbine. The project is expected to generate 3,353 Million Units (MU) of clean electricity annually.

BHEL has made significant contribution to the hydro sector of Arunachal Pradesh and accounts for around 88% of the total installed capacity in the state.



Profile and Performance of Business Segments

INTERNATIONAL OPERATIONS



1.4.3 International Operations

Overview

Starting its journey with the first ever export in the early seventies, the company has covered a long distance, reaching out to 86 countries in all 6 inhabited continents. Today, BHEL's international references encompass almost the entire range of BHEL's products and services, covering thermal, hydro and gas-based turnkey power projects, solar PV based projects, substation projects, R&M projects, besides a wide variety of products like transformers, compressors, motors, valves, oil field equipment, electrostatic precipitators, photovoltaic equipment, insulators, heat exchangers, switchgears, castings and forgings, etc.

The cumulative portfolio of BHEL's overseas projects stands at 17 GW out of which over 11 GW has already been commissioned. Currently, the company is executing several major projects, including 2x660 MW Maitree thermal power project in Bangladesh, 6x200 MW Punatsangchhu-I and 6x170 MW Punatsangchhu-II hydro projects in Bhutan, 2 x 200 MW Tishreen Thermal in Syria, 26 MW Calabar Gas based power project and 1.3 MW Kaduna Solar Mini grid projects in Nigeria, 4x225 MW Arun-3 hydro project and 40 MW Rahughat hydro project in Nepal. The company has also been providing after sales support to its international customers in the form of spares and services.

During the past year, a greater part of the world was under lockdown for a significant time and recovery started during the latter part of the year. All sectors including the energy sector have been affected. With the US joining the world powers for fighting climate change, no funding will be available for coal projects from next year onwards.

There is a clear intent for overwhelmingly decarbonized electricity sector by the end of this decade.

COVID-19 has severely impacted BHEL's ongoing overseas projects. Project sites were forced to demobilize and the entire demobilization-remobilization, coupled with interrupted logistics channels, have led to delays in project schedules. Also, finalization of projects already under consideration has been delayed in various focus markets. Even those projects where the contract has been signed (viz. 8 MW Mauritius Solar and 32 MW Chad solar) have not taken off.

In spite of these challenging circumstances in the past year, BHEL has able to expand its global footprints by making an entry in Liberia and Bahrain.

Order Booking

- Secured maiden orders for motors from two new markets- Bahrain and Liberia
- First ever order of 2 nos. of 560 kW Flameproof motors from France
- Order for 8 MW solar PV based power plant in Mauritius
- Orders for spares, services & other products from various countries including Algeria, Bahrain, Bhutan, Ethiopia, France, Indonesia, Italy, Liberia, Malawi, New Caledonia, Oman, Sri Lanka, UAE, Uganda & Vietnam.

Project Execution

Despite the constraints due to COVID-19 and various lockdowns in India and abroad, BHEL has been diligently delivering at project sites by coordinating with customers, consultants, vendors and



2x660 MW Maitree Supercritical Power Project being executed by BHEL in Bangladesh

also Government agencies. For BHEL's biggest overseas project, i.e., 2x660 MW Maitree Thermal Power Project at Rampal, Bangladesh, regular meetings have been held with the Ministry of Power (MoP), Govt of Bangladesh as well as Ministry of External Affairs (MEA), for ensuring continuity at site, clearance of material/ equipment at border and movement of material/ equipment within Bangladesh, etc. This enabled BHEL to complete the Boiler Hydro test of Unit #1 at site. BHEL has also solicited support from Ministry of Health and Family Welfare, MEA, MoP GoB and others for making vaccines available for site personnel.

Strenuous efforts by BHEL enabled restoration, synchronization to grid and operationalisation of Generating Unit 1 (84 MW) of the 336 MW Chhukha Hydropower Plant, which was also appreciated by DGPC.

Site support was extended virtually for the Gas Turbine project in Nigeria for lowering of Gas Turbine on foundation and test witnessing was also conducted for the solar mini grid, Nigeria.

Future perspective

Exports has been a corner-stone of BHEL's growth strategy and several steps are being taken to revitalize BHEL's overseas business. The company has been aggressively pursuing opportunities in focus markets (viz. Neighbouring countries, Africa and South-East Asia), concentrating on conventional sectors of coal, hydro & gas based power plants, besides renewables.

In the renewables space, BHEL is an established EPC player in the solar PV based power plants in India and has several references of supply of PV modules and cells overseas. The company is now working to establish reference of EPC solar PV projects in the international market, and is targeting projects in Africa region in the initial phase.

BHEL has a dominant position in the hydropower sector in the Neighbouring countries region and is executing several large size projects in Bhutan and Nepal. Systemic improvements are being undertaken to further improve our competitiveness in this segment. Your company is also looking towards the small hydro market and intends to offer a turnkey solution for these in future.

Requirement of Export Credit Agency (ECA) funding is fast emerging as a mandatory requirement in international tenders and the company is in touch with various domestic and international financing institutions to meet the requirement of bundled financing. BHEL is also exploring the option of barter trade in countries from where goods can be imported in India.

Power project opportunities in focus markets are moving from the state-developed model to IPP/PPP model. Continuous engagement with IPP developers (especially Indian promoters attempting to develop overseas projects) has led to success in recent past.

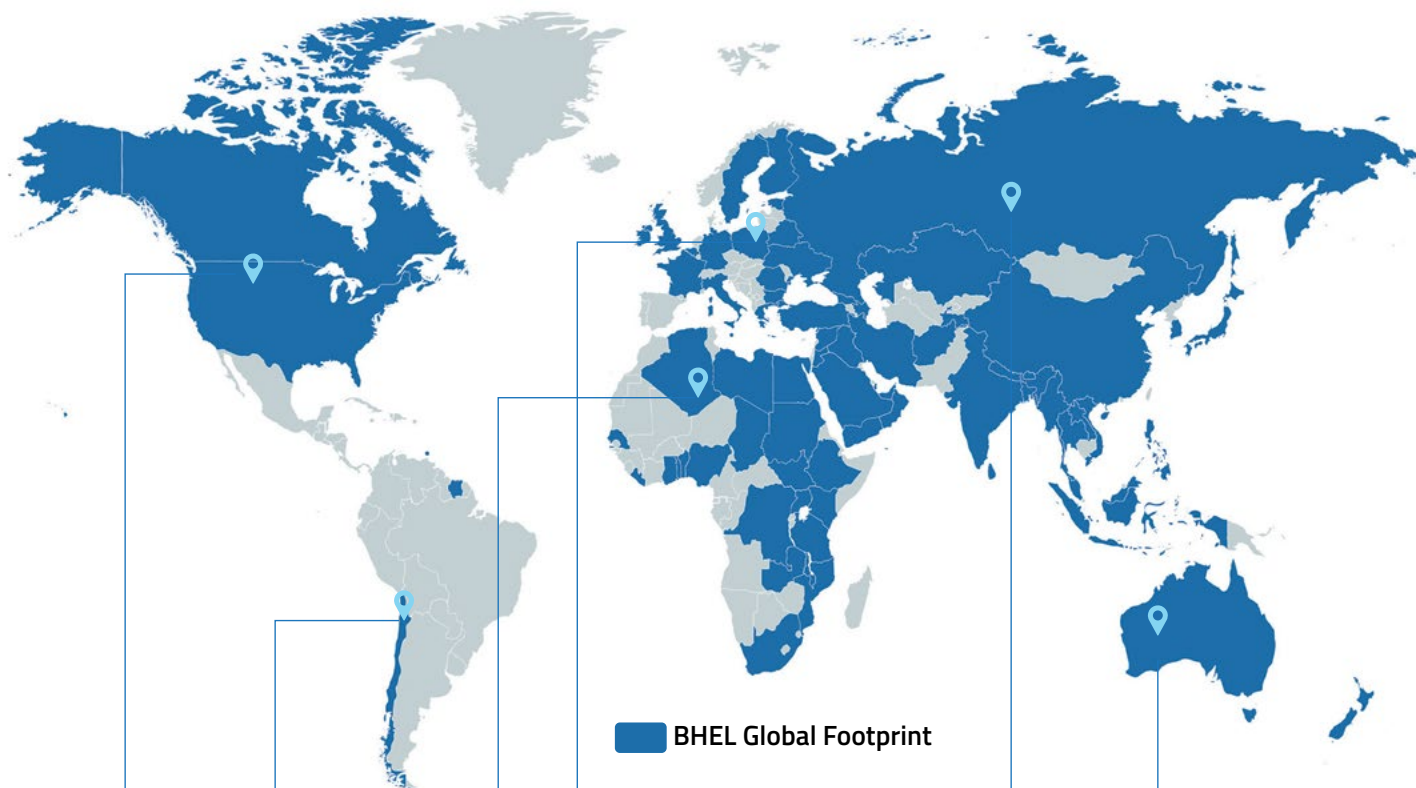
BHEL products such as motors, transformers, compressors, and valves have a huge demand in the international market and over years' orders in this segment have grown. A dedicated Product desk has been created to increase outreach in the target markets in a focused manner to strive for quantum jump in product exports.

Efforts have been initiated to enter the consultancy services domain of power plant improvement studies, providing technical domain knowledge for the existing power plants in various target countries encouraged by few good successes in the recent past.



BHEL aided restoration, synchronisation to grid and operationalisation of Generating Unit 1 of the 336 MW Chhukha Hydropower Plant, Bhutan

BHEL Global Footprints



North America
Canada
United States of America

South America
Chile
Suriname
Trinidad & Tobago

Europe

Belarus	Germany	Sweden
Belgium	Greece	Switzerland
Bulgaria	Iceland	Turkey
Cyprus	Italy	Ukraine
Estonia	Malta	United Kingdom
Finland	Poland	
France	Romania	
Georgia	Russia	

Oceania

Australia
New Caledonia
New Zealand
Samoa

Africa

Algeria	Kenya	South Africa
Benin	Libya	Sudan
Chad	Liberia	Tanzania
Comoros	Malawi	Togo
DR Congo	Mauritius	Uganda
Egypt	Mozambique	Zambia
Eswatini	Nigeria	Zimbabwe
Ethiopia	Rwanda	
Ghana	Senegal	

Asia

Afghanistan	Jordan	Singapore
Azerbaijan	Kazakhstan	South Korea
Bangladesh	Kuwait	Sri Lanka
Bahrain	Laos	Syria
Bhutan	Malaysia	Taiwan
China	Myanmar	Tajikistan
Hong Kong	Nepal	Thailand
Indonesia	Oman	U.A.E
Iran	Philippines	Vietnam
Iraq	Saudi Arabia	Yemen
Japan		

with presence in
86 countries
in all six inhabited continents

1.5 Comprehensive Analysis of Financial Performance

(Based on Financial Statements prepared in compliance with Ind AS, Guidance Notes, Companies Act 2013 and other applicable statutes.)

1.5.1 BHEL Standalone

A. Financial Results

1. Total Income

(₹ Crore)

Particulars	2020-21	2019-20
Revenue from Goods & Services	16296	20491
Other Operational Income	1013	969
Other Income	370	581
Total Income	17679	22041

Total income in FY 2020-21 has declined by about 20% as compared to previous financial year. The Item wise explanation for each element of total income is given below:

1.1 Revenue from Goods and services

(₹ Crore)

Particulars	2020-21	2019-20
Revenue from Goods	13011	15057
Revenue from Services	3285	5434
Total Revenue from Goods and services (as per Ind AS 115)	16296	20491

The Nationwide lockdown, consequent to spread of Covid 19 pandemic resulted in global disruptions & triggered slowing down of the economic activities. Such consequences impacted the Company's operations during H1 of FY 2020-21, which could be recouped in a gradual and progressive manner. Also, the issues arising out of the geo political situation across the globe severely disrupted the supply chains which further impacted operations.

Company's paradigm shift in its operating philosophy from Revenue Centric to Project Centric execution also impacted revenues. This philosophy however helped in improving customer satisfaction, reducing trade receivables to lowest levels (as evidenced by highest cash collection to net billing ratio in last ten years), and savings through reduction in damages & rework for material lying at site for extended periods and ensured optimum working capital management. Though the change in approach has adversely impacted the topline for current year, BHEL expects to reap long-term benefits from this approach for years to come.

1.2 Other operational income

(₹ Crore)

Particulars	2020-21	2019-20
Other operational income	1013	969

The Company's efforts in a structured and focused manner, has led to increase in other operational income by about 5% w.r.t last year which resulted in containing the losses despite dip in sales.

1.3 Other income

(₹ Crore)

Particulars	2020-21	2019-20
Interest income	321	509
Dividend on investment in joint venture - BGGTS	21	16
Profit on sale of units of Mutual Fund / items of PPE, Govt. grants & others	28	56
Total	370	581

The decline in interest income is mainly due to lower rate of interest on Fixed Deposits caused by general decline in the interest rates in the economy as well as the lower Cash & Bank balance available for investment during the year as compared to previous year.

2. Expenses

2.1 Material consumption, erection and engineering expenses

(₹ Crore)

Particulars	2020-21	2019-20
Consumption of raw material & components	8159	11780
Civil, erection & engineering expenses	2912	2947
Sub total	11071	14727
Changes in inventories of finished goods and work in progress	511	(1042)
Total	11582	13685
Material cost % of revenue	71	67

The material cost % has increased from 67% to 71% during the year. There has been significant increase in global metal price index (Source : IMF) as well as domestic indices (Source: Ministry of Commerce & Industry). The cost of civil construction, structural fabrication and erection activities have also witnessed an upswing. The impact on the company's financials is more accentuated as part of the current orders under execution are on firm price basis, i.e. without any PVC clause to absorb such unprecedented increase.

2.2 Employee benefits expenses

(₹ Crore)

Particulars	2020-21	2019-20
Employee benefits expenses	5372	5427
No. of Employees	32131	33752

Employee benefits expenses are at the lowest levels in last five years due to reduction made in variable elements of employee benefit expenses as well as retirements. The company has contributed ₹280 Crore in respect of pension scheme (Defined Contribution Plan) for the FY 2020-21. Company has also modified Pre-mature retirement scheme allowing employees above the age of 50 years to opt for such scheme. However the benefit due to

above measures has been offset to a large extent by increase in annual increments/DA and its impact on other employee benefits.

2.3 Other expenses

(₹ Crore)

Particulars	2020-21	2019-20
Other Expenses	1799	2429

The Company has identified reduction in other expenses [particularly non production related expenses] as a major initiative for sustenance of its operations efficiently. Though reduction in volume has been one of the reason for lower expenses, however stringent budgetary control in each & every line item of expenditure has been a major contributor which has resulted in reduction of expenditure to the tune of ₹630 Crore in FY 2020-21 w.r.to FY 2019-20. The new lower benchmarks set will enable the Company in making the operations sustainable and profitable.

2.4 Provisions (Net)

(₹ Crore)

Particulars	2020-21	2019-20
Doubtful debts, liquidated damages, loans, advances & deposits and others	2146	822
Bad debts, LD & losses written off	273	224
Provision for expected credit loss (Time value)	(691)	(676)
Contractual obligations	(261)	(137)
Total	1467	233

Consistently rising receivables and quantum of Trade receivables in terms of no. of days of revenue had been a matter of concern for institutional investors, DPE, bankers and other stakeholders. In order to address the above apprehensions, the company, carried out detailed review of each and every major contract with the objective of improving the realization. Wherever realization was not probable in the near future, appropriate action was taken based on merits of the case i.e. provisioning, disclosure as contingent liability or maintaining status quo. Based on the above management assessment, in line with the applicable Ind AS, additional provision against such receivables amounting to about ₹1800 Crore, based on comprehensive review, has been created during the year.

The Company recognizes provision for expected credit loss (time value of money) in line with the requirements of Ind AS 109.

3. Finance costs

(₹ Crore)

Particulars	2020-21	2019-20
Discount & other expenses on commercial papers	164	206
Interest expense	67	105
Un-winding of provisions	142	196
Total	373	507

The company managed its treasury operations effectively, minimised the interest outgo and earned higher returns on intermittent cash surpluses. PCFC loan also provided natural hedging benefit to the company. Lower volume of operations was also one of the reasons for lower finance costs.

4. Depreciation & amortisation expenses

(₹ Crore)

Particulars	2020-21	2019-20
Depreciation & amortisation expenses	473	503

There is a reduction of about 6% in the depreciation cost as compared to the previous financial year.

5. Tax expenses

(₹ Crore)

Particulars	2020-21	2019-20
Current tax - current year	33	63
-Earlier years	(17)	(62)
Deferred tax -current year	(908)	(162)
-Earlier years	(2)	971
Total	(894)	811

The Company has a taxable loss of ₹3689 Crore in the current financial year resulting in creation of deferred tax asset amounting to ₹908 Crore, which shall be available for set off against future taxable profits.

Tax for earlier years mainly represents net refund w.r.t earlier assessment years. Further, deferred tax assets for earlier years represents change on account of final tax computation with reference to the preceding financial year.

6. Profitability

For FY 2020-21, the company has incurred a loss after tax of ₹2717 Crore as against a loss of ₹1473 Crore in FY 2019-20, mainly due to lower volume of operations, higher material cost and additional merit based provisioning [about ₹1800 Crore, based on comprehensive review]. However, cost reduction initiatives and stringent budgetary control measures have helped minimize the loss to some extent. The element wise explanation of the items in profit and loss account have already been given above under the respective heads.

7. Other comprehensive income

(₹ Crore)

Particulars	2020-21	2019-20
Re-measurement of defined employee benefits gain/(loss)	27	(342)
Less: Income tax related to above item	7	(68)
Total	20	(274)

Other Comprehensive income represents re-measurement gain/(loss) on defined benefit plans such as gratuity, PF, Post-Retirement Medical Benefit (PRMB), etc.

B. Financial position

8. Property, plant and equipment (PPE), intangible assets and capital WIP

(₹ Crore)

Particulars	As at March 31, 2021			As at March 31, 2020		
	PPE	Intangible	Total	PPE	Intangible	Total
Gross carrying value	6172	291	6463	6051	280	6331
Less: Accumulated depreciation / amortisation	3746	229	3975	3316	201	3517
Net carrying value (net block) *	2426	62	2488	2735	79	2814
CWIP & intangible assets under development	403	17	420	307	7	314
Total			2908			3128

*Net carrying value of PPE includes Right-of-use Assets of ₹165 Crore (PY ₹198 Crore)

The company has not carried out any major addition in PPE in its existing business portfolio due to subdued demand in thermal power segment. However, company is diversifying in new non-coal areas which is likely to entail capital investment in future. In line with applicable Ind AS, the company annually assesses and modifies the useful life of PPE and depreciation is worked out accordingly. In case of any change in useful life, the financial impact of the same is disclosed as part of notes to accounts.

9. Equity investments

(₹ Crore)

Particulars	As at March 31, 2021			As at March 31, 2020		
	Investment	Impairment	Net	Investment	Impairment	Net
Investment in joint ventures	718	(52)	666	723	(57)	666
Investment in subsidiary Company	5	(5)	-	5	(5)	-
Investment in other equity instruments	6	(2)	4	6	(3)	3
Total	729	(59)	670	734	(65)	669

Investment in joint ventures (JVs) and subsidiary company were accounted at cost after considering impairment loss, if any, in line with Ind AS. Investment in other equity are accounted at fair value through profit and loss account and changes in carrying value have been made based on fair value on the reporting date.

During the year, Dada Dhuniwale Khandwa Power Limited (DDKPL) stands dissolved vide NCLT order dated 2nd November, 2020. Against the investment of ₹22.50 Crore, ₹17.57 Crore was received in earlier years and balance ₹4.93 Crore has been written off during

the year and corresponding provision has also been withdrawn.

Investment in other equity instruments includes investment in Neelanchal Ispat Nigam Limited (NINL). The Board has given its approval for strategic disinvestment of the same and the approval from the concerned ministry is awaited.

10. Trade receivables (Net)

(₹ Crore)

Particulars	As at March 31, 2021			As at March 31, 2020		
	Non-current	Current	Total	Non-current	Current	Total
Gross Receivables	16134	4911	21045	16738	8546	25284
Less: Allowances for Bad & doubtful debts	12955	877	13832	12204	1438	13642
Trade receivables (net)	3179	4034	7213	4534	7108	11642

Consistently rising receivables, both in absolute value and number of days of Revenue, had been a concern of institutional investors, DPE, bankers and other stakeholders. Trade receivables has always remained a major concern particularly with Power sector customers not only with our company but with the peer group companies also. Timely realization of dues is a major challenge particularly from state GENCOS [which constitutes approx. 41% of total trade receivables].

Nevertheless, the company, took it as a challenge and carried out a detailed review of each and every major contract with the objective of improving the realization and taking appropriate actions in line with Board approved Trade receivable policy.

The company has taken a host of measures viz. project centric approach, sequential supplies as per contractual requirements, taking strong position against slow/non-paying customers, ensuring LC before dispatch to private customers strictly as per contract terms etc. There has been a decline of 38% in net trade receivables in the current Financial year and also in no. of days from 175 days to 134 days of revenue from operations. Further, Trade receivables (net) includes ₹1773 Crore for FY 2020-21 [PY ₹1712 Crore] in respect of projects under various stages of litigation or arbitration. The Company has taken steps to strengthen the receivable management process and ensured qualitative reflection of the receivables in the Balance Sheet.

11. Cash & cash equivalents and bank balances

(₹ Crore)

Particulars	As at March 31, 2021	As at March 31, 2020
Cash & cash equivalents	1527	1403
Deposits having maturity more than 3 months but not more than 12 months	5160	5000
Earmarked bank balances & FD against margin money	14	16
Total	6701	6419

Amidst Covid-19 pandemic, cash conservation was identified as a critical success factor for the year 2020-21. Accordingly, the company registered an increase in its Cash and Bank Balances from ₹6419 Crore to ₹6701 Crore, i.e. an increase of ₹282 Crore [4%] despite Trade Payables going down by ~ ₹1400 Crore. This was primarily due to adoption of effective and best practices in treasury management.

Keeping "Cash" as the corner stone of its operations, systemic improvement in the top line operations have led to customer collections as a % age of revenue reaching a peak of 123% in FY 2020-21. Further, the improved customer collection is also reflected from the liquidation of 82% of the billing in the current year itself. This has also helped the company in channelizing sufficient liquidity to its vendors/sub-contractors, thereby improving operations.

12. Deferred tax assets (net)

(₹ Crore)

Particulars	As at March 31,2021	As at March 31,2020
Deferred tax assets (net)	3660	2756

Deferred tax asset is created mainly on account of items for which benefit is not available in the current year's taxable income but shall be adjustable against future taxable income on meeting certain conditions in line with the provisions of the Income Tax Act. Such items include carry forward losses, provision for doubtful debts, dues allowable on payment basis etc. The increase in deferred tax assets is mainly on account of taxable loss in the current year. Such deferred tax assets shall be available for set off against taxable income in future years as per the provisions of the Income Tax Act.

13. Other assets

(₹ Crore)

Particulars	As at March 31,2021			As at March 31,2020		
	Non-Current	Current	Total	Non-Current	Current	Total
Contract assets (Net)	16585	7494	24079	16124	7670	23794
Input tax credit receivable	-	1040	1040	-	927	927
Claim recoverable	65	722	787	79	688	767
Deposit with tax authorities & others	119	577	696	135	460	595
Advances & others	136	159	295	91	233	324
Less: Provision	53	216	269	67	194	261
Total	16852	9776	26628	16362	9784	26146

Contract assets (constituting about 90% of the other assets) represent unbilled revenue not yet due for payment as per contract terms. This includes event based milestone related payments, payments due on obtaining material receipt certificates, project related finished goods ready for dispatch etc. Accrual of such contract assets is mainly on account of stringent and skewed payment terms for many projects currently under execution (orders obtained under stiff competitive bidding with zero deviation) where higher proportion is linked to milestone achievement / final

completion. These include ₹1664 Crore for FY 2020-21 [PY ₹1572 Crore] in respect of projects under various stages of litigation or arbitration.

Despite the above challenges, focused monitoring of every element has resulted in containing the contract assets at almost same levels vis-a-vis previous financial year.

14. Inventories

(₹ Crore)

Particulars	As at March 31,2021	As at March 31,2020
Raw material & components	3010	3967
WIP	3778	4120
FG	692	892
Stores & spare parts	220	254
Other inventory	210	215
Sub total	7910	9448
Less: Provision for non-moving inventory	719	543
Total	7191	8905

During the year, strenuous efforts were made to further streamline the procurement process, interalia, strengthening the internal controls for usage of available inventory, synchronising delivery of procured items with site requirements & manufacturing lead time and ensuring alternate usage of available inventory to the extent feasible. This has resulted in reduction in inventory levels by more than 19%.

Such measures contributed in efficient working capital management and also helped in avoiding obsolescence and wastage of materials.

15. Current tax assets /(liabilities) - Net

(₹ Crore)

Particulars	As at March 31,2021	As at March 31,2020
Current tax assets / (liabilities) -net of provisions	404	229

The amount represents mainly prepaid taxes (i.e. TDS and advance tax) net of provision for tax (mostly pertaining to FY 2019-20 & FY 2020-21) which is due for refund in near future.

16. Share Capital

(₹ Crore)

Particulars	As at March 31,2021	As at March 31,2020
Authorised share capital	2000	2000
Issued, subscribed & paid up share capital	696	696

There has been no change in the share capital during the current financial year. The shareholding of promoter [GOI] stands unchanged at 63.17%.

17. Other equity

(₹ Crore)

Particulars	As at	
	March 31, 2021	March 31, 2020
Opening balance	28485	30704
Add: Reinstatement due to change in policies	-	32
Total comprehensive income/(loss) for the year	(2697)	(1747)
Less : Dividend paid during the year	-	418
Less : Corporate Dividend Tax	-	86
Closing balance	25788	28485

The other equity includes capital reserve of ₹35 Crore (PY ₹35 Crore) and capital redemption reserve of ₹38 Crore (PY ₹38 Crore)

The reduction in net worth is due to post tax losses incurred during the year. In line with the dividend distribution policy of the company and the losses in the current financial year, the Board has not recommended any dividend for the year 2020-21.

18. Borrowings & Lease Liabilities

(₹ Crore)

Particulars	As at March 31, 2021			As at March 31, 2020		
	Non-Current	Current	Total	Non-Current	Current	Total
Borrowings	-	4834	4834	-	4933	4933
Lease Liabilities	53	48	101	75	57	132
Total	53	4882	4935	75	4990	5065

The company resorted to intermittent short term borrowings to bridge the temporary gaps in cash inflows/outflows. Short term borrowings in the form of PCFC loan, buyer's credit, and commercial paper were availed at optimal interest rates. Despite pandemic induced liquidity challenges across sectors, the company remained zero debt and has no long term borrowings.

The company had positive net cash & bank balance (after reducing short term borrowings) of ₹1868 Crore as at March 31, 2021 as against ₹1485 Crore as at March 31, 2020, an increase of 26% in the current financial year.

The company has always ensured repayment of its borrowings on or before the due date. There was not a single instance of any delay or default in this regard.

19. Financial liabilities

(₹ Crore)

Particulars	As at March 31, 2021			As at March 31, 2020		
	Non-current	current	Total	Non-current	current	Total
Trade payables	1881	6678	8559	1076	8824	9900
Other financial liabilities	217	917	1134	159	1426	1585
Total	2098	7595	9693	1235	10250	11485

In our endeavour to smoothen the operating processes and project executions, the company pro-actively engaged with the vendors/sub-contractors and released timely payments to them. A large part of the above trade payables pertains to retention money (not due as per contractual terms) or the cases under litigation/arbitral settlement.

20. Provisions

(₹ Crore)

Particulars	As at March 31, 2021			As at March 31, 2020		
	Non-current	current	Total	Non-current	current	Total
Provision for contractual obligation	2506	1486	3992	2755	1564	4319
Provision for employee benefits	1093	827	1920	1170	1121	2291
Other provisions	312	832	1144	278	390	668
Provision for CSR	2	19	21	9	7	16
Total	3913	3164	7077	4212	3082	7294

The provision for employee benefits is based on actuarial valuation of leave, medical and gratuity benefits. The increase in other provisions is mainly on account of provision for loss making onerous contracts which has been provided in line with the requirements of Ind AS 37. The CSR provision of ₹21 Crore represents unspent amount on ongoing projects and has been transferred to a separate bank account as per Companies [CSR policy] Amendment Rules 2021.

21. Other liabilities

(₹ Crore)

Particulars	As at March 31, 2021			As at March 31, 2020		
	Non-current	Current	Total	Non-current	Current	Total
Contract liabilities- (Advances received from customers incl. excess of billing over revenue)	2807	4057	6864	2921	3797	6718
Statutory dues	-	617	617	-	454	454
Govt. grants	25	6	31	32	6	38
Total	2832	4680	7512	2953	4257	7210

While advances from customer gets adjusted progressively during execution of the projects, net increase is on account of higher receipt in the current financial year vis-à-vis the previous financial year. This, coupled with lower volume of operations in the current financial year and consequently lower adjustment of advance led to net increase in the advances.

Statutory dues are primarily GST liability, to be discharged on due dates after adjustment of input tax credit disclosed under "other assets" (Refer point 13 above). The company has been discharging all its GST and other dues on time and even before the due date [out of the GST liability for the month of March 2021, ₹119 Crore has been deposited on March 31, 2021 itself].

C. Fund Position

22. Fund flow position and liquidity

(₹ Crore)

Particulars	2020-21	2019-20
Cash generated from Operations before working capital changes	(1870)	50
Net cash inflow / (outflow) from working capital changes	2623	(2620)
Net cash inflow / (outflow) from operating activities	562	(2892)
Net cash inflow / (outflow) from investing activities	(43)	1877
Net cash inflow / (outflow) from financing activities	(395)	1622

The Company has achieved an Operating Cash Surplus of ₹562 Crore in FY 2020-21 as against a deficit of ₹2892 Crore. The main contributor for the turnaround in the cash flows were the effective management of working capital, strenuous efforts given on receivables and inventory management. The Trade receivables are at their lowest levels in the last 10 years and inventory is at the lowest levels in the last 3 years. At the same time, Company has also ensured timely flow of liquidity to its vendors/sub - contractors for effective management of supply chains.

D. Key Financial Ratios

In compliance with the requirement of listing regulations, the key financial ratios have been provided hereunder. There is no change of more than 25% in any of the ratios other than profitability ratios which are explained hereunder:

PROFITABILITY RATIOS	2020-21	2019-20
Operating Profit/(loss) Margin (%)	(23.01)	(5.79)
Net Profit /(loss) Margin (%)	(15.70)	(6.86)
Return on Net Worth	(9.62)	(4.82)

With regard to operating profit margin and Net profit margin ratio, the same are affected due to lower revenues (primarily due to the nationwide lockdown, consequent to spread of Covid 19 pandemic.), higher material cost and additional merit based provisioning. The production and supplies from units were also regulated in view of site progress status to maintain sequential supply and optimisation of working capital.

With regard to return on net worth, primarily the impact is due to profit position as explained in the above para. However, the company has taken steps to improve the quality of its net worth especially w.r.t creating merit based provisioning. The qualitative net worth is also now better aligned to the market capitalisation of the company.

Further, stringent budgetary control measures and reduction in operating expenses have resulted in restricting the loss.

OTHER KEY RATIOS	2020-21	2019-20
Debtors Turnover (Trade receivable as no. of days of Revenue from operations incl. GST)	134	175
Inventory Turnover (no. of days)	161	159
Interest Coverage Ratio	NA	
Debt Equity Ratio	[Zero Debt company]	
Cash Collection as % of Revenue*	123%	120%
Liquidation % out of current year Net Billing*	82%	73%
Current Ratio*	1.39	1.45

* Best performance in Last 10 years

With regard to other Key ratios placed above, the company has performed exceedingly well in all spheres of working capital management. Constant review by creating structural frameworks for monitoring of receivables resulted in cash collection of 123% of revenue. Expediting completion of projects by paradigm shift to project centric approach, sequential supplies and disciplined billing enabled 82% liquidation of current year billing against 73% in FY 20 which is highest in preceding 10 years. Efficient receivables management resulted in operating cash surplus in FY 2020-21 and reduction of Trade Receivables by 38% over previous year.

In the area of Inventory management, during the year, strenuous efforts were made to further streamline the procurement process, inter alia, strengthening the internal controls for usage of available inventory, synchronising delivery of procured items with site requirements & manufacturing lead time and ensuring alternate usage of available inventory to the extent feasible. This has resulted in reduction in inventory levels by more than 19%. Such measures contributed in efficient working capital management and also helped in avoiding obsolescence and wastage of materials.

The current ratio at 1.39 is the lowest in the last ten years which is also a reflection of effective working capital management.

E. Segment performance

The Company has two operating segments - power and industry. The performance of segments is given below:

(₹ Crore)

Particulars	2020-21		2019-20	
	Power	Industry	Power	Industry
Segment revenue	11386	4910	14960	5530
Segment results	(1246)	(850)	804	(206)
Segment capital employed	16733	3973	20279	4681
Segment results as % of segment revenue	(11%)	(17%)	5%	(4%)

The Covid-19 pandemic has impacted both the segments, however, the impact has been more severe in power segment due to its nature of activities which are more dependent on site executions and labour availability. Over the last few years, as a part of its strategic initiatives, the company is also focussing on increasing its share of non-coal business which is also reflected in higher share of industry segment revenue which was 30% in FY 2020-2021, and 27% in FY 2019-2020 as compared to previous average of about 20%.

The losses in both the segments are primarily due to lower volume of operations as mentioned above and also due to high material cost.

1.5.2 Financial Review of Subsidiary Company

BHEL Electrical Machines Ltd.

A subsidiary company was incorporated on 19th January 2011 as "BHEL Electrical Machines Ltd", with BHEL holding the majority stake of 51% with an equity investment of ₹5.36 Crore and Govt. of Kerala retaining 49% stake. The company does not have any subsidiary or associate company. The brief financials of BHEL –EML are tabulated below:

(₹ Crore)

Particulars	2020-21*	2019-20*
BHEL Share (%)	51%	51%
BHEL's Investment in Equity	5.36	5.36
Revenue from Operations	0.25	3.97
Profit/ (Loss) for the year	(5.28)	(4.78)

* based on provisional unaudited figures

Ministry of Heavy Industries on May 11, 2021 informed BHEL about the approval of competent authority for transfer of BHEL's 51% share held in BHEL EML to Government of Kerala (GoK). BHEL is pursuing with GoK for signing of Agreement of Sale and completion of stake transfer to GoK.

1.5.3 Financial Review of Joint Venture Companies

a. BHEL-GE Gas Turbine Services Private Limited (BGGTS):

BHEL-GE Gas Turbine Services Private Limited (BGGTS) is a Joint Venture Company of BHEL and GE, USA formed to take up repair & servicing of GE designed gas turbines. The financials in brief are as below:

(₹ Crore)

Particulars	2020-21	2019-20
BHEL share (%)	One share less than 50%	One share less than 50%
BHEL's investment in equity	2.38	2.38
Revenue from operations	791.76	685.84
Profit/(loss) after tax	88.29	58.14
Net worth	362.99	317.40

For FY 2020-21, BGGTS paid highest ever dividend of 1100% (interim dividend of 700% and final dividend of 400%) on the equity share capital of ₹4.76 Crore.

b. NTPC BHEL Power Projects Private Limited (NBPPL):

NTPC BHEL Power Projects Private Limited (NBPPL) is a Joint

Venture Company of BHEL and NTPC Limited promoted to execute EPC contracts for Power Plants and manufacture power plant equipment. The JVC has a manufacturing facility for Balance of Plant (BoP) equipment at Mannavaram in Andhra Pradesh. The brief financials are tabulated below:

(₹ Crore)

Particulars	2020-21*	2019-20
BHEL share (%)	50%	50%
BHEL's investment in equity	50.00	50.00
Revenue from operations	49.17	75.65
Profit/(Loss) for the year	(24.51)	(51.34)

* based on provisional unaudited figures

In-principle approval for pursuing winding up of NBPPL has been accorded by the Board of Directors in its meeting held on February 8, 2018. Ministry of Power, Government of India vide letter dated 23.08.2019 advised NTPC Ltd. to consider buying out the stake of BHEL and thereafter decide either to continue it as an in-house EPC arm or close it after completion of present work.

c. Raichur Power Corporation Limited (RPCL):

Raichur Power Corporation Limited (RPCL) is a Joint Venture Company of BHEL and Karnataka Power Corporation Limited (KPCL) promoted for setting up of 2x800 MW supercritical thermal power plant at Yeramarus, Raichur, Karnataka and 1x800 MW supercritical thermal power plant at Edlapur, Raichur, Karnataka on build, own and operate basis. The paid-up equity capital as on March 31, 2020 was ₹2373.76 Crore with contribution of ₹1709.72 Crore from KPCL and ₹664.04 Crore from BHEL. The financial highlights of the Company are as under:

(₹ Crore)

Particulars	2020-21*	2019-20
BHEL share (%)	27.97%	27.97%
BHEL's investment in equity	664.04	664.04
Revenue from operations	2224.22	256.32
Profit/(Loss) for the year	(543.44)	(2084.95)

* based on provisional unaudited figures

In FY 2020-21, consequent to improved plant operations the company could generate higher level of revenues which helped the company in significantly reducing its losses by about 74%. Going ahead, the company is expected to further improve its performance.

d. Dada Dhuniwale Khandwa Power Limited (DDKPL):

Dada Dhuniwale Khandwa Power Limited (DDKPL) was a Joint Venture Company of BHEL and Madhya Pradesh Power Generating Company Limited (MPPGCL) promoted for setting up of 2x800 MW supercritical thermal power plant at Khandwa, Madhya Pradesh on build, own and operate basis.

Due to non-availability of coal linkage and problems being faced in land acquisition, both the promoters approved for voluntary winding up of the JVC. As per National Company Law Tribunal (NCLT) order dated 02.11.2020, DDKPL stands dissolved with effect from date of the order.

Against the investment of ₹22.50 Crore, the company could realise ₹17.57 Crore on dissolution of this JV, resulting in net loss of ₹4.93 Crore (provided in earlier years).

e. Power plant Performance Improvement Private Limited (PPIL):

Power plant Performance Improvement Private Limited (PPIL) is a Joint Venture Company of BHEL and Siemens AG, Germany promoted for performance improvement of old fossil fuel power plants.

Since sufficient business to ensure viability of the Company was not forthcoming, the promoter partners mutually agreed to gradually wind up the Company. All the pending contracts of the JVC were closed and the process of winding up was initiated during FY 2018-19. The JVC is under liquidation.

Investment in PPIL is ₹2 Crore which has been fully provided for.

1.5.4 Consolidated Financial Statement (CFS)

Consolidated Financial Statements have been prepared in accordance with Ind AS -110 on "Consolidated Financial Statements" and Ind AS 28 "Investments in Associates and Joint Ventures".

The financial statements of subsidiary Company is combined on a line by line basis after fully eliminating the intra group balances and intra-group transactions and for joint ventures, Equity method is adopted in line with Ind AS. M/s PPIL was not considered for CFS as it is under liquidation. DDKPL was under liquidation and finally dissolved during the year.

A summary of the results on financial performance, in line with the afore-mentioned Ind AS are as under:

Financial performance

(₹ Crore)

Particulars	For the year ended	
	March 31, 2021	March 31, 2020
Revenue from operations	17309	21463
Profit /(loss) before tax	(3596)	(659)
Profit /(loss) after tax	(2700)	(1468)
Other comprehensive income/ (loss)	20	(274)
Total comprehensive income / (loss)	(2680)	(1742)

The share of profit in respect of joint ventures was ₹44.14 Crore in FY 2020-21 as against profit of ₹25.72 Crore in FY 2019-20. The joint venture companies (NBPL and RPCL) have incurred losses in 2020-21 and the group has already recognised accumulated losses equal to the cost of investment in these two JV's, in consolidated financial statements FY 2018-19.

Financial position

(₹ Crore)

Particulars	As at	
	March 31, 2021	March 31, 2020
Assets		
Property, plant and equipment, intangible assets and CWIP (net carrying value)	2911	3131
Investment accounted for using equity method	182	159
Non-current financial assets	3281	4620
Deferred tax assets (net)	3671	2766
Non-current other assets	16852	16362
Current assets	28343	32711
Total	55240	59749
Equity and Liabilities		
Equity share capital	696	696
Other equity	25287	27964
Non-controlling interest	(12)	(9)
Non-current liabilities	8909	8489
Current liabilities	20360	22609
Total	55240	59749

1.6 Capital Investment

BHEL has been focussing on enhancing its capabilities in the strategic sectors of Nuclear, Defence and Aerospace, besides addressing requirements for ongoing businesses. The company has undertaken capital expenditure for upgrading manufacturing capacities for Steam Generators & Heat Exchangers for nuclear application, Transformers, Emission Control equipment, Valves for Oil & Gas sector, etc.

Further your company has also conceptualized concrete plans for manufacturing strategic equipment for India's space program as well as expansion for existing facilities for the Defence sector.

1.7 Quality Performance

BHEL pioneered the development of quality management systems in India as early as the 1970s, with the adoption of the then prevalent state-of-the-art technology and quality processes and systems. Since then the company has worked towards continual improvement in the quality of its products, services and internal systems. It has been at the forefront of the quality movement in the country and is known for introducing the concept of Quality Circles in India, launching its Quality maturity model called Quality Management Effectiveness Review (QMER—a copyright of BHEL), adopting Total Quality Management and other major quality initiatives.

In light of the current demand for stringent quality requirements and as part of its efforts to transform the company into a Future-Ready Global Engineering Organisation, BHEL has launched a companywide 'Quality First' initiative in FY 2019-20, to put in place state-of-the-art processes, for making quality a hallmark of the

company's products and services. The success of the initiative is visible with the company winning the "Golden Peacock National Quality Award" for the year 2020 and its HEEP Haridwar unit being recognized in the Platinum category of CII EXIM Bank Award for Business Excellence 2020 after a gap of 14 years.

Mission 'Quality First' focuses on four objectives — Empower, Educate, Engage and Encourage employees and putting in place the latest quality processes and systems to further strengthen the quality mind-set within the company.

To strengthen the existing quality systems in Manufacturing Units, Engineering Centres and Power Sector project sites, periodic Quality Audits, **Quality Management Effectiveness Review (as per Quality360 model)**, and **Total Quality Management (TQM)** assessment are being conducted internally. During 2020-21, twenty-three BHEL divisions were subjected to Quality360 review and TQM assessment as per EFQM 2020 model.

Integrated Quality Health Index (QHI) implemented across the Organization covering 23 divisions considering Quality Performance Indicators, Quality Management System maturity & overall Business Excellence and Quality Image. HPEP Hyderabad, HEEP Haridwar and HPBP Trichy are the top three units based on QHI score 2020-21 with an overall increase across the organization of over 10% (Y-o-Y).

BHEL was the first organization in India to introduce the concept of **Quality Circle (QC)** movement in 1981, which is being driven, by workers & supervisors across the country. The movement over the past few decades has grown to 1152 Quality Circles in BHEL. Every year an inter-unit annual QC summit is held in BHEL where Quality Circles showcase their case studies. 30th such event was organized jointly by HPEP - Hyderabad and Corporate Quality & Business Excellence - New Delhi through video conferencing during 5-9th Oct'20. Total 48 QC teams from 14 Manufacturing Units participated in the event under various categories viz. Manufacturing, Support Services, New Circle and 5S.

Conversation on Quality "**Qonverse**" deliberation/ workshop with all Quality Heads of MUs, Regions & Engineering Centres has been initiated in order to assess the level of compliance of Quality Roadmap, new initiatives of unit and any specific issue that needs support / intervention of other units so that necessary actions can be initiated in advance to pre-empt major future concerns. The platform is used to encourage units to adapt best & unique practices followed in other BHEL units.

Major focus is given to training by Corporate Quality & Business Excellence group wherein **Quality Management training programs** are conducted at different centres of BHEL in addition to trainings conducted by Human Resource Development (HRD) Centres of units for capability building of employees in the field of Quality.



Steam turbine rotor shaft under inspection at HEEP, Haridwar



Quality Month 2020 was observed in BHEL in November 2020

To cater to the requirement of inspection in the Covid pandemic situation, **guideline for carrying out remote inspection** at BHEL Manufacturing Units were also prepared.

During the Quality Month (Nov'20), twelve special Quality Improvement Projects (QIPs) were taken up which include identification & adoption of best practices emerged from 'Qonverse' initiative (Conversation of best practices); Process Capability enhancement of Critical Machines; launching dashboard for Quality Vital Indicators - QUAVID; Guidelines for prevention of Boiler Tube Leakage; Efficacy study of PAUT vis-a-vis RT, Quality through Measurement (QTM) concept for transformer, etc., and same have been implemented in the organization.

The company is also leveraging the power of digitalisation to further enhance Quality efficacy. It has introduced an Online System for management of Field Quality Plans and protocols/ log-sheets at sites which has been implemented at six Project Sites. A Quality Vital Indicators (QUAVID) dashboard has been developed, with an objective to get an insight of Quality Health of the organization through real time monitoring of status of Quality Vital Indicators (process level & system level) at Company as well as Unit level. Additionally, for ensuring continuous systemic improvement, Welding Performance Monitoring System (WPMS) has been digitally up-graded for capturing boiler tube leakage (BTL) information and incorporation of weld defect details.

The impact of these initiatives will be visible on the supplies as well as deliveries in the years to come.

1.8 Internal Financial Control System

The Internal Financial Control (IFC) of BHEL is designed in the form of well documented policies and procedures for ensuring the orderly and efficient conduct of its business, including adherence to Company's policies, the safeguarding of assets, the prevention & detection of frauds and errors, the accuracy & completeness of the accounting records, and the timely preparation of reliable financial information.

The source of implementation and maintenance of IFC are Manuals, Guidelines, Delegation of Powers, IT system & controls and are effected through well-defined organizational structure i.e. people operating in various departments within the Company at different levels at each stage of the processes.

BHEL has an in-house Internal Audit Department commensurate with its size of operations and nature of its business. Apart from Corporate Internal Audit, 12 Internal Audit Cells are set up across BHEL to cover internal audit activities at all locations of BHEL. With a view to assess the adequacy and effectiveness of IFC, Internal Audit carries out continuous audit of risk focussed areas and critical appraisal of the functioning of the processes and systems designed at respective locations. Based on the report of internal audit function, process owners undertake corrective action(s) in their respective area(s) and thereby strengthening the controls.

Audit assignments are conducted as per Annual Audit Programme approved by Board Level Audit Committee (BLAC). Highlights of Internal Audit activities are presented to senior executives at various forums and shared with all Units and Regions. BLAC also reviews major Internal Audit observations and CAG audit findings and issues directions, wherever required, to strengthen the IFC, keeping in view the dynamic environment in which the Company is operating. Also, the Audit Committee at frequent intervals has independent sessions with the statutory auditors and the Management to discuss the adequacy and effectiveness of internal financial controls.

Internal Financial Controls in BHEL has been evaluated at all locations by the Internal Audit during the year by applying test of controls and the controls tested have been found in place and operating effectively within the company.

Independent Auditors Report on the Internal Financial controls of the company in terms of Clause (i) of sub-section 3 of section 143 of the Companies Act, 2013 is forming part of the Statutory Auditors report at **Annexure- IX**.

1.9 Human Resource

People are the greatest asset for an Engineering organization and your organization has taken up a number of initiatives for developing a dedicated and motivated workforce. The company's Performance Management System has been revamped with a focus on closely linking company's reward system to individual as well as company performance. Other initiatives include focus on manpower development through training/retraining of the workforce in this dynamic business environment, development of eModules for ensuring continual training of workforce, leadership development, strengthening of internal communication, simplifying policies for making them employee centric, etc.

A key role was played by the HR function in the Company during the Covid-19 pandemic to ensure safety and security of all its employees and their families. Multiple initiatives were undertaken to tackle the dynamic situation pertaining to the pandemic and adequate support and medical help was provided to all concerned employees.

A result of all these initiatives resulted in BHEL being ranked 7 in the 'Times Ascent Dream Companies to Work For' survey by 'World HRD Congress', and winning the Platinum Award under 'APEX India HR Excellence Award- 2020' for excellence in HR practices in Engineering Sector, among others.

1.9.1 Learning and Development

To counter the challenges created by COVID-19 pandemic during the year 2020-21, L&D function swiftly transformed its training processes and adopted online training methods to impart

continuous training to the employees. Training has been aligned to business requirements by revamping the training need identification process with the strategic goals of the organisation i.e. Revamping Project Execution, Quality First, Defending Core Business, Digital Enablement, Cost Optimisation, Cash Management, New Growth Areas and Employee Focus. Also, to improve two-way communication across the company, 3C (Connect, Collaborate and Create) initiative was launched with an aim to share about the organisation's journey and present challenges, take suggestions from employees and thereby encourage them to make extra effort in developing a stronger BHEL.

In order to make learning more cost effective and knowledge enriched, number of in-house developed e-Modules on topics like 7 Quality Control Tools, Site Management, Water Systems, Project Management, Power Cycle System Engineering, Women Leadership, Stability of structures, Turbo generator, Emotional Intelligence, 6 Modules on Safety, CFD, Understanding Financial Statements, etc. were released on UNNAYAN (BHEL's Learning Management System) and more than 7000 employees completed these modules. 835 employees have participated in e-learning courses offered by Great Learning Academy in domains like Artificial Intelligence, Cloud computing, Big data, Machine learning etc.

A special initiative has been started to capture and disseminate site experiences with all the concerned internal stakeholders on monthly basis. Learning from our own experiences truly deepens explicit and tacit knowledge, thus directly supporting in better Project Execution.

In its endeavour to accelerate the growth of high performers, TRAILBLAZER programme has been introduced to groom them for taking challenging roles in future. The programme also offers mentoring conversation post programme, so that they continue excelling in their journey. 104 executives have been already covered out of 550 identified. As per MoU signed with MSDE, 846 and 116 apprentices under NAPPS and NATS respectively, have been provided training in 2020-21.

Extensive programmes were conducted on Health Management and lecture series organized by reputed professionals for employees to cope with the pandemic and keep their morale high.

Human Resource Development Centres at Units organised virtual programmes for esteemed customers like ONGC, IOCL, GAIL etc.



Learning Week observed in BHEL in September 2020

The 5th BHEL Learning Week (BLW) - 2020 was organized from 05-11 September 2020 with the theme "Opportunity in the face of adversity".

All these collective efforts helped in achieving 4.54 Training Man Days (TMD) per employee in BHEL during 2020-21 as against 3.70 TMD in the previous year.

1.9.2 Performance Management and Career Development

Performance Management: The Performance Management System has been comprehensively revamped to link Individual employee performance and rewards with the Company's as well as Unit performance. Succession policy and special programs in collaboration with leading management institutes are being implemented for developing leadership at all levels. Mentor-mentee program with 3600 feedback has been strengthened to develop technical and behavioural skills in sync with the organization needs/ethos. The benefit is clearly visible with the organization having one of the lowest attrition rates in the industry.

People Capability Maturity Model (PCMM): The company has prepared a roadmap towards attainment of PCMM Level 3, and various activities were completed during the year according to timelines approved by the company's Board. A process area wise Task Force trained in PCMM Level 3 was constituted to conduct the Internal Assessment against the pre-defined Process definitions developed through an external consultant. This was followed by Gap Analysis and action planning to plug the gaps for all the seven Process Areas.

PEACE: BHEL's Employee Support Initiative PEACE (Positive Emotional Alignment through Counselling Experience) was launched during the year for facilitating our employees to seek help and advice on issues impacting their well-being, performance and behaviour at the workplace, family and society at large by providing confidential counselling services. The facility was made available during the pandemic to enable employees and their dependent family members to cope up with any anxiety or stress due to uncertainty caused by the pandemic and rollout of Unlock 2.0.

Online Development Centre: Towards development of the desired Leadership/ Behavioural Competencies, employees were invited to participate in Online Development Centre exercise, where they were exposed to a series of internationally validated exercises based upon competency framework of BHEL. It was followed by comprehensive feedback report highlighting areas of strength and suggested areas of development, through Individual Development Plans, based upon individual's preferred learning style. Around 950 executives at AGM/ GM level were covered during this exercise.

Centralized Competency Assessment System: During the year 2020-21, Job Descriptions and Competency Profile of more than 1800 key positions were created and updated in 'Job Description Analysis System' (JDAS) in SAP HR module which will help in the long term succession planning of the company.

With the organization maturing to higher levels in HR processes viz career development, succession planning, training & development etc., it becomes imperative to not only rationalize roles/ competencies of key positions in the company but also to have an online database as a central pool for better decision making in manpower positioning. For this purpose a new system

namely, 'Centralised Competency Assessment System' (CCAS) was developed in SAP-HR module in 2020-21 for assessment of competencies of key positions holders.

Disclosure under section 134 (3)(p) of the Companies Act

As per Section 134 (3) (p) of the Companies Act 2013, the Board's Report of a Listed Company shall include a statement indicating the manner of formal annual evaluation of Board, individual directors etc. Ministry of Corporate Affairs has, vide its notification dated 5th June, 2015, notified the exemptions to Government Companies from the provisions of the Companies Act, 2013 which inter-alia provides that Sec. 134(3)(p) regarding statement on formal annual evaluation shall not apply to Government Companies in case the directors are evaluated by the Ministry which is administratively in-charge of the company as per its own evaluation methodology. Further, in line with above exemptions, Sub-Sections (2), (3) & (4) of Sec. 178 regarding appointment, performance evaluation and remuneration shall not apply to Directors of Government Companies.

In a CPSE, the MoU signed between the Company and the Govt. of India details out the parameters and initiatives that the Company is required to undertake during that financial year. This MoU is evaluated at the end of the year by the Govt. and a performance rating is assigned to BHEL based on its performance on the spelt out parameters. Further, there is a well laid down procedure for performance evaluation of CMD and Functional Directors. Department of Public Enterprises (DPE) has designed a format and laid down a procedure for evaluation of the Functional Director's performance. The tenure of Functional Directors as spelt out in their Terms and Conditions of Appointment is five years or the date of their superannuation, whichever is earlier.

The terms of reference of Board Level Committees are approved by the Board. The minutes of Board Level Committees are placed before the Board for its perusal.

In respect of Independent Directors, their appointment and tenure (normally a period of three years) is decided by the Government of India. DPE, through BHEL's Administrative Ministry (MHI), has been doing the exercise of performance evaluation/ assessment of non-official (Independent) Directors on the Board of the Company.

1.9.3 Industrial Relations

'All round Development through Participation of All', ensured by way of BHEL's policy of open and continuous communication with all sections of employees, has been the driving mantra of our Industrial Relations journey. The impetus given to participatory culture by the Management in close collaboration with various employee groups has been instrumental in maintaining and building up a congenial harmonious Industrial Relations climate within the organization.

Industrial Relations in various manufacturing units, divisions and offices of the Company remained harmonious and peaceful during FY 2020-21. Owing to the participatory ecosystem prevalent in the Company, 'NIL' man days were lost during the year on account of strike against Company policies, which bears testimony to the concerted efforts undertaken by the Management as well as the employee groups to work jointly towards the organisation's goals..

One meeting of the apex level bipartite forum, namely "Joint

Committee" was held during the year. There were 26 meetings of the Plant Councils and 213 meetings of the Shop Councils held at various manufacturing units. In addition, meetings were also held with the representatives of executives and supervisors on business prospects & challenges, company level issues, etc.

The focus of discussions in the various bipartite fora centred on improvement in the overall performance of the Company by way of increase in productivity, improvement in quality, safety and delivery in order to meet customer commitments and adopting various cost reduction measures for betterment of the financial health of the Company eventually benefitting different stakeholders including employees.

1.9.4 Manpower Strength

The Manpower Strength of BHEL as on 31.03.2021 is a total of **32,131** Nos.

1.9.5 Status on Presidential Directives

1.9.5.1 Directives on Reservation Policy for Reserved Category Persons

Presidential Directives on reservation policy issued by Central Government from time to time provide for certain percentages of reservation in direct recruitment as well as promotion in specified posts and for specified reserved category of candidates, i.e. SCs, STs, OBCs and Persons with Disabilities(PwD). Besides, the Directives also contain provision for certain concessions and relaxations for specified category of employees in direct recruitment and promotion. The Presidential Directives on the subject are being strictly complied with and reservation percentages are ensured through maintenance of Post Based Roster system as prescribed by Govt. However, there is no direct impact of these guidelines on the financial position of the company.

Other relevant information on the subject is furnished below:

i. Representation of SC/ST/OBC/EWS employees

The overall representation of SC/ST/OBC employees in total manpower as on 31/12/2020 was 20.69%, 7.41% and 35.10% for SCs, STs and OBCs respectively. During the year 2020, no recruitment took place. One candidate recruited in 2019 joined in 2020.

In the year 2019, 10% reservation was introduced for Economically Weaker Sections (EWS) who are not covered under existing reservation for Scheduled Castes, Scheduled Tribes and the Socially and Educationally Backward Classes.

The Annual Statement in the prescribed format showing the representation of SCs, STs, OBCs and EWS as on 31/12/2020 and number of appointments made during the preceding calendar year, as furnished to the Government, is given at **Annexure - A**.

ii. Manpower strength of PwD employees as on December 31,2020

Total number of PwD employees as on 31/12/2020 was 865. Though no recruitment took place in 2020, but 1 candidate who was recruited in the year 2019, joined in January 2020 under PwD Category. The group wise manpower strength of PwD employees in the Company as on 31/12/2020 is given at **Annexure - B**.

1.9.5.2 Safeguard of Women at Workplace

An Act to provide protection against sexual harassment of women at workplace and for the prevention and redressals of complaints of sexual harassment and for matters connected therewith or incidental thereto called "The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressals) Act, 2013", has come into force from 9th December 2013 with notification of rules by Government of India, Ministry of Women and Child Development called "The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressals) Rules, 2013".

The provisions of the Act and the rules thereon are being strictly complied with. In accordance with the Act, Internal Complaints Committee has been constituted in all units of BHEL and their

constitution and contact details have been hosted on the unit's website. Posters highlighting the key provisions of the Act, Duties of the Employer, Complaints Redressals Mechanism, Action for Malicious Complaints & various misconceptions about Sexual Harassment have been displayed at conspicuous places in all units in Hindi, English and Regional languages. 2 workshops were conducted by Corporate Office for ICC members across units through Video Conferencing. At unit level, 15 Workshops / awareness programmes were conducted on Sexual Harassment Act, Gender Sensitization, Crime against women and cyber-crime.

The Annual Report showing details on number of complaints of sexual harassment received during the year 2020-21 and status thereof as on 31.03.2021 is given at **Annexure - C**.



International Women's Day celebrated at Corporate Office, New Delhi

Annexure 'A'

Groups	Representation of SCs/STs/OBCs/EWS (As on December 31,2020)					No. of appointments made during the calendar year 2020											
						By Direct Recruitment					By Promotion*			By Deputation/ Absorption			
	Total No. of Employees	SCs	STs	OBCs	EWS	Total	SCs	STs	OBCs	EWS	Total	SCs	STs	Total	SCs	STs	OBCs
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Group A	10270	1838	864	2602	11	1	0	0	0	0	N/A			0	0	0	0
Group B	7060	1385	669	1809	0	0	0	0	0	0				0	0	0	0
Group C	14846	3406	869	6884	0	0	0	0	0	0				0	0	0	0
Group D (Excl. SW)	264	59	4	104	0	0	0	0	0	0				0	0	0	0
Group D (SW)	33	31	1	0	0	0	0	0	0	0				0	0	0	0
Total	32473	6719	2407	11399	11	1	0	0	0	0	0	0	0	0	0	0	0

* In BHEL, no appointments are made at induction level by promotion

Annexure 'B'

Statement showing number of persons with disabilities appointed during the calendar year 2020

Group	Number Of Employees				Direct Recruitment							Promotion*						
	Total number of employees	VH	HH	OH	No. of vacancies reserved			Total	No. of appointments made			No. of Vacancies reserved			Total	No. of appointments made		
					VH	HH	OH		VH	HH	OH	VH	OH	HH		VH	HH	OH
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Group A	10270	6	17	236	0	0	1	0	0	0	1	-----NA-----						
Group B	7060	1	12	187	0	0	0	0	0	0	0							
Group C	14846	15	25	357	0	0	0	0	0	0	0							
Group D	297	1	5	3	0	0	0	0	0	0	0							
Total	32473	23	59	783	0	0	1	0	0	0	1							

Note:

- (i) VH stands for Visually Handicapped (persons suffering from blindness or low version)
- (ii) HH stands for Hearing Handicapped (persons suffering from hearing impairment)
- (iii) OH stands for Orthopaedically Handicapped (persons suffering from locomotor disability or cerebral palsy)

* As per RPwD Act 2016, there is no reservation in Promotion for PwD employees

Annual Report on Safeguard of Women at Workplace

1	No. of complaints received during the year 2020-21 (incl. complaints C/F from previous year)	1
2	Number of complaints disposed off during the year 2020-21 (incl. complaints C/F from previous year)	0
3	Number of complaints pending as on 31.03.2021	1*
4	Number of cases pending for more than ninety days	0
5	Number of workshops or awareness programme against sexual harassment carried out	17
6	Nature of action taken by the employer on recommendation of ICC	
	*Complaint received on 30.03.2021 Since the complaint was received by ICC on 30.03.2021, no action could be taken upto 31.03.2021 (As on date, same has been closed)	

1.10 Right to Information Act, 2005

In consonance with the provisions of the Right to Information Act, 2005 (the Act) BHEL works towards promoting transparency and accountability. A Central Public Information Officer (CPIO) at Corporate Office, along with 24 other CPIOs at each of the major administrative units are functioning in the Company. 25 First Appellate Authorities are also functioning in the Company to dispose off first appeals filed under the Act.

As a measure to facilitate citizens in filing their RTI applications and first appeals online, BHEL has adopted the Online RTI web portal (<https://rtionline.gov.in>) launched by Department of Personnel & Training. Consequently, RTI applications and RTI first appeals filed on this online RTI portal are being replied through the online mode. Section 4 (1) (b) disclosures have been made available on BHEL's website. In addition, certain guidelines & proforma(s) indicating procedure for obtaining information and for filing RTI first appeals under the Act have been placed on BHEL's website.

The CPIOs and other internal stakeholders involved are sensitised about their obligations under the Act through training and workshops.

BHEL being a member of Steering Committee on RTI constituted by Standing Conference of Public Enterprise (SCOPE) actively participates in its meetings and discussions related to RTI matters organised by SCOPE. Quarterly RTI Returns for all the four (4) quarters have been submitted to the Central Information Commission. During 2020-21, 840 applications and 169 appeals were received, and 746 applications and 151 appeals were disposed off.

1.11 Risks and Concerns

BHEL operates businesses which involve exposure to various types of Risks such as dynamic customer requirements, technology considerations, long duration of contracts, timely on-site product support requirements in adverse conditions, etc.

Considering the pervasiveness of Industry Risks, diversity of our business portfolio and geographical locations of our operations, we have devised a robust Risk Management Policy. Our process for risk identification is consciously guided by the Company's objectives, external environment, Industry reports as well as internal and external stakeholders, among others. This process ensures that the Company is adequately positioned for Risk identification and management. Our risk management approach lends impetus to ensure compliance with relevant legislations.

In order to address this, BHEL has in place a Board approved Risk Management Charter & Policy to implement a structured and comprehensive enterprise risk management system. This charter is intended to establish a common understanding, language and methodology for identifying, assessing, responding, monitoring and reporting risks and to provide assurance to the management that key risks are being properly identified and effectively managed in the company.

The Risk Management framework of BHEL has three tier Structure, with the Board of Directors(BoD) (represented by Board Level Risk Management Committee (BLRMC)) at the Apex Level and the Risk Management Steering Committee(RMSC) at Corporate Level and Unit Risk Management Committees (URMCs) at the Regions/Units/ R&D Centres.

The 'Board level Risk Management Committee' (BLRMC) is assigned the responsibility of reviewing the company's Risk Governance structure, Risk Assessment & Risk Management framework, Guidelines, Policies and Processes. The Board / BLRMC regularly reviews top risk areas.

Key risks faced by the company are analysed in detail by the Risk Management Steering Committee, which is responsible for adopting & implementing the risk management framework and leading the risk management initiative across the company.

Chief Risk Officer (CRO), the convener of BLRMC & RMSC is responsible for periodic reporting on risk management to Board/ BLRMC.

Risk management committees at unit level analyse the risks concerned to their respective areas, prepare mitigation plans, ensure their implementation and also inform the top management, if required.

Some of the key risks the company faces and corresponding strategies for mitigation are mentioned in the table below:

Risk Statement	Mitigation Strategies
Excess domestic manufacturing capacities, changes in business mix due to policy changes and increasing competition leading to lower Order Book	<ul style="list-style-type: none"> ▪ Cater to opportunities arising out of 'AatmaNirbhar Bharat' and 'Make in India' missions. ▪ Increasing non-coal based and spares business. ▪ Thrust on Strategic tie ups for venturing into new areas.
Delayed delivery of projects leading to LDs, penalties, customer dissatisfaction and impacting company image	<ul style="list-style-type: none"> ▪ Implementation of 'Integrated Project Management Software (IPMS)' for real-time project monitoring & for taking proactive actions to arrest delays. ▪ Implementation of PEDM system (project engineering documentation manager) to expedite drawing/ document submission & approval. ▪ Formation of dedicated business groups to exclusively focus on projects of major customers. ▪ Policy enablement to improve contractor manpower availability and encourage contractor performance at project sites. ▪ Monitoring framework for sequential supplies for seamless execution ▪ Activities like engg etc., to commence at pre award stage

Rising debtors	<ul style="list-style-type: none"> Constitution of Cross Functional Teams for improved efficacy of Cash realisation from every element of debtors against Ongoing as well as Commissioned projects. Action against defaulting customers in line with the Trade Receivables policy of the company including Arbitration/ NCLT/ AMRCD proceedings.
Rising direct material cost affecting profitability	<ul style="list-style-type: none"> Formation of Cost Optimization Cell (COC), headed by Executive Director level official, to provide focused & sustained approach on cost reduction efforts in the company. Focused approach for cost reduction in the direction of design optimisation, engineering excellence and judicious procurement right from customer ordering till execution stage.
Technology readiness to meet current/ future market requirements	<ul style="list-style-type: none"> Formation of Emerging Technology Strategy Desk headed by Executive Director level official, for exploring opportunities in emerging technology areas. Since the focus of the company is to increase the share of non-coal business, technology development projects as well as tie-ups/ collaboration agreements with world class global OEM's are underway currently. Steered by DHI, the AUSC R&D phase of technology development has been completed in Dec'2020. BHEL is now geared to set up 800 MW Technology Demonstration Plant. Development and upgradation of technologies through in-house efforts

Online data & information security breach leading to loss and critical information infrastructure breakdown	<ul style="list-style-type: none"> All Internet traffic is monitored 24X7 through the Cyber SOC (Security Operations Center) integrated with the Global Threat Intelligence (GTI) database. Integration of all the internet routers of BHEL with "Cyber Swachhta Kendra" (Botnet Cleaning and Malware Analysis Centre of CERT-In, MeitY). Integration of Information Security Management System (ISMS) across all the ISO 27001 certified BHEL units.
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For and on behalf of the Board of Directors of
BHARAT HEAVY ELECTRICALS LTD.



Dr. Nalin Shinghal

Chairman & Managing Director

Place: New Delhi

Dated: 27.08.2021

Annexure-II to the Board's Report

Corporate Governance

2.1 Our Philosophy on Corporate Governance

BHEL functions within a sound Corporate Governance framework, which underlines its commitment to quality of governance, transparency in disclosures, consistent enhancement of stakeholders' value and corporate social responsibility. BHEL endeavours to transcend beyond the basic and regulatory requirements of corporate governance, focusing consistently on building confidence of its shareholders, customers, employees, suppliers and the society at large. BHEL's corporate governance framework rests upon the cornerstones of transparency, full disclosure, independent monitoring, and fairness to all, especially minority shareholders.

The following factors strengthen Corporate Governance in BHEL:

- Independence and versatility of the Board
- Integrity and ethical behavior of all employees
- Recognition of obligations towards all stakeholders – shareholders, customers, employees, suppliers and the society
- High degree of disclosure and transparency levels
- Full legal and regulatory compliance in all areas in which the Company operates
- Achievement of goals with compassion for people and environment

The Company believes in conducting its business complying with Corporate Governance procedures and Code of Conduct, exemplifies each of the core values, which positions BHEL to deliver long-term returns to the shareholders, favourable outcomes to the customers, attractive opportunities to the employees, opportunity to the suppliers to partner the Company in progress, and enrichment of society.

2.2 Board of Directors

i. Composition & Category of Directors

Pursuant to Section 2(45) of the Companies Act, 2013, BHEL is a 'Government Company' as 63.17% of the total paid-up share capital of the Company is held by the Central Government through the President of India.

The composition of Board of Directors of BHEL has an appropriate mix of Executive Directors represented by Functional Directors including CMD and Non-Executive Directors represented by Government Nominees & Independent Directors, to maintain the independence of the Board and to separate the Board functions of management and control.

The composition of the Board of Directors as on March 31, 2021 is as follows:

Category of Directors	Board Structure	Actual Strength as on March 31, 2021
Chairman & Managing Director	1	1
Whole-time Executive (Functional) Directors	5	4
Part-time Official Directors (Government Nominees) representing the Ministry of Heavy Industries & Public Enterprises, Government of India	2	2
Part-time Non-official (Independent) Directors	8	3
TOTAL	16	10

As on March 31, 2021, there exist five vacancies of Part-time Non-official (Independent) Directors (including atleast one Independent Woman Director) and vacancy of Director (Power) on the Board of BHEL. The matter of filling up of these vacancies is under consideration of Department of Heavy Industry, Ministry of Heavy Industries & Public Enterprises, Government of India.

ii. Attendance of each Director at the Board Meetings held during 2020-21 and the last AGM

Director's Name S/ Shri	No. of Board Meetings		Last AGM (held on 28.09.2020)
	Held	Attended	
Executive Directors			
Dr. Nalin Shinghal, Chairman & Managing Director	8	8	Yes
Subodh Gupta, Director (Finance)	8	8	Yes
S. Balakrishnan, Director (IS&P) (upto November 30, 2020)	6	6	Yes
Manoj Kumar Varma, Director (Power) (upto January 31, 2021)	7	7	Yes
Kamalesh Das, Director (E, R&D)	8	8	Yes
Anil Kapoor, Director (HR) #	8	8	Yes
Ms. Renuka Gera, Director (IS&P) (w.e.f. December 1, 2020)	2	2	*

Part-Time Official Directors – Govt. Nominees			
Shashank Priya, Additional Secretary & Financial Adviser, Ministry of Commerce & Industry	8	8	Yes
Amit Varadan, Joint Secretary (JS), Department of Heavy Industry (DHI), Ministry of Heavy Industries & Public Enterprises (upto September 2, 2020)	4	4	*
Amit Mehta, JS,DHI, Ministry of Heavy Industries & Public Enterprises (w.e.f. September 2, 2020)	4	4	Yes
Part-Time Non-Official (Independent) Directors			
Desh Deepak Goel (upto September 11, 2020)	5	5	*
Ranjit Rae (upto September 11, 2020)	5	5	*
Rajesh Sharma	8	7	Yes
Raj Kamal Bindal	8	8	Yes
Manish Kapoor	8	8	Yes

Held additional charge of Director (Power) w.e.f. February 1, 2021.

* denotes the respective person was not a Director of BHEL as on last AGM date.

iii. A. Details of Directorships, Committee Memberships and Committee Chairmanship in other companies as on March 31, 2021*

Director's name S/ Shri	Details of Directorships in other Companies	Details of Committee Memberships and Committee Chairmanship in other Companies*
Dr. Nalin Shinghal, Chairman & Managing Director	Heavy Engineering Corporation Ltd.	-NIL-
Subodh Gupta, Director (Finance)	Raichur Power Corporation Ltd.	-NIL-
Kamalesh Das, Director (E,R&D)	1. BHEL-GE Gas Turbine Services Pvt. Ltd. 2. BHEL Electrical Machines Ltd.	-NIL-

Anil Kapoor, Director (HR)	Raichur Power Corporation Ltd.	-NIL-
Ms. Renuka Gera, Director (IS&P)	-NIL-	-NIL-
Shashank Priya, Part-time Official Director	1. The State Trading Corporation of India Ltd. 2. MMTC Ltd. 3. India International Convention & Exhibition Centre Ltd. 4. India Trade Promotion Organization 5. Invest India 6. HMT Ltd. 7. National Jute Manufactures Corporation Ltd. 8. Rashtriya Ispat Nigam Ltd. 9. NMDC Ltd. 10. KIOCL Ltd. 11. Steel Authority of India Ltd. 12. MECON Ltd.	Audit Committee: 1. The State Trading Corporation of India Ltd. (Chairperson) 2. MMTC Ltd. (Member) 3. India Trade Promotion Organization (Member) 4. Rashtriya Ispat Nigam Ltd. (Member) Stakeholders' Relationship Committee: The State Trading Corporation of India Ltd. (Chairperson)
Amit Mehta, Part-time Official Director	1. Andrew Yule & Co. Ltd. 2. Tide Water Oil Co. India Ltd.	-NIL-
Rajesh Sharma, Independent Director	Burnpur Cement Ltd.	Audit Committee: Burnpur Cement Ltd. (Chairperson) Stakeholders' Relationship Committee: Burnpur Cement Ltd. (Member)
Raj Kamal Bindal Independent Director	1. Avika Consulting Pvt. Ltd. 2. Namah Shivay Ventures Pvt. Ltd. 3. Raj Kamal Bindal Foundation	-NIL-
Manish Kapoor Independent Director	Genext Lifecare Pvt. Ltd.	-NIL-

*Only Chairmanship/ Membership of the Audit Committee and Stakeholders' Relationship Committee has been considered.

The Directorships/ Committee Memberships in other companies are based on the latest disclosure received from respective Directors on the Board.

No Director of the Company holds office at the same time as Director in more than twenty (20) companies. No Director of the Company is a member in more than ten (10) Committees or acts as Chairperson of more than five (5) Committees across all companies in which he is a Director.

Disclosure of relationship between Directors inter-se: NIL

B. Details of Directorships in Listed Entities & Category of Directorship

As on March 31, 2021, the following Directors held Directorship in listed entities, as under:

Director's name S/Shri	Name of Listed Entity	Category of Directorship
Shashank Priya, Part-time Official Director	1. The State Trading Corporation of India Ltd. 2. MMTC Ltd. 3. HMT Ltd. 4. NMDC Ltd. 5. KIOCL Ltd. 6. Steel Authority of India Ltd.	Government Nominee Director
Amit Mehta, Part-time Official Director	1. Andrew Yule & Co. Ltd. 2. Tide Water Oil Co. India Ltd.	Government Nominee Director
Rajesh Sharma, Independent Director	Burnpur Cement Ltd.	Independent Director

iv. No. of Board Meetings held, dates on which held

The meetings of the Board are normally held at the Company's Registered Office in New Delhi and are scheduled well in advance. The Company Secretary, in consultation with the Chairman & Managing Director, sends a written notice of each Board meeting to each Director.

The members of the Board have access to all information of the Company and are free to recommend inclusion of any matter for discussion in agenda which is usually sent in advance. In case of need, the senior management is invited to attend the Board Meetings to provide additional inputs relating to the items being discussed and/ or to give presentation to the Board. The Board meets at least once in a quarter to review the quarterly results and other items on the agenda. Additional meetings are held, when necessary.

During the year under review, the Board met eight times on the following dates:

(i) April 9, 2020	(ii) June 13, 2020	(iii) June 24, 2020
(iv) August 28, 2020	(v) September 11, 2020	(vi) November 6, 2020

(vii) December 24, 2020	(viii) February 6, 2021	
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The Board minutes are prepared promptly after every Board meeting and circulated to all Directors for their comments, if any, and approved by the Chairman thereafter. The approved minutes are then circulated to the departments/groups concerned for initiating appropriate action and implementation.

v. List of core skills /expertise/competence

As BHEL is a Government Company, all Directors on its Board viz., Functional Directors, Government Nominee Directors and Independent directors are selected and appointed by the Government as per a well laid down process for each category of directors. The requirements of core skills, expertise and competence required for the Board to function effectively, in context of business segment BHEL operates in, forms an integral part of the government's process of selection of these directors. Therefore, the Board of BHEL by itself does not identify any such core skills or competence required for the job as well as identification of directors for particular skill/ expertise/ competence.

vi. Board's Responsibilities

The Board's mandate is to oversee the Company's strategic direction, review and monitor corporate performance, ensure regulatory compliance and safeguard the interests of the stakeholders.

vii. Independent Directors

The Independent Directors play an important role in deliberations at the Board and Committee meetings and bring to the Company their expertise in the fields of engineering, finance, management, law, public policy etc.

The Independent Directors are part of important Committees constituted by the Board such as the Audit Committee, Nomination & Remuneration Committee, Stakeholders Relationship Committee and CSR Committee. In terms of Companies Act, 2013 and Listing Regulations, the Audit Committee and the Nomination & Remuneration Committee are chaired by an Independent Director and function within their respective defined terms of references.

Further, in line with DPE OM dated December 28, 2012 on Model Role & Responsibilities of Non-Official Directors for CPSEs, the Board had constituted a Committee of Independent Directors. The said Committee is in compliance with the requirements of Listing Regulations and the Code of Independent Directors under Companies Act, 2013.

Details regarding familiarization programme of Independent Directors are available on the website of the Company [www.bhel.com](https://www.bhel.com/familiarization-programme-directors) at web link <https://www.bhel.com/familiarization-programme-directors> under the heading 'Familiarization Programme for Directors'.

In the opinion of the Board, the Independent Directors fulfill the conditions specified in the Listing Regulations and are independent of the Management.

viii. Information placed before the Board of Directors

The agenda placed before the Board *inter alia* includes the following:-

- Annual operating plans and budgets and any updates.
- Capital budgets and any updates.

- Significant Capital Investment proposals.
- Short term investment of surplus funds.
- Sale of investments, subsidiaries and assets which are material in nature and not in normal course of business.
- Changes in significant accounting policies & practices and reasons for the same.
- Quarterly results for the Company and its operating divisions or business segments.
- Quarterly details of foreign exchange exposures and the steps taken by management to limit the issues of adverse exchange rate movement, if material.
- Quarterly report on compliance of various laws.
- Status of Arbitration cases and major legal disputes.
- Minutes of meetings of Audit Committee and other Committees of the Board.
- Minutes of Board Meetings of unlisted subsidiary companies.
- Statement of all significant transactions and arrangements entered into by unlisted subsidiary companies.
- The information on recruitment of senior officers just below the Board level.
- Details of any Joint Venture or R&D project or technical collaboration agreement requiring approval of Board of Directors.
- Significant labour problems and their proposed solutions.
- Any significant development in Human Resources/ Industrial Relations front like signing of wage agreement, implementation of Voluntary Retirement Scheme etc.
- Action Taken Report on matters desired by the Board.
- Any contract(s) in which Director(s) are deemed to be interested.
- Disclosure of Interest by Directors about directorships and Committee positions occupied by them in other companies.
- Any other matters required to be presented to the Board either for information or approval under Listing Regulations, DPE guidelines and Secretarial Standard-1 on meeting of Board of Directors etc.

The Board has constituted various Committees to facilitate the smooth and efficient flow of decision making process. The minutes of all Board level committees are circulated and discussed in the Board meetings. There was no instance where the Board had not accepted any recommendation of any Committee of the Board which is mandatorily required, during the year under review.

ix. Selection of New Directors

As per Articles of Association of BHEL, the President of India through Department of Heavy Industry, Ministry of Heavy Industries & Public Enterprises, appoints the Chairman & Managing Director and Functional Directors on the Board of BHEL. Two Part-time Official Directors are nominated by the Administrative Ministry on the Board of BHEL. The President of India also appoints Part-time Non-official (Independent) Directors on the Board of BHEL.

The Independent Directors are selected by the Department of Heavy Industry in consultation with the Search Committee of the Department of Public Enterprises which maintains a panel

of eminent personalities having wide experience in the field of Management, Finance, Engineering, Administration, Industry etc.

x. Membership term & Retirement policy

The appointment of Chairman & Managing Director and Functional Directors is made for a period of five years from the date of their assumption of charge of the post, or till the date of their superannuation or until further orders, whichever is the earliest. The Part-time Official Directors continue to be on the Board of BHEL at the discretion of the Government of India. The tenure of Part-time Non-official (Independent) Directors is decided by the Administrative Ministry. Normally, an Independent Director is appointed for a period of three years.

xi. Code of Conduct

As part of BHEL's persisting endeavour to set a high standard of conduct for its employees, BHEL Board in 2005 laid down a 'Code of Business Conduct and Ethics for Board Members and Senior Management Personnel' in line with clause 49 of the erstwhile Listing Agreement. The Code was subsequently revised from time to time in line with changes in the regulatory framework including changes in the Listing Agreement & changing business dynamics and to incorporate other relevant provisions to strengthen the Code. The extant Code is also in compliance with the Listing Regulations, as amended.

The Code encompasses:

- General Moral Imperatives;
- Specific Professional Responsibilities; and
- Specific Additional Provisions for Board Members and Senior Management Personnel.

A copy of the Code has been placed on the Company's website www.bhel.com.

xii. Charter of the Board of Directors

For the purpose of clearly defining the roles and responsibilities of the Board and individual Directors, the Board has laid down a Charter of the Board of Directors. The Charter also articulates BHEL corporate governance objectives and approach.

In line with the DPE guidelines, listing agreement and with the objective of providing the Directors a) insight into guidelines and procedures for successful discharge of their statutory duties, b) better understanding of the business environment to envision the future and develop strategies and c) need based training to meet the specific requirements of the board members, BHEL Board has approved a policy for Training of Directors. It covers both general and specific trainings more tuned towards Company specific areas.

xiii. Certificate by Company Secretary in Practice

The Company has received a certificate from a company secretary in practice that none of the Directors on the board of the company have been debarred or disqualified from being appointed or continuing as Director of the Company by SEBI/ Ministry of Corporate Affairs or any such statutory authority. The same is enclosed.

xiv. CEO/ CFO certification

CEO / CFO certification pursuant to Listing Regulations is enclosed at **Annexure-III** of the Board's Report.

2.3 Board Level Audit Committee

i. Terms of Reference

The terms of reference of the Board Level Audit Committee specified by the Board are in conformity with the requirements of Section 177 of the Companies Act, 2013 as well as Listing Regulations and are as under:

1. Oversight of the company's financial reporting process and the disclosure of its financial information to ensure that the financial statement is correct, sufficient and credible;
2. Recommendation for appointment, remuneration and terms of appointment of auditors of the company;
3. Approval of payment to statutory auditors for any other services rendered by the statutory auditors;
4. Reviewing, with the management, the annual financial statements and auditor's report thereon before submission to the board for approval, with particular reference to:
 - i. Matters required to be included in the Director's Responsibility Statement to be included in the Board's report in terms of clause (c) of sub-section 3 of section 134 of the Companies Act, 2013;
 - ii. Changes, if any, in accounting policies and practices and reasons for the same;
 - iii. Major accounting entries involving estimates based on the exercise of judgment by management;
 - iv. Significant adjustments made in the financial statements arising out of audit findings;
 - v. Compliance with listing and other legal requirements relating to financial statements;
 - vi. Disclosure of any related party transactions;
 - vii. Qualifications in the draft audit report;
5. Reviewing, with the management, the quarterly financial statements and auditor's report thereon before submission to the board for approval;
6. Reviewing, with the management, the statement of uses/ application of funds raised through an issue (public issue, rights issue, preferential issue, etc.), the statement of funds utilized for purposes other than those stated in the offer document/ prospectus/ notice and the report submitted by the monitoring agency monitoring the utilization of proceeds of a public or rights issue and making appropriate recommendations to the Board to take up steps in this matter;
7. Review and monitor the auditor's independence and performance, and effectiveness of audit process;
8. Approval or any subsequent modification of transactions of the company with related parties;
9. Scrutiny of inter-corporate loans and investments;
10. Reviewing the utilization of loans and/ or advances from/ investment by the holding company in the subsidiary exceeding rupees 100 Crore or 10% of the asset size of the subsidiary, whichever is lower including existing loans/ advances/ investments existing as on the date of coming into force of this

provision;

11. Valuation of undertakings or assets of the company, wherever it is necessary;
12. Evaluation of internal financial controls and risk management systems;
13. Reviewing, with the management, performance of statutory and internal auditors, adequacy of the internal control systems;
14. Reviewing the adequacy of internal audit function, if any, including the structure of the internal audit department, staffing and seniority of the official heading the department, reporting structure coverage and frequency of internal audit;
15. Discussion with internal auditors of any significant findings and follow up there on;
16. Reviewing the findings of any internal investigations by the internal auditors into matters where there is suspected fraud or irregularity or a failure of internal control systems of a material nature and reporting the matter to the board;
17. Discussion with statutory auditors before the audit commences, about the nature and scope of audit as well as post-audit discussion to ascertain any area of concern;
18. To look into the reasons for substantial defaults in the payment to the depositors, debenture holders, shareholders (in case of non-payment of declared dividends) and creditors;
19. To review the functioning of the Whistle Blower/ Vigil mechanism;
20. To review the Audit paras referred to BLAC by the Internal Audit / Board and / or Govt. of India and to provide its suggestions / guidance / comments on the issues referred to it;
21. Discussion with Statutory Auditors/ Internal Auditors periodically about internal control systems;
22. To seek professional advice from external sources in appropriate cases, wherever required;
23. The Audit Committee shall also review the following information:
 - i. Management discussion and analysis of financial condition and results of operations;
 - ii. Statement of significant related party transactions;
 - iii. Management letters / letters of internal control weaknesses issued by the statutory auditors; and
 - iv. Internal audit reports relating to internal control weaknesses;
24. Carrying out any other function related to the terms of reference of the Audit Committee as prescribed under the Companies Act, SEBI Regulations and other statutory regulations.

ii. Composition of Committee, name of Members & Chairperson

The composition of the Audit Committee is in compliance with Listing Regulations and Companies Act, 2013. The Audit Committee is chaired by an Independent Director. The member Directors comprise of professionals of repute and standing with background in commerce, finance, administration and governance.

The Audit Committee was last reconstituted w.e.f. February 6, 2021. The composition of the Audit Committee during the year comprises of the following Directors:

Name of the Director S/ Shri	Position	No. of meetings	
		Held during their tenure	Attended
Desh Deepak Goel, Independent Director (upto September 11, 2020)	Chairperson	3	3
Rajesh Sharma, Independent Director	Chairperson (w.e.f. September 12, 2020)	2	2
	Member (upto September 11, 2020)	3	3*
Shashank Priya, AS & FA, M/o Commerce & Industry, Part-time Official Director	Member (w.e.f. February 6, 2021)	0	0
Amit Varadan, JS, DHI, Part-time Official Director (upto September 2, 2020)	Member	2	2
Amit Mehta, JS, DHI, Part-time Official Director	Member (w.e.f. September 2, 2020 upto February 5, 2021)	3	3
Ranjit Rae, Independent Director (upto September 11, 2020)	Member	3	3
Raj Kamal Bindal Independent Director	Member (w.e.f. February 6, 2021)	0	0
Manish Kapoor Independent Director	Member (w.e.f. May 29, 2020)	5	5

* Shri Rajesh Sharma was granted leave of absence for the adjourned meeting held on August 20, 2020.

Director (Finance) is permanent invitee. Company Secretary acts as Secretary to the Committee.

Head of Internal Audit and a representative of the Statutory Auditor may be present as invitees for the meetings of the Audit

Committee. The Auditors of the Company and the Key Managerial Personnel shall have a right to be heard in the meetings of the Audit Committee when it considers the Auditor's Report but shall not have the right to vote.

iii. Meetings and Attendance

The Audit Committee met five times on June 13, 2020, August 19-20, 2020, September 11, 2020, November 5-6, 2020 and February 6, 2021 during the year under review. The details of attendance of each member is given in the above table.

2.4 Nomination and Remuneration Committee

i. Remuneration policy

BHEL being a Public Sector Undertaking, the appointment and remuneration of Chairman & Managing Director/ Functional Directors are decided by the Government of India. The terms of appointment of Chairman & Managing Director/ Directors, as approved by the President of India, provide for fixation of certain perks and benefits like leased accommodation, payment of HRA, furnished accommodation, productivity linked incentive etc., as per rules of BHEL. The part-time non-executive directors are not paid any remuneration except sitting fees to Independent Directors for attending meetings of the Board or Committee thereof.

ii. Terms of Reference

In line with the requirements of Section 178 of the Companies Act, 2013 and Clause 49 of the erstwhile Listing Agreement (now Listing Regulations), the Board constituted the Nomination & Remuneration Committee (NRC) w.e.f. March 30, 2015. In line with the amendment to the terms of reference of NRC, the terms of reference of the Committee are as under:

1. To identify persons who are qualified to become directors and who may be appointed in senior management in accordance with the criteria laid down and recommend to the Board for their appointment and removal and shall specify the manner for effective evaluation of performance of Board, its committees and individual directors to be carried out either by the Board, by the Nomination and Remuneration Committee or by an independent external agency and review its implementation and compliance;
2. To formulate the criteria for determining qualifications, positive attributes and independence of a director and recommend to the Board a policy, relating to the remuneration of the directors, key managerial personnel and other employees in compliance with the provisions of Act/ Listing Regulations/ DPE guidelines;
3. Formulation of criteria for evaluation of Independent Directors and the Board;
4. Devising a policy on Board diversity;
5. To recommend to the Board, nomination of BHEL officials in the Boards of its subsidiaries and other government organizations which are required to be approved by the Board of BHEL before further submission to DHI;
6. Oversight of the company's policy on specific remuneration packages, perquisites for Whole-time Directors including pension rights and any compensation payment, which are not fixed by the President of India;

7. Approve certain perquisites for Whole-time Directors which are within the powers of Board. Review of the elements of remuneration package of individual directors summarized under major groups, such as incentives/ benefits, bonus, stock options, pension etc;
8. Finalization of policies on perks and benefits and other related matters which are not fixed by the President of India but within the powers of Board;
9. Approval of fixed component and performance linked incentives based on the performance criteria;
10. Finalization of the criteria of making payments to Non-Executive Directors;
11. Recommendation of fees/ compensation/ stock options, if any, to be paid/ granted, to non-executive directors, including independent directors, to the Board of Directors/ Shareholders;
12. Recommendation to the board, all remuneration, in whatever form, payable to senior management;
13. To decide the bonus/ variable pay pool and policy for its distribution across the executives and non-unionised supervisors;
14. Carrying out any other function related to the terms of reference of the NRC as prescribed under the Companies Act, SEBI Regulations and other statutory regulations.

MCA vide Notification dated June 5, 2015 provided that Section 178 (2), (3) & (4) of the Companies Act, 2013 with regard to performance evaluation of Directors shall not apply to Government Company.

iii. Composition of Committee, name of Members & Chairperson

The Nomination & Remuneration Committee was last reconstituted w.e.f. February 6, 2021. The composition of the Committee during the year comprises of the following Directors:

Name of the Director S/Shri	Position	No. of meetings	
		Held during their tenure	Attended
Rajesh Sharma, Independent Director	Chairperson*	2	2
Shashank Priya, AS & FA, M/o Commerce & Industry, Part-time Official Director	Member (upto February 5, 2021)	2	2
Amit Varadan, JS, DHI, Part-time Official Director (upto September 2, 2020)	Member	0	0
Amit Mehta, JS, DHI, Part-time Official Director	Member (w.e.f. September 2, 2020)	2	2

Ranjit Rae, Independent Director (upto September 11, 2020)	Member	0	0
Manish Kapoor Independent Director	Member* (w.e.f. May 29, 2020)	2	2

* Shri Manish Kapoor was elected as Chairperson of the Meeting held on January 13, 2021 in place of Shri Rajesh Sharma in view of his late joining in the meeting due to some technical issues.

Director (HR) is permanent invitee. Company Secretary acts as Secretary to the Committee.

iv. Meetings and Attendance

The Nomination & Remuneration Committee met two times on October 6, 2020 and January 13, 2021 during the year under review. The details of attendance of each member is given in the above table.

v. Details of remuneration of Functional Directors during the year 2020-21 are given below:

(in ₹)

Sl. No.	Name of the Director S/ Shri	Salary	Benefits	Other Benefits	Performance Linked Incentives	Total	Service Contract/ Notice Period Severance Fee
1.	Dr. Nalin Shinghal	51,64,430	8,00,047	39,600	-	60,04,077	----
2.	Subodh Gupta	41,78,054	7,37,526	3,37,609	3,76,613	56,29,803	Liable to retire by rotation
3.	S. Balakrishnan (upto November 30, 2020)	54,33,724	4,89,311	8,02,839	3,48,992	70,74,865	----
4.	Manoj Kumar Varma (upto January 31, 2021)	53,93,457	6,18,154	5,13,372	2,99,053	68,24,036	----
5.	Kamalesh Das	40,77,360	7,19,388	3,21,800	2,58,274	53,76,822	Liable to retire by rotation
6.	Anil Kapoor	39,75,593	7,48,793	3,14,483	2,66,832	53,05,701	Liable to retire by rotation
7.	Ms. Renuka Gera (w.e.f. December 1, 2020)	14,28,029	2,53,414	1,82,997	-	18,64,440	Liable to retire by rotation

vi. Details of payments made to Independent Directors during the year 2020-21 are given below: -

(in ₹)

Name of the Independent Directors	Sitting Fees		Total
	Board Meeting	Committee Meeting	
Shri Desh Deepak Goel	1,50,000/-	1,80,000/-	3,30,000/-
Shri Ranjit Rae	1,50,000/-	2,00,000/-	3,50,000/-
Shri Rajesh Sharma	2,10,000/-	3,00,000/-	5,10,000/-
Shri Raj Kamal Bindal	2,40,000/-	2,20,000/-	4,60,000/-
Shri Manish Kapoor	2,40,000/-	2,40,000/-	4,80,000/-

During FY 2020-21 Independent Directors were entitled for sitting fee @ ₹30,000/- per Board Meeting and ₹20,000/- per Board Level Committee Meeting attended by them.

Independent Directors are not entitled to Stock Option.

vii. Equity Shares held by Directors

Except as stated hereunder, none of the Directors hold any Equity Shares in BHEL (as on March 31, 2021):

Name of the Director	No. of shares held
Dr. Nalin Shinghal (jointly with spouse)	100

The Company has not issued any stock options during the year 2020-21.

2.5 Shareholders Committees

2.5.1 Stakeholders Relationship Committee

i. Terms of Reference

The Board of Directors on May 12, 2014 reconstituted the Shareholders' Investors' Grievance Committee as the Stakeholders Relationship Committee (SRC), in line with the requirements of Companies Act, 2013 and erstwhile Listing Agreement (now Listing Regulations). The Committee looked into the redressal of grievances of shareholders including complaints related to transfer of shares, non-receipt of balance sheet, non-receipt of declared dividends etc. In line with the amendment to the terms of reference of SRC in the Listing Regulations, the terms of reference of the Committee are as under:

1. Resolution of the grievances of the security holders of the Company including complaints related to transfer/ transmission of shares, non-receipt of annual report, non-receipt of declared dividends, issue of new/duplicate certificates, general meetings etc;
2. Reviewing measures taken for effective exercise of voting rights by shareholders;
3. Reviewing adherence to the service standards adopted by the Company in respect of various services being rendered by the Registrar & Share Transfer Agent;
4. Reviewing the various measures and initiatives taken by the Company for reducing the quantum of unclaimed dividends and ensuring timely receipt of dividend warrants/ annual reports/

statutory notices by the shareholders of the company;

5. To look into various aspects of interest of shareholders, debenture holders and other security holders;
6. Carrying out any other function related to the terms of reference of the Committee as prescribed under the Companies Act, SEBI Regulations and other statutory regulations.

ii. Composition of Committee, name of Members & Chairperson

The Stakeholders Relationship Committee was last reconstituted w.e.f. February 6, 2021. The composition of the Committee during the year comprises of the following Directors:

Name of the Director S/ Shri	Position	No. of Meetings	
		Held during their tenure	Attended
Ranjit Rae, Independent Director (upto September 11, 2020)	Chairperson	2	2
Manish Kapoor Independent Director	Chairperson (w.e.f. September 12, 2020)	1	1
Shashank Priya, AS & FA, M/o Commerce & Industry, Part-time Official Director	Member (w.e.f. February 6, 2021)	0	0
Amit Varadan, JS, DHI, Part-time Official Director (upto September 2, 2020)	Member	2	1
Amit Mehta, JS, DHI, Part-time Official Director	Member (w.e.f. September 2, 2020 upto February 5, 2021)	1	0
Director (Finance)	Member	3	3
Director (HR)	Member	3	3

Chief Investor Relationship Officer (CIRO) is permanent invitee. Company Secretary acts as Secretary to the Committee.

Shri Rajeev Kalra, Company Secretary is the Compliance Officer in terms of the SEBI (Listing Obligations & Disclosure Requirements) Regulations, 2015.

iii. Meetings and Attendance

The Committee met three times on June 12, 2020, July 30, 2020 and November 5, 2020 during the year under review. The details of

attendance of each member is given in the above table.

Detail of shareholders' complaints

As reported to SEBI by KFin Technologies Private Limited (RTA of the Company upto December 31, 2020) and Alankit Assignments Limited (RTA of the Company w.e.f. January 1, 2021), 265 complaints were received from the shareholders during the year under review and all complaints were redressed up to March 31, 2021. No complaint was pending at the end of the period under report.

2.5.2 Share Transfer Committee

The Board constituted a Share Transfer Committee on March 25, 1992. The Board of Directors revised the terms of reference of the Committee w.e.f. August 1, 2014. The Share Transfer Committee considers and approves share related issues pertaining to transposition, sub-division, consolidation, issue of duplicate share certificate etc. in physical mode. The Share Transfer Committee was last reconstituted on February 6, 2021 with Director (Finance) as Chairperson alongwith Director (E, R&D) and Director (IS&P) as Members.

Meetings during 2020-21

The Share Transfer Committee met two times during the year. The minutes of the Share Transfer Committee meetings are periodically placed before the Board of Directors.

2.6 Board Level Committee for Corporate Social Responsibility

i. Terms of Reference

Pursuant to the DPE Guidelines on Corporate Social Responsibility for CPSEs, the Board constituted the Board Level Apex Committee for CSR on November 25, 2010 for proper & periodic monitoring of CSR activities. The Committee is presently christened as the Board Level Committee for Corporate Social Responsibility. In line with Section 135 of the Companies Act, 2013, as amended (pertaining to CSR Committee), the terms of reference of the Committee are as under:

1. Formulation and recommendation to the Board the Corporate Social Responsibility Policy which shall indicate the activities to be undertaken by the Company in areas or subject, specified in Schedule VII to the Companies Act, 2013;
2. Recommendation of the Projects, Programs and amount of expenditure to be incurred on the activities referred to in clause (1);
3. Monitoring the Corporate Social Responsibility activities of the Company from time to time;
4. Ensuring compliance with guidelines on Corporate Social Responsibility and Sustainable Development issued by the Government of India from time to time.

ii. Composition of Committee, name of Members & Chairperson

The Committee was last reconstituted w.e.f. February 6, 2021. The composition of the Committee during the year comprises of the following Directors:

Name of the Director S/ Shri	Position	No. of Meetings	
		Held during their tenure	Attended
Ranjit Rae, Independent Director (upto September 11, 2020)	Chairperson	2	2
Manish Kapoor Independent Director	Chairperson (w.e.f. September 12, 2020)	1	1
	Member (w.e.f. May 29, 2020 upto September 11, 2020)	2	2
Amit Varadan, JS, DHI, Part-time Official Director (upto September 2, 2020)	Member	2	2
Amit Mehta, JS, DHI, Part-time Official Director	Member (w.e.f. September 2, 2020 upto February 5, 2021)	1	1
Rajesh Sharma, Independent Director	Member	3	3
Director (Finance)	Member	3	3
Director (HR)	Member	3	3

Head (CSR), Corporate Office is Permanent Invitee. Company Secretary acts as Secretary to the Committee.

iii. Meetings and Attendance

The Committee met three times on June 12, 2020, July 30, 2020 and November 5, 2020 during the year under review. The details of attendance of each member is given in the above table.

2.7 HR Committee

i. Terms of Reference

The Board constituted the HR Committee on May 31, 2006 specifically to look into the following matters:

- Review of present policies with respect to promotion and reward/ incentive to the Executives.
- Suggest both short term and long term changes in the policies to prepare BHEL for the changed/ emerging business environment.

ii. Composition of Committee, name of Members & Chairperson

The Committee was last reconstituted w.e.f. February 6, 2021. The composition of the Committee during the year comprises of the following Directors:

Name of the Director S/ Shri	Position	No. of Meetings	
		Held during their tenure	Attended
Desh Deepak Goel, Independent Director (upto September 11, 2020)	Chairperson	0	0
Raj Kamal Bindal Independent Director	Chairperson (w.e.f. February 6, 2021)	0	0
	Member (w.e.f. May 29, 2020)	1	1
Ranjit Rae, Independent Director (upto September 11, 2020)	Member	0	0
Director (Finance)	Member* (upto February 5, 2021)	1	1
Director (HR)	Member	1	1
Director (IS&P)	Member (w.e.f. February 6, 2021)	0	0

* Director (Finance) was elected as Chairperson of the Meeting held on December 22, 2020.

Head (HR), Corporate Office is permanent invitee. Company Secretary acts as Secretary to the Committee.

iii. Meetings and Attendance

The Committee met one time on December 22, 2020 during the year under review. The details of attendance of each member is given in the above table.

2.8 Committee of Independent Directors

i. Terms of Reference

The Board, in line with DPE OM dated December 28, 2012 on Model Role & Responsibilities of Non-Official Directors for CPSEs,

constituted a Committee of Independent Directors, which is also in compliance with the requirements of Schedule IV of the Companies Act, 2013 and Listing Regulations.

ii. Composition of Committee, name of Members & Chairperson

The composition of the Committee during the year comprises of the following Directors:

Name of the Director S/Shri	Position	No. of Meetings	
		Held during their tenure	Attended
Desh Deepak Goel (upto September 11, 2020)	Chairperson & Lead Independent Director	1	1
Rajesh Sharma	Chairperson & Lead Independent Director (w.e.f. September 12, 2020)	0	0
	Member (upto September 11, 2020)	1	1
Ranjit Rae (upto September 11, 2020)	Member	1	1
Raj Kamal Bindal	Member	1	1
Manish Kapoor	Member	1	1

iii. Meetings and Attendance

The Committee met one time on September 11, 2020 during the year under review. The details of attendance of each member is given in the above table.

2.9 Board Level Risk Management Committee

i. Terms of Reference

In line with erstwhile Listing Agreement (now Listing Regulations), the Board of Directors on November 14, 2014 constituted the Board Level Risk Management Committee. The terms of reference of the Board Level Risk Management Committee in line with Listing Regulations, as amended, are as under:

- Reviewing the Company's risk governance structure, risk assessment and risk management frame work, guidelines, policies and processes for risk assessment and risk management;
- Reviewing the Company's risk mitigation strategies relating to identified key risks as well as the processes for monitoring and mitigating such risks;
- Reviewing risk pertaining to Cyber Security and its mitigation;
- Report to the Board on the Committee's activities for information and recommend proposed changes, if any, to the Board for approval.
- Carrying out any other function related to the terms of reference of the Committee as prescribed under the Companies Act, SEBI Regulations and other statutory regulations.

ii. Composition of Committee, name of Members & Chairperson

The Committee was last reconstituted on May 29, 2020. The composition of the Committee during the year comprises of the following members:

Name of the Director S/ Shri	Position	No. of Meetings	
		Held during their tenure	Attended
Shashank Priya, AS & FA, M/o Commerce & Industry, Part-time Official Director	Chairperson	3	3
Desh Deepak Goel, Independent Director (upto September 11, 2020)	Member	1	1
Raj Kamal Bindal Independent Director	Member (w.e.f. May 29, 2020)	3	3
Director (Finance)	Member	3	3
Director (IS&P)	Member	3	3
Director (Power)	Member	3	3
Chairman, Risk Management Steering Committee	Member	3	3
Chief Risk Officer	Member & Convener	3	3

iii. Meetings and Attendance

The Committee met three times on June 12, 2020, October 8, 2020 and January 13, 2021 during the year under review. The details of attendance of each member is given in the above table.

2.10 Committee on Arbitration & Major Legal Disputes**i. Terms of Reference**

The Board of Directors in its meeting held on May 26, 2015 constituted the Committee on Arbitration & Major Legal Disputes for detailed review of arbitration cases as well as major legal disputes and thereafter apprising the Board accordingly.

ii. Composition of Committee, name of Members & Chairperson

The Board of Directors in its meeting held on February 6, 2021 approved the merger of the "Board Level Committee on Alternative Dispute Resolution" with the "Committee on Arbitration & Major Legal Disputes" and renamed the "Committee on Arbitration & Major Legal Disputes" as "Committee on Arbitration & Major Legal Disputes and Alternative Dispute Resolution". Prior to its merger the Committee on Arbitration & Major Legal Disputes comprised the following Directors:

Name of the Director S/ Shri	Position	No. of Meetings	
		Held during their tenure	Attended
Desh Deepak Goel, Independent Director (upto September 11, 2020)	Chairperson	2	2
Amit Varadan, JS, DHI, Part-time Official Director (upto September 2, 2020)	Member	2	2
Amit Mehta, JS, DHI, Part-time Official Director	Member (w.e.f. September 2, 2020)	2	0
Rajesh Sharma, Independent Director	Member	4	4
Raj Kamal Bindal# Independent Director	Member (w.e.f. May 29, 2020)	4	4
Director (Power)#	Member	4	4*
Director (HR)	Member	4	4*

* Shri Anil Kapoor, Director (HR) is having additional charge of Director (Power) w.e.f. February 1, 2021.

Director (Power) and Shri Raj Kamal Bindal, Independent Director were elected as Chairperson of the Meetings held on November 5, 2020 and February 6, 2021 respectively.

Head-Law is convener of the Committee and furnishes the required information for review by the Committee.

iii. Meetings and Attendance

Till its merger, the Committee on Arbitration & Major Legal Disputes met four times during the year on June 12, 2020, July 30, 2020, November 5, 2020 and February 6, 2021. The details of attendance of each member is given in the above table.

2.11 Board Level Committee on Alternative Dispute Resolution**i. Terms of Reference**

The Board of Directors in its Meeting held on May 29, 2018 constituted the Board Level Committee on Alternative Dispute Resolution to act as the Competent Authority for accepting/rejecting the draft settlement agreement under the BHEL Conciliation Scheme, 2018.

ii. Composition of Committee, name of Members & Chairperson

The Board of Directors in its meeting held on February 6, 2021 approved the merger of the "Board Level Committee on Alternative Dispute Resolution" with the "Committee on Arbitration & Major Legal Disputes" and renamed the "Committee on Arbitration & Major Legal Disputes" as "Committee on Arbitration & Major Legal Disputes and Alternative Dispute Resolution". Prior to its merger the Board Level Committee on Alternative Dispute Resolution comprised the following Directors:

Name of the Director S/ Shri	Position
Rajesh Sharma, Independent Director	Chairperson
Manish Kapoor Independent Director	Member (w.e.f. May 29, 2020)
Director (Finance)	Member
Director (E, R&D)	Member
Director (HR)	Member

The Committee, shall Co-opt the concerned Functional Director as an additional member, whenever required.

iii. Meetings and Attendance

Till its merger, no Meeting of the Board Level Committee on Alternative Dispute Resolution took place during the year under review.

2.12 Buy back Committee

i. Terms of Reference, Composition of Committee, Name of Members & Chairperson

The Board of Directors in its Meeting held on October 25, 2018 constituted the Buyback Committee and delegated the powers of the Board in respect of Buyback of shares to the Committee. The Committee was also authorized to do all such acts, deeds, matters and things as it may, in its absolute discretion deem necessary, expedient, usual or proper, as the Buyback Committee may consider to be in the best interests of the shareholders for the implementation of the Buyback. The Board of Directors in its meeting held on February 6, 2021 approved the dissolution of the Buyback Committee. The Committee comprised the following Directors prior to its dissolution:

Name of the Director S/ Shri	Position
Director (HR)	Chairperson
Director (Finance)	Member
Director (E,R&D)	Member

Company Secretary/Dy. Company Secretary acts as the Secretary to the Buyback committee.

ii. Meetings and Attendance

No Meeting of the Buyback Committee took place during the year till its dissolution.

2.13 Board Level Project Review Committee

i. Terms of Reference

The Board of Directors in its meeting held on August 9, 2019 approved the revival of the Board Level Project Review Committee with the following revised terms of reference:

- The Committee shall review the status of all projects with contract value of ₹500 Crore and above;
- The Committee shall review the periodical status of the debtors;
- The quorum for the meetings shall be three Members;
- The Committee shall meet at least four times a year;
- The Committee may invite such executives, as it considers appropriate to be present at the meetings of the Committee.

ii. Composition of Committee, name of Members & Chairperson

The Committee was last reconstituted on February 6, 2021. The composition of the Committee during the year comprises of the following Directors:

Name of the Director S/ shri	Position	No. of Meetings	
		Held during their tenure	Attended
Ranjit Rae, Independent Director (upto September 11, 2020)	Chairperson	2	2
Amit Mehta, JS, DHI, Part-time Official Director	Chairperson (w.e.f. February 6, 2021)	0	0
	Member (w.e.f. September 2, 2020 upto February 5, 2021)	0	0
Amit Varadan, JS, DHI, Part-time Official Director (upto September 2, 2020)	Member	2	1
Desh Deepak Goel, Independent Director (upto September 11, 2020)	Member	2	2
Raj Kamal Bindal, Independent Director	Member (w.e.f. May 29, 2020)	2	2
Director (Finance)	Member	2	2
Director (IS&P)	Member	2	2
Director (Power)	Member	2	2

Head (PS-PMG) & GM (Receivable Management) are Convener of the Committee for the respective agenda and furnish the required information for review by the Committee. Heads of respective

Business Sectors shall be invited as and when required. Company Secretary shall act as Secretary to the Committee.

iii. Meetings and Attendance

The Committee met two times on June 11, 2020 and July 30, 2020 during the year under review. The details of attendance of each member is given in the above table.

2.14 Committee on Arbitration & Major Legal Disputes and Alternative Dispute Resolution

i. Terms of Reference, Composition of Committee, Name of Members & Chairperson

The Board of Directors in its meeting held on February 6, 2021 approved the merger of the "Board Level Committee on Alternative Dispute Resolution" with the "Committee on Arbitration & Major Legal Disputes" and renamed the "Committee on Arbitration & Major Legal Disputes" as "Committee on Arbitration & Major Legal Disputes and Alternative Dispute Resolution". The Committee comprises of the following Directors:

Name of the Director S/ Shri	Position
Raj Kamal Bindal Independent Director	Chairperson
Amit Mehta, JS, DHI, Part-time Official Director	Member
Rajesh Sharma, Independent Director	Member
Director (Power)	Member
Director (E,R&D)	Member
Director (HR)	Member

Head-Law is convener of the Committee and furnishes the required information for review by the Committee.

ii. Meetings and Attendance

No Meeting of the Committee on Arbitration & Major Legal Disputes and Alternative Dispute Resolution took place during the year.

2.15 General Meetings

i. Location and time of last three AGMs:

Year	Location	Date	Time
FY 2017-18 (54th AGM)	Manekshaw Centre, Parade Road, Khyber Lines, Delhi Cantt., Delhi-110010	September 19, 2018	10.00 a.m.
FY 2018-19 (55th AGM)	Manekshaw Centre, Parade Road, Khyber Lines, Delhi Cantt., Delhi-110010	September 19, 2019	10.00 a.m.
FY 2019-20 (56th AGM)	Meeting was held through video-conferencing. Deemed venue was Registered Office of the Company	September 28, 2020	10.00 a.m.

ii. Details of Special resolutions passed in previous three AGMs

In line with the provisions of Section 14 of the Companies Act, 2013, a Special Resolution was passed in the 54th Annual General Meeting held on September 19, 2018, for amendment in the Articles of Association by insertion of Article 5A regarding Buy-Back of shares. Further, in line with the provisions of Section 149 of the Companies Act, 2013, a Special Resolution was passed in the 55th Annual General Meeting held on September 19, 2019, for reappointment of Shri R. Swaminathan as an Independent Director for a second term.

iii. Postal Ballot

No special resolutions were passed through postal ballot in the previous year. No such resolution is proposed to be conducted through postal ballot.

2.16 Disclosures

i. Disclosures on materially significant related party transactions that may have potential conflict with the interests of Company at large

The Company has not entered into any materially significant related party transactions (RPTs) that may have potential conflict with the interests of the Company at large. Nonetheless, transactions with related parties have been disclosed in Notes to the financial statements 2020-21 in the Annual Report.

The company's policy determining Material Subsidiaries and Policy Dealing with Related Party Transactions is available at <https://www.bhel.com/policy-regard-related-party-transactions-0>

ii. Non-compliances/ penalties & strictures imposed on the Company related to capital markets during the last three years

There were no cases of non-compliance by the Company on any matter related to capital markets during the last three years and no penalties/ strictures were enforced on the Company by Stock Exchanges/ SEBI or any other statutory authority on any matter related to capital market.

However, the Company received notices from NSE as well as BSE regarding non-compliance with the provision of Regulation 17 (1) of the SEBI Listing Regulations and imposition of fine for not having 50% Independent Directors (including at least one Independent Woman Director) on its Board. In response to the notices, the Company clarified to the Exchanges that the shortfall in Independent Directors was not due to any negligence/ default of the Company, as the appointment is not within its control. In view thereof, the Company has requested the Exchanges to waive-off the fine under their carve-out policies. The matter of appointment of Independent Directors (including at least one Independent Woman Director) is under process with administrative ministry.

iii. Whistle Blower Policy

In pursuance of the DPE Guidelines on Corporate Governance for Central Public Sector Enterprises and Clause 49 of the Listing Agreement between listed Companies & the Stock Exchanges and Section 177 of the Companies Act, 2013, a detailed Whistle Blower Policy was drafted by the Company and it was duly approved by the Board of Directors in its 464th meeting held on August 12, 2014. The policy is also in line with Listing Regulations. Subsequent to this, a Circular notifying the Whistle Blower Policy and informing the contact details of the Competent Authority and of Chairman,

Audit Committee was issued for the notice of all employees.

A copy of the Whistle Blower Policy has also been placed on the website of the Company www.bhel.com for wide publicity. Changes in address, contact number(s) and email address of the Competent Authority and Chairman, Audit Committee are being notified from time to time.

The complaints received under the Policy are being processed as per the guidelines in this regard and no employee has been denied access to the Audit Committee.

iv. Details of compliance with the requirements of DPE Guidelines on Corporate Governance, compliance with mandatory requirements and adoption of the non-mandatory Corporate Governance requirements of Listing Regulations

All mandatory requirements of the DPE Guidelines on Corporate Governance for CPSEs and SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 have been duly complied with by the company except those relating to composition of the Board of Directors. With regard to non-mandatory requirements under the Listing Regulations, BHEL is already in the regime of financial statements with unmodified audit opinion.

No expenditure has been debited in books of accounts which is not for the purpose of business and no expenses incurred and accounted which are personal in nature and incurred for the Board of Directors and Top Management. The other expenses (including administrative, and other miscellaneous expenses) as a % age of total expenses have been curtailed to 8.45% of the total expenses in FY 2020-21 as against 10.70% in FY 2019-20. The same has been made possible by various cost reduction measures and stringent budgetary controls.

v. Presidential Directives

No Presidential Directive was received during the last three years i.e. 2018-19, 2019-20 and 2020-21.

vi. Risk Management

Complying with SEBI Regulations, 2015 and DPE guidelines on Corporate Governance for CPSEs, BHEL has in place a Board approved Risk Management Charter & Policy, laying down procedures to inform Board members about the risk assessment, minimization and mitigation. An important purpose of the Charter is to implement a structured and comprehensive risk management system across the company which ensures that the risks are being properly identified and effectively managed. The risk management process includes risk identification, risk assessment, risk evaluation, risk mitigation and regular review & monitoring. A Board Level Risk Management Committee (BLRMC) is in place with the assigned responsibility of reviewing the company's risk governance structure, risk assessment & risk management framework, guidelines, and policies and processes at Board level.

The Risk Management Steering Committee (RMSC) leads the risk management initiative across the company. The RMSC, comprising of Functional Heads from Corporate Functions and Business Sectors are responsible for adopting & implementing the risk management framework. Risk Management Committees (RMCs) at Business Sectors/ Regions/ Units level are responsible for review of risk profiles & risk mitigation plans and their implementation for the respective Units/ Regions.

vii. Sexual Harassment of Women at Workplace (Prevention, Prohibition & Redressal) Act, 2013

The information on disclosure in relation to Sexual Harassment of Women at Workplace (Prevention, Prohibition & Redressal) Act, 2013 is part of Board's Report and is available as **Annexure C to Para 1.9.5.2 "Safeguard of Women at Workplace"**.

viii. Details of utilization of funds raised through preferential allotment or qualified institutions placement as specified under Regulation 32 (7A)

Nil

ix. Total fees for all services paid by the listed entity and its subsidiaries, on a consolidated basis, to the statutory auditor and all entities in the network firm/ network entity of which the statutory auditor is a part

Total fees for all services paid to the statutory auditors and branch auditors are disclosed in Notes to the financial statements 2020-21. The auditors of subsidiary company and joint venture companies were appointed separately by them and were not same auditors who have conducted audit of financial statements of BHEL.

x. Compliance Certificate on Corporate Governance

Compliance Certificate on Corporate Governance is enclosed.

2.17 Means of Communication

As required under the Listing Regulations, the Company issues a notice in advance, to the Stock Exchanges, of the Board Meetings in which the unaudited/ audited financial results are due for consideration. Further, the said results are intimated immediately after they are taken on record/ approved, to the Stock Exchanges. These approved financial results are published within 48 hours of conclusion of the Board meeting in at least one English daily newspaper circulating in the whole or substantially the whole of India and in one daily newspaper published in the language of the region, where the registered office of the Company is situated and also uploaded on the Company's website (www.bhel.com). Other information pertaining to shareholders viz. changes in directorship, details of unpaid dividend, Annual Reports etc., are also displayed on the Company's website. Official news releases including important events like receipt of major orders, major projects commissioned, important collaborations, other material events etc. are posted on the website of the Company and simultaneously sent to the Stock Exchanges. During 2019-20, while BHEL has not made any presentation on financial results to analysts or investors, conference calls were held quarterly post financial result declaration, with prior intimation to the stock exchanges and posting the same on their websites. For Q2&Q3 FY21, wherein the conference calls could not be held, detailed result documents were uploaded on the stock exchange websites as well as on Company's website. BHEL has also participated in various investor conferences/ meetings in addition to regular face-to-face interactions.

In compliance with Regulation 46 of the Listing Regulations, the Company disseminates on its website information which inter-alia contains, details regarding composition of various committees of Board of Directors, code of conduct, policy dealing with RPTs, contact information of the designated officials of the Company responsible for assisting and handling investor grievances etc.

In pursuance of the "Green Initiatives" of the Ministry of Corporate Affairs, Government of India, the Company sends the Annual Report and the Notice convening the Annual General Meeting

through email to those shareholders who have registered their email ids with the Depository Participants/RTA and have not opted for a physical copy of the Annual Report. For continued success of this initiative, shareholders are requested to register their email ids with their Depository Participants/RTA.

2.18 General Shareholder Information

	AGM Date	Time	Venue
i	September 23, 2021	10:00 AM	The Company is conducting meeting through VC pursuant to the MCA Circular dated January 13, 2021 read with MCA circular dated May 5, 2020 and as such deemed venue for the AGM shall be the registered office of the Company. For details please refer to the Notice of this AGM.
ii	Financial year	April 01, 2020 to March 31, 2021	

The annual return is available at-
<https://www.bhel.com/agm-related>

iii. Dividend History:

The details of dividend paid by BHEL (and not due for transfer to Investor Education Protection Fund) are summarized as under:

Year	Rate of Dividend	Total Amount of Dividend Paid (₹ in Crore)	Date on which Dividend was Declared
2013-2014 (Final)	76%	372.04	19.09.2014
2014-2015 (Interim)	27%	132.17	12.02.2015*
2014-2015 (Final)	31%	151.75	22.09.2015
2015-2016 (Final)	20%	97.90	22.09.2016
2016-2017 (Interim)	40%	195.81	07.02.2017*
2016-2017 (Final)	39%	190.92	22.09.2017
2017-2018 (Interim)	40%	293.72	08.02.2018*
2017-2018 (Final)	51%	374.48	19.09.2018
2018-2019 (Interim)	40%	278.57	05.02.2019*
2018-2019 (Final)	60%	417.85	19.09.2019

* Date of meeting of Board of Directors in which interim dividend was declared.

Note:

- (1) During 2017-18, the Company has allotted Bonus Equity Shares to its Shareholders on 03.10.2017 in the ratio of 1:2 i.e. one fully paid up new bonus equity share of ₹2 each for every two fully paid up equity shares. Consequently, the total number of shares have increased from 244.76 Crore to 367.14 Crore.
- (2) During 2018-19, the Company has made Buy Back of 18,93,36,645 fully paid up equity shares representing 5.16% of the total issued and paid-up equity share capital of the Company from its shareholders as on the record date (i.e. Tuesday, November 06, 2018), on a proportionate basis, through the "Tender Offer" process at a price of ₹86 (Rupees Eighty-Six Only) per equity share payable in cash for an aggregate consideration of ₹1628.30 Crore. Consequently, the total number of shares have decreased from 367.14 Crore to 348.21 Crore.
- (3) In case a shareholder has not claimed/received dividend for any of the last seven years and the same has not yet been transferred to the Investor Education & Protection Fund (IEPF), he/she can claim this unpaid dividend by following the procedure uploaded on the Company's website (www.bhel.com). Unclaimed dividend for the year 2012-13 (Final) & 2013-14 (Interim) has already been transferred to IEPF during the year 2020-21. Further, unclaimed dividend for the year 2013-14 (Final) & 2014-15 (Interim) are due for transfer to IEPF on 19.10.2021 & 15.03.2022 respectively.
- (4) In respect of dividend/shares which have been transferred to IEPF, shareholders can claim the same from IEPF authority by following the procedure prescribed under IEPF Authority (Accounting, Audit, Transfer and Refund) Rules, 2016. These Rules are available on the website of IEPF (www.iepf.gov.in) and company's website (www.bhel.com).

iv. a) Listing on Stock Exchanges and Stock Code

BHEL's Equity shares are listed on the following Stock Exchanges for which listing fees for 2020-21 has been paid:

Name of the Stock Exchange	Stock Code
1. BSE Limited Phiroze Jeejeebhoy Towers, Dalal Street, Mumbai - 400 001	500103
2. National Stock Exchange of India Limited Exchange Plaza, Plot no. C/1, Block - G, Bandra Kurla Complex, Bandra (East), Mumbai - 400 051	BHEL

In addition, the Commercial Papers issued by the Company are also listed on BSE & NSE.

b) Payment of Annual Custodian Fee to Depositories

The Annual Custodian fee has been paid to NSDL and CDSL for the financial year 2020-21.

v. The High, Low, Close & Volume of BHEL shares and market index during each month in the financial year 2020-21 at BSE & NSE are indicated below:

Market Price Data: High, Low, Close during each month in the financial year 2020-21										
Months	BSE				NSE				Market Index (Close)	
	High	Low	Close	Volume	High	Low	Close	Volume	S&P BSE SENSEX	NSE NIFTY
	(in ₹)			(No. of shares in Crore)	(in ₹)			(No. of shares in Crore)		
Apr-20	23.50	20.40	22.40	2.99	23.35	20.40	22.45	48.85	33717.62	9859.90
May-20	29.30	20.90	27.95	10.76	29.25	20.90	28.00	167.02	32424.10	9580.30
Jun-20	39.80	26.40	35.70	15.04	39.80	26.40	35.70	209.04	34915.80	10302.10
Jul-20	44.35	35.40	35.95	9.97	44.40	35.40	35.95	151.35	37606.89	11073.45
Aug-20	42.35	34.90	38.55	7.67	42.45	34.75	38.55	120.73	38628.29	11387.50
Sep-20	40.35	28.90	29.30	5.04	40.40	28.85	29.25	81.80	38067.93	11247.55
Oct-20	30.40	26.75	28.00	3.35	30.40	26.75	28.00	41.14	39614.07	11642.40
Nov-20	33.45	26.95	32.85	7.34	33.45	26.95	32.85	84.81	44149.72	12968.95
Dec-20	37.60	30.60	35.90	9.89	37.60	30.60	35.90	106.28	47751.33	13981.75
Jan-21	42.25	35.15	36.05	13.81	42.30	35.10	36.05	124.54	46285.77	13634.60
Feb-21	48.80	35.45	47.65	16.89	48.80	35.40	47.60	183.14	49099.99	14529.15
Mar-21	56.50	46.90	48.75	16.83	56.50	46.90	48.75	188.07	49509.15	14690.70

Source: www.bseindia.com / www.nseindia.com

vi. Policy on Insider Trading

BHEL endeavours to preserve the confidentiality of unpublished price sensitive information and to prevent misuse of such information. For this purpose and in line with the SEBI (Prohibition of Insider Trading) Regulations, 1992, the Company had adopted "Code of Conduct for Prevention of Insider Trading" on August 26, 2002 which was subsequently revised w.e.f. January 29, 2009.

The Board, in its 469th meeting held on April 6, 2015, approved the 'Code of Conduct for Regulating & Reporting Trading by Insiders and for Fair Disclosure, 2015' in line with SEBI (Prohibition of Insider Trading) Regulations, 2015. In pursuance to SEBI (Prohibition of Insider Trading) (Amendment) Regulations, 2018, the Board had also approved the revised BHEL Code of Conduct for Regulating & Reporting Trading by Designated Persons & their Immediate Relatives and for Fair Disclosure effective from 01.04.2019. The objective of the Code is to regulate, monitor and report trading by Designated Persons and Immediate Relatives of Designated Persons towards achieving compliance with SEBI (Prohibition of Insider Trading) Regulations, 2015, as amended. The Code also provides for practices and procedures for fair disclosure of Unpublished Price Sensitive Information. Head-Corporate Strategic Management Department is the Chief Investor Relations Officer of the company under this code.

vii. (A) Registrar & Share Transfer Agent for Equity Shares (RTA)

The Company has appointed M/s Alankit Assignments Limited in

place of M/s KFin Technologies Private Limited, as its Registrar and Share Transfer Agent (RTA) w.e.f. 01.01.2021 for handling all matters relating to the Equity shares of BHEL (both physical as well as demat mode). All matters relating to the Equity shares of the Company such as transfer, transmission, dematerialization, rematerialisation, dividend, change of address, etc. and related correspondence and queries may be addressed to:-

M/s Alankit Assignments Limited
Unit: Bharat Heavy Electricals Limited
 4E/2, Alankit House, Jhandewalan Extension,
 New Delhi-110055
 Tel No.: 011-42541234
 Fax No.: 011-23552001
 Email: rta@alankit.com
 Website: www.alankit.com

(B) Registrar & Share Transfer Agent for Commercial Papers:

M/s KFin Technologies Private Limited
 Selenium Tower B, Plot 31-32,
 Gachibowli Financial District, Nanakramguda,
 Hyderabad – 500 032
 Tel. No. : 040- 67162222
 Fax No. : 040- 23001153
 E-mail : einward.ris@kfintech.com
 Website : www.kfintech.com

RTA's performance in servicing shareholders has been satisfactory. All the investor grievances have been promptly attended to.

viii. Share Transfer System

All share transfer activities under physical segment like receipt/dispatch of documents and their verification are being carried out by M/s Alankit Assignments Limited. As per SEBI (Listing Obligations and Disclosure Requirements (Fourth Amendment) Regulations, 2018, w.e.f. 01.04.2019, requests for effecting transfer of securities (except in case of transmission or transposition of securities) shall not be processed unless the securities are held in the dematerialized form. In line with the Listing Regulations, share certificates are being issued within the timeline prescribed for transmission, transposition, sub-division and consolidation.

ix. Distribution of Shareholding

i. Distribution of shares according to size of holding as on March 31, 2021

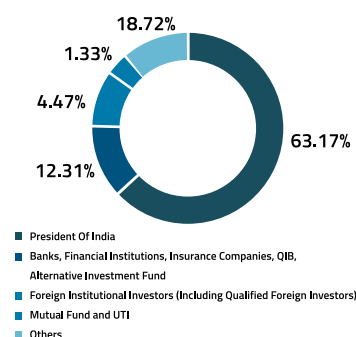
No. of equity share(s) held	No. of Shareholders	% of Shareholders	No. of Shares	% of Shareholding
1 - 500	826102	81.49	110071938	3.16
501 - 1000	93020	9.18	75649152	2.17
1001 - 2000	48879	4.82	74637450	2.14
2001 - 3000	16454	1.62	42699961	1.23
3001 - 4000	7125	0.70	25821702	0.74
4001 - 5000	6681	0.66	31879251	0.92
5001 - 10000	9088	0.90	68369712	1.96
10001 and above	6410	0.63	3052934189	87.68
Total	1013759	100	3482063355	100

ii. Shareholding Pattern as on March 31, 2021

Category	2021		2020	
	Voting strength (%)	No. of Shares held	Voting strength (%)	No. of Shares held
Promoters Holding				
Indian Promoters-				
President of India (POI)	63.17	2199650402	63.17	2199650402
Total Promoter Holding	63.17	2199650402	63.17	2199650402
Non-promoters Holding				
Banks, Financial Institutions, Insurance Companies, Qualified Institutional Buyers, Alternative Investment Fund	12.31	428740274	12.28	427674203
Foreign Institutional Investors (including Qualified Foreign Investors)	4.47	155519893	9.36	325989415
Mutual Funds and UTI	1.33	46172073	5.62	195826511
Others				
Individuals	16.65	579818714	8.00	278542017

Category	2021		2020	
	Voting strength (%)	No. of Shares held	Voting strength (%)	No. of Shares held
Bodies Corporate	0.69	23948963	0.80	27825151
NRIs & Foreign National/ Entity	0.72	24980324	0.41	14205495
Trust	0.01	462075	0.11	3680869
Clearing Members	0.64	22402985	0.24	8337813
IEPF	0.01	366052	0.01	331267
Directors & Relatives	0	100	0	212
State Govt.	0	1500	0	0
Total Non-promoter Holding	36.83	1282412953	36.83	1282412953
Grand Total	100.00	3482063355	100.00	3482063355

Shareholding Pattern as on March 31, 2021



iii. List of shareholders who are holding more than 1% of the shares of the Company as on March 31, 2021

Category & Shareholder's Name	March 31, 2021	
	Voting strength	No. of shares held
Promoters		
President of India	63.17	2199650402
Non-promoters		
Life Insurance Corporation of India	10.07	350647914

x. Dematerialisation of shares and liquidity

In accordance with the directions of the Securities & Exchange Board of India (SEBI), trading in BHEL shares by all categories of investors in demat form has been made compulsory w.e.f. April, 5, 1999. BHEL has executed agreement with both the depositories of the country i.e. National Securities Depository Limited (NSDL) and Central Depository Services (India) Limited (CDSL) for admission of its securities under demat mode. As on March, 31, 2021, 99.97% (NSDL: 91%, CDSL: 8.97%) of the total equity share capital of BHEL is being held in demat mode by the shareholders. Shares held in physical mode by the shareholders are 0.03%. Shareholding of Hon'ble President of India (being the Promoter of the Company holding 63.17% of the paid-up share capital of the Company) is also held in dematerialized form. The International Securities Identification Number (ISIN) allotted to the Company is INE257A01026.

xi. Outstanding GDRs / ADRs / Warrants or any convertible instruments, conversion date and likely impact on equity:

Nil

xii. List of Credit Ratings received during the year is disclosed in the main Report of the Board of Directors.
xiii. Foreign Exchange risk or Commodity price risk and hedging activities

Hedging activities/transactions during the financial year 2020-21 has been undertaken by the Company in line with the Board approved Foreign Exchange Risk Management Policy.

Exposure of the listed entity to commodity and commodity risks faced by the entity throughout the year:

a) Total exposure of the listed entity to commodities in INR: ₹1438 Crore (approx.)

b) Material exposure of the listed entity to various commodities:

Commodity Name	Exposure in INR towards the particular commodity (in ₹ Crore) (approx.)	Exposure in Quantity terms towards the particular commodity (in MT) (approx.)	% of such exposure hedged through commodity derivatives				
			Domestic market		International market		Total
			OTC	Exchange	OTC	Exchange	
Steel	1040	195723	-				
Copper	350	5095	-				
Aluminium	30	1400	-				
Nickel	15	120	-				
TIN	3	22	-				

c) Major Industrial commodities like Steel, Copper, Aluminum etc. are being procured centrally by one of the identified units by bulking the requirements of various BHEL units, to the extent possible, to derive price advantage. To insulate the Company against price fluctuations, Framework Agreements are finalized periodically.

xiv. Plant locations

BHEL Manufacturing Units	
Bengaluru	1. Electronics Division (EDN)
	2. Electronics Systems Division (ESD)
	3. Solar Business Division (SBD)
Bhopal	4. Heavy Electrical Plant (HEP)
Goindwal	5. Industrial Valves Plant (IVP)
Haridwar	6. Heavy Electrical Equipment Plant (HEEP)
	7. Central Foundry Forge Plant (CFFP)
Hyderabad	8. Heavy Power Equipment Plant (HPEP)
Jagdishpur	9. Fabrication, Stamping & Insulator Plant (FSIP)
Jhansi	10. Transformer Plant (TP)
Rudrapur	11. Component Fabrication Plant (CFP)
Ranipet	12. Boiler Auxiliaries Plant (BAP)
Tiruchirappalli	13. High Pressure Boiler Plant (HPBP)
	14. Seamless Steel Tube Plant (SSTP)
Thirumayam	15. Power Plant Piping Unit (PPPU)
Visakhapatnam	16. Heavy Plates & Vessels Plant (HPVP)
BHEL Repair Units	
Mumbai	1. Electrical Machine Repair Plant (EMRP)
Varanasi	2. Heavy Equipment Repair Plant (HERP)
BHEL Subsidiary	
Kasaragod	1. BHEL Electrical Machines Ltd. (BHEL-EML)

xv. Address for correspondence

Shareholders can send their queries regarding transfer of shares, non-receipt of dividend, revalidation of dividend warrants and any other correspondence relating to the shares of the Company either to:

M/S ALANKIT ASSIGNMENTS LIMITED**UNIT: BHEL****Delhi:**

4E/2, Alankit House,
Jhandewalan Extension,
New Delhi – 110055

Phone: 011-42541234
Fax: 011-23552001
Email: rta@alankit.com

OR

Shri Rajeev Kalra
Company Secretary

Phone: 011-26001046
Fax : 011-66337533
Email : shareholderquery@bhel.in

BHEL

Regd. Office: BHEL House,
Siri Fort, New Delhi – 110 049

Note: Shareholders holding shares in electronic mode should address all correspondence to their respective depository participants.

Declaration: Pursuant to Listing Regulations, it is hereby declared that all the Board members and Senior Management personnel have affirmed compliance with BHEL's "Code of Business Conduct and Ethics" for the financial year 2020-21.

**For and on behalf of the Board of Directors of
BHARAT HEAVY ELECTRICALS LTD.**



Dr. Nalin Shinghal
Chairman & Managing Director

Place: New Delhi
Dated: 27.08.2021

CERTIFICATE OF NON-DISQUALIFICATION OF DIRECTORS

{pursuant to Regulation 34(3) and Schedule V Para C clause 10(i) of the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015}

To
The Members,
Bharat Heavy Electricals Limited
BHEL House, Siri Fort
New Delhi-110049

We have examined the relevant registers, records, forms, returns and disclosures received from the Directors of Bharat Heavy Electricals Limited having CIN: L74899DL1964GOI004281 and having registered office at BHEL House, Siri Fort, New Delhi-110049 (hereinafter referred to as 'the Company'), produced before us by the Company for the purpose of issuing this Certificate, in accordance with Regulation 34(3) read with Schedule V Para C clause 10 (i) of the Securities & Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015.

In our opinion and to the best of our information and according to the verifications (including Directors Identification Number (DIN) status at the portal www.mca.gov.in) as considered necessary and explanations/ representations furnished to us by the Company & its Director/ officers, we hereby certify that none of the Directors on the Board of the Company as stated below for the Financial Year ending on 31st March, 2021 have been debarred or disqualified from being appointed or continuing as Directors of companies by the Securities & Exchange Board of India, Ministry of Corporate Affairs, or any such other Statutory Authority:

Sr. No.	Name of Director (as per DIN)	DIN	Date of appointment in Company
1	Nalin Shinghal	01176857	08.07.2019
2	Shashank Priya	08538400	04.10.2019
3	Amit Mehta	08859397	02.09.2020
4	Rajesh Sharma	01586332	20.02.2019
5	Raj Kamal Bindal	07423392	31.01.2020
6	Manish Kapoor	02405818	31.01.2020
7	Subodh Gupta	08113460	18.04.2018
8	Kamalesh Das	08376769	01.03.2019
9	Anil Kapoor	08587329	15.10.2019
10	Renuka Gera	08970501	01.12.2020

Ensuring the eligibility of the appointment/ continuity of every Director on the Board is the responsibility of the management of the Company. Our responsibility is to express an opinion on these based on our verification. This certificate is neither an assurance as to the future viability of the Company nor of the efficiency or effectiveness with which the management has conducted the affairs of the Company.

SPNG & Associates
Practicing Company Secretaries



FRN: P2021DE086300
CS P.N Gupta
C.P. NO. : 6778
FCS NO: 4430
UDIN: F004430C000317699

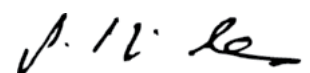
Place: New Delhi
Date: 15 May, 2021

CERTIFICATE ON COMPLIANCE WITH THE CONDITIONS OF CORPORATE GOVERNANCE

The Members,

Bharat Heavy Electricals Limited

1. I have examined the compliance conditions of Corporate Governance by Bharat Heavy Electricals Limited (CIN:L74899DL1964GOI004281) for the year ending 31st March 2021 as stipulated in the Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015 (Listing Regulations) and the Guidelines on Corporate Governance for Central Public Sector Enterprises (CPSEs) issued by the Department of Public Enterprises (DPE), Ministry of Heavy Industries and Public Enterprises, Government of India in May, 2010.
2. The compliance of the conditions of Corporate Governance is the responsibility of the Management. My examination was limited to procedures and implementations thereof, adopted by the Company, for ensuring the compliance of the conditions of Corporate Governance. It is neither an audit nor an expression of opinion on the financial statements of the Company.
3. In my opinion and to the best of my information and according to the explanations and assurance given to me, I certify that the Company has complied with all applicable conditions of Corporate Governance as stipulated in the Listing Regulations and Guidelines on Corporate Governance for CPSEs issued by DPE, *except Regulation 17(1)(a) and (b) of the Listing Regulations and Clause 3.1.4 of the DPE Guidelines, as the Company did not have requisite number of independent directors on its Board including at-least one independent woman director.*
4. The Company has explained that BHEL, being a Government Company, the appointment of the Independent Directors is made by the Govt. of India. The Company is in constant communication with the Department of Heavy Industry, Ministry of Heavy Industries and Public Enterprises, Government of India, for the appointment of requisite number of Independent Directors including at least one independent woman director on its Board.
5. I further state that such compliance is neither an assurance as to the future viability of the Company nor the efficiency or the effectiveness with which the management has conducted the affairs of the Company.
6. I have conducted on line verification and examination of records, as facilitated by the Company due to Covid 19 for the purpose of issuing the Certificate.



(P.S.R. Murthy)

Practicing Company Secretary
UDIN: A005880C000395874

Place: New Delhi

Date: 31st May 2021

Form No. MR-3

SECRETARIAL AUDIT REPORT FOR THE FINANCIAL YEAR ENDED ON MARCH 31, 2021

[Pursuant to Section 204(1) of the Companies Act, 2013 and Rule 9 of the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014]

To,

The Members,

Bharat Heavy Electricals Limited

We have conducted the Secretarial Audit of the compliance of applicable statutory provisions and the adherence to good corporate practices by Bharat Heavy Electricals Limited, CIN: L74899DL1964GOI004281 (hereinafter called 'the Company' or 'BHEL'). The Secretarial Audit was conducted in a manner that provided us a reasonable basis for evaluating the corporate conducts/statutory compliances and expressing our opinion thereon.

Based on our verification of the Company's books, papers, minute books, forms and returns filed and other records maintained by the Company and also the information provided by the Company, its officers, agents and authorized representatives during the conduct of secretarial audit, we hereby report that in our opinion, the Company has, during the audit period covering the financial year ended on 31st March, 2021 complied with the statutory provisions listed hereunder and also that the Company has proper board-processes and compliance-mechanism in place to the extent, in the manner and subject to the reporting made hereinafter.

We have examined the books, papers, minute books, forms and returns filed and other records maintained by the Company for the financial year ended on 31st March, 2021 according to the provisions of:

- (i) The Companies Act, 2013 ('the Act') and the rules made thereunder;
- (ii) The Securities Contracts (Regulation) Act, 1956 ('SCRA') and the rules made thereunder;
- (iii) The Depositories Act, 1996 and the regulations and bye-laws framed thereunder;
- (iv) The Foreign Exchange Management Act, 1999 and the rules and regulations made thereunder to the extent of Foreign Direct Investment, Overseas Direct Investment and External Commercial Borrowings;
- (v) The following Regulations and Guidelines prescribed under the Securities and Exchange Board of India Act, 1992 ('SEBI Act'): -
 - (a) The Securities and Exchange Board of India (Substantial Acquisition of Shares and Takeovers) Regulations, 2011;
 - (b) The Securities and Exchange Board of India (Prohibition of Insider Trading) Regulations, 2015;
 - (c) The Securities and Exchange Board of India (Issue of Capital and Disclosure Requirements) Regulations, 2018 (Not applicable to the Company during the audit period);
 - (d) The Securities and Exchange Board of India (Share Based Employee Benefits) Regulations, 2014 (Not applicable to the Company during the audit period);
 - (e) The Securities and Exchange Board of India (Issue and Listing of Debt Securities) Regulations, 2008 (Not applicable to the Company during the audit period);
 - (f) The Securities and Exchange Board of India (Registrars to an Issue and Share Transfer Agents) Regulations, 1993 regarding the Companies Act and dealing with client;
 - (g) The Securities and Exchange Board of India (Delisting of Equity Shares) Regulations, 2009 (Not applicable to the Company during the audit period);
 - (h) The Securities and Exchange Board of India (Buy-back of Securities) Regulations, 2018 (Not applicable to the Company during the audit period); and
 - (i) The Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015.
- vi) We further report that, having regard to the compliance system prevailing in the Company and on examination of the relevant documents and records in pursuance thereof, on test-check basis, the Company has complied with all the specific applicable laws to the Company including:
 - (a) Atomic Energy (Radiation Protection) Rules, 2004;
 - (b) Batteries (Management and Handling) Rules, 2001;

- (c) Factories Act, 1948;
- (d) The Indian Boilers Act, 1923; and
- (e) Manufacturing, Storage and Import of Hazardous Chemical Rules, 1989.

We have also examined compliance with the applicable clauses of the following:

- i. Secretarial Standards with regard to Meetings of the Board of Directors (SS-1) and General Meetings (SS-2) issued by the Institute of Company Secretaries of India; and
- ii. Corporate Governance Guidelines issued by the Department of Public Enterprises vide their OM No. 18(8)/2005-GM dated 14th May, 2010.

During the period under review the Company has complied with the provisions of the Act, Rules, Regulations, Guidelines, Standards etc. mentioned above subject to the following observation:

The composition of the Board of Directors is not in compliance with Regulation 17(1) of the Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015 and Para 3.1.4 of the DPE Guidelines on Corporate Governance as the Company did not have requisite number of independent directors including atleast one independent woman director on its Board.

The Company has explained that BHEL, being a Government Company, the nomination/ appointment of independent directors is made by the Government of India. The Company has already requested the Department of Heavy Industry in the Ministry of Heavy Industries, Government of India for nomination of requisite number of independent directors including atleast one independent woman director on its Board.

We further report that the changes in the Board of Directors that took place during the period under review were carried out in due compliance with the provisions of the Act.

Generally, adequate notice is given to all Directors to schedule the Board Meetings and agenda and detailed notes on agenda were sent atleast seven days in advance, and a system exists for seeking and obtaining further information and clarifications on the agenda items before the meeting and for meaningful participation at the meeting.

As per the minutes of the meetings duly recorded and signed by the Chairman, the decisions of the Board were unanimous in all cases and no dissenting views have been recorded.

We further report that based on the review of compliance mechanism established by the Company and on the basis of the Certificates of Legal Compliance taken on record by the Board of Directors at their meetings, we are of the opinion that there are adequate systems and processes in the Company commensurate with the its size and operations to monitor and ensure compliance with applicable laws, rules, regulations and guidelines.

We further report that during the audit period, there were no specific events/actions having a major bearing on the Company's affairs in pursuance of the above referred laws.

For P. P. AGARWAL & CO.
Company Secretaries



Pramod Prasad Agarwal
Proprietor
M.No. F4955, C.P. No. 10566
P.R.C. No. 1241/2021
UDIN: F004955C000491650

Place: New Delhi
Date: 21.06.2021

This report is to be read with our letter of even date which is annexed as "Annexure A" and forms an integral part of this report.

"Annexure A"

To,
The Members,
Bharat Heavy Electricals Limited

Our report of even date is to be read along with this letter.

1. Maintenance of secretarial record is the responsibility of the management of the Company. Our Responsibility is to express an opinion on these secretarial records based on our audit.
2. We have followed the audit practices and processes as were appropriate to obtain reasonable assurance about the correctness of the contents of the secretarial records. The verification was done on test check basis to ensure that correct facts are reflected in secretarial records. We believe that the processes and practices, we followed provide a reasonable basis for our opinion.
3. We have not verified the correctness and appropriateness of financial records and Books of Accounts of the Company.
4. We have physically checked records during the course of major part of the Audit. However, due to spread of COVID-19 pandemic and consequent lockdown of work places/ offices, we conducted online verification and examination of balance records, as facilitated by the Company in the latter part of the audit.
5. Wherever required, we have obtained the Management representation about the proper compliance of laws, rules, regulations etc.
6. The Compliance of the provisions of corporate and other applicable laws, rules, regulations, standards is the responsibility of the management. Our examination was limited to the verification of procedures on test check basis.
7. The Secretarial Audit Report is neither an assurance as to future viability of the Company nor of the efficacy or effectiveness with which the management has conducted the affairs of the Company.

For P. P. AGARWAL & CO.
Company Secretaries



Pramod Prasad Agarwal
Proprietor
M.No. F4955, C.P. No. 10566
P.R.C. No. 1241/2021
UDIN: F004955C000491650

Place: New Delhi
Date: 21.06.2021

Annexure-III to the Board's Report

CEO and CFO Certification

(in terms of Regulation 17(8) of SEBI (LODR) Regulations 2015)

To,
The Board of Directors
Bharat Heavy Electricals Ltd.,
New Delhi.

- (a) We have reviewed Financial Statements and the Cash Flow statement of Bharat Heavy Electricals Limited for the year ended 31st March, 2021 and that to the best of our knowledge and belief:
- (i) These statements do not contain any materially untrue statement or omit any material fact or contain statements that might be misleading;
 - (ii) These statements together present a true and fair view of the company's affairs and are in compliance with the applicable Ind AS, laws and regulations.
- (b) There are, to the best of our knowledge and belief, no transactions entered into by the company during the year 2020-21 which are fraudulent, illegal or violative of the Company's Code of Conduct.
- (c) We accept responsibility for establishing and maintaining internal controls for financial reporting and that we have evaluated the effectiveness of the internal control systems of the Company pertaining to financial reporting and we have disclosed to the Auditors and the Audit Committee, deficiencies in the design or operation of such internal controls, if any, of which we are aware and the steps we have taken or propose to take to rectify these deficiencies.
- (d) We have indicated to the Auditors and the Audit Committee.
- (i) Significant changes, if any, in internal control over financial reporting during the year 2020-21;
 - (ii) Significant changes, if any, in the accounting policies during the year 2020-21 and the same have been disclosed in the notes to the financial statements; and
 - (iii) Instances of significant fraud of which we have become aware and the involvement therein, if any, of the management or an employee having a significant role in the company's internal control system over financial reporting.



(Subodh Gupta)
Director (Finance)



(Dr. Nalin Shinghal)
Chairman & Managing Director

Place: New Delhi
Date: June 11, 2021

SUSTAINABLE DEVELOPMENT





Annexure-IV to the Board's Report

4.1 Sustainability Performance –Environmental

Commitment to the tenets of Sustainable Development is embedded in our business processes. BHEL manages its environmental impact across the entire manufacturing value chain in a responsible manner. Internally, various initiatives are in place to optimally manage key aspects of materials, water, energy, emissions and biodiversity in the larger interest of society. In addition, we also facilitate our customers in managing their environmental and social impacts throughout the entire operational lifecycle of the power plants by offering them state-of-the-art engineering and technology inputs for reducing greenhouse gas emissions - as well as water consumption, better heat rate, less auxiliary power consumption with less fuel requirement resulting in lesser environmental footprint of our products and services.

In the following sections, glimpses of activities carried out under sustainable development is presented for the year 2020-21

4.1.1 Responsible Material & Natural Resource Consumption

As an organization involved in manufacturing of plethora of products & systems, BHEL is well aware of its responsibility towards sustainable use of natural resources including raw material. Towards resource conservation activities, the principle of reduce-recycle-reuse is extensively used in our planning and operations. Activities like reuse of scrap in our manufacturing unit for instance reuse of 1200 MT of Mild Steel Scrap and 32 MT of copper scrap in the foundry shop of Bhopal, despatch of scrap to CFFP Haridwar by sister units for manufacturing of large castings and forgings, reuse of packing wood to make cupboard for storage & packaging of products, rescue of waste oil and recycling of hydraulic oil optimization of nesting plan for sheet cutting to avoid wastage, recovery of 35 MT of oil from the oil skimmer and coolant treatment plant at HEEP Haridwar, reclamation and reuse of 820 MT of sand in foundry shop of HEP Bhopal are some of the activities reflecting our efforts towards sustainable natural resource consumption in our operations during 2020-21.

4.1.2 Energy Management

Sustainable use of energy across our premises is an important element of business decision making process. We have taken numerous activities in energy conservation / efficiency which has resulted in lot of saving in our energy consumption. Some of our units which have been considered as energy intensive, have undergone through detailed energy audit process and subsequently obtained ISO 50001 certification to harness energy saving opportunities to the extent feasible. Reduction in lighting load through switching to energy efficient lighting fixtures in offices/street lighting is a regular activity in our organization. Activities like reconditioning of refractory bricks of 10 Ton Furnace leading to efficient utilization and reduction in fuel consumption at BAP Ranipet, optimization of capacity of air compressor at EDN Bengaluru and HEEP Haridwar, replacement of 538 Nos. 1& 2 - star ACs with latest 5-star rated ACs and replacement of LPG Cylinder by PNG Gas by laying Natural Gas Line for Canteen no. 3 & 5 at HEEP Haridwar, overhauling and modification in hydraulic circuit of innocent milling column machine at HEP Bhopal, etc. are some examples of the activities carried out during 2020-21 related to energy conservation / efficiency.

Generation of Renewable Energy for captive use has gained momentum in the recent years in our organization. Now we have nearly 28 MWe installed capacity of solar power plant comprising of ground mounted as well as rooftop solar systems. It has resulted into lesser dependence on DG sets and achieve sustainable energy mix in our operations. During the year 2020-21, a total of 27.2 Million Units of green energy was generated across our company.

4.1.3 Water and Biodiversity Management

Water is a very precious natural resource and managing water & wastewater sustainably and enhancing the green cover across our premises are important elements of our business activities. 12 Sewage Treatment Plants and 12 Effluent Treatment Plants installed across our premises help us in meeting the discharge norms and making most of our units Zero Liquid Discharge (ZLD) entities. Further, to maintain the green belt across our establishments, treated wastewater is reused for horticultural purpose which helps us in reducing the demand for fresh water.

At our units, superannuating employees and visiting dignitaries plant the sapling to mark the occasion. Further World Environment Day is a day of mass tree plantation across our unit. Overall nearly 35,500 saplings were planted across BHEL during 2020-21 to enhance our verdant cover and will act as carbon sink in future.

4.1.4 Carbon Management

Our efforts in energy conservation/efficiency, increasing greenery in our premise, development of cleaner products, use of cleaner fuel in our operations, use of piped gas wherever feasible avoidance carriage of fuel thorough transport – all of them help us in reducing our carbon footprint also. During the year 2020-21, we have



5MW in-house Solar PV installation at BAP, Ranipet for captive power generation

avoided nearly 26,118 Metric Tons of Carbon Dioxide emission due to generation of renewable energy in our premises.

4.1.5 Waste Management

In our process reduction of generation of waste is taken as a very important activity and our nesting plan for cutting of metal sheet is made in such a way to take care of this aspect. However, once the scrap is generated, it is either used in the local foundry shop for making castings/forgings or sent to CFFP Haridwar / authorised recycler for melting into the furnace for avoidance of virgin material consumption.



Inauguration of 7 MLD capacity Sewage Treatment Plant (STP) at HEEP, Haridwar

The hazardous waste generated at units are disposed as per the regulatory requirement and necessary records for scrutiny of authority is duly maintained.

Some of the specific activities related to responsible waste management conducted during 2020-21 included establishment of a 500 Kg/Day bio-gas plant to utilise kitchen waste and generate energy at HEP Bhopal, development of hazardous waste storage area in HEEP Haridwar, wormicomposting of kitchen waste at HERP Varanasi, set up an incinerator which works using the Controlled Oxygen Rotating Technology (CORT) to incinerate the solid wastes generated inside Factory and Township premises at BAP Ranipet etc.

As a special initiative to fight plastic pollution, BHEL has taken tremendous effort to ensure that all our townships are made "Single Use Plastic Free" and got 3rd party certification for the same for these 14 townships.

4.2 Sustainability Performance – Social

For its CSR initiatives, BHEL has identified Seven Thrust Areas. These are elaborated in BHEL's CSR policy. All the activities in these thrust areas are in line with activities and areas mentioned in Schedule VII of the Companies Act, 2013. Brief description of some key interventions during the year, in these thrust areas, are given below:

Clean India

- BHEL continued with its program for constructing Bio-digester toilets in Haridwar & Rishikesh. Twenty-Two clusters of these Bio-digester toilets have been completed.
- Construction of toilets block in Christian cemeteries located in Bairagarh & Bhadbhada area of Bhopal.



Inauguration of Bio-digester toilets constructed by BHEL at Haridwar and Rishikesh

Educated India

- Distribution of scholarship to 44 Widow Ward / Orphan / PH school students in BHEL adopted villages and 15 physically challenged ITI students.
- Financial support for construction of Tin shed at Govt. Hr. Primary School, Lunkaransar, Bikaner (Rajasthan).
- Financial support for construction of Tin shed & Chowki at Govt. Sr. Sec. School, Janglu, Bikaner (Rajasthan)



Bicycles handed over to girl students by BHEL Jhansi



Financial support to ALIMCO for distribution of aids and appliances at aspirational districts of the country

Healthy India

- Providing Anti Hemophilic Factors (AHF) to Persons & Children with Hemophilia (P & Cwh) in various Aspirational Districts across India under our CSR initiative "Heal-A-Soul IV"
- Financial support to "Nav Bharat Jagriti Kendra (NBJK), Hazaribag (Jharkhand)" for free cataract surgery of cataract-blind patients from nearby areas in Bihar and Jharkhand
- Financial support to the Artificial Limbs Manufacturing Corporation of India (ALIMCO) for distribution of Aids and Appliances to Divyangjan at Aspirational Districts Haridwar (Uttarakhand), Khammam (Telangana), Damoh (Madhya Pradesh), Khagaria (Bihar).
- Financial support to the "Cure International India Trust (CIIT), New Delhi" for treating children born with club foot disability using ponseti method at Rishikesh (Uttarakhand), Jhansi (UP), Guwahati (Assam) and Bhubaneshwar (Odisha), covering

patients from nearby areas, including aspirational districts".

- Financial support to HelpAge India for providing service of 03 (three) Mobile Healthcare Units, one each at Satpura (MP), Bikaner (Rajasthan) & Noida (UP).
- Financial Support to NGO - "Cankids KidsCan" for Providing Medical Assistance to 200 children aged between 0-19 and Medical Equipment for Hospitals & Palliative Care Centre for the Children suffering from Cancer across India (covering Aspirational Districts).

Responsible India

- Financial support for construction of Bridge and Road across the canal at Makali to Harokyathanahalli, Dasanapura Hubli, Bangalore North Taluk.
- Distribution of wheel chairs to rural poor people, Chennai, Tamil Nadu



BHELMister was used to sanitise ghats during Kumbh Mela 2021



Several health camps organised by BHEL during COVID period



Inclusive India

- Financial support to Municipal Commissioner, Varanasi for Installation of Heritage Street Lighting system in Varanasi.
- Financial support to the "Professional Assistance for Development Action (PRADAN)" for the project: Motivating AgRarian communities of Aspirational District Kandhamal (Odisha) for their Economic Transformation.
- Vocational & Skill Development Training to Differently Abled & Visually Impaired Children, Vizag, Andhra Pradesh.

Disaster Relief

- Distribution of essential grocery items to the affected families of workers during flash flood in Chamoli distt, Uttarakhand.



Skill development training given to women in various trades through BHEL Ladies Club at its major units

4.3 Annual Report for CSR Activities

(as per the requirement of The Companies (CSR Policy) Rules, 2014)

- 1 Brief outline on CSR Policy of the Company. **(Annexure-A)**
- 2 Composition of CSR Committee

S. No.	Name of Director	Designation/ Nature of Directorship	Number of meetings of CSR Committee Held during the year	Number of meeting of CSR Committee attended during the year
1	Ranjit Rae, Independent Director (upto September 11, 2020)	Chairperson	2	2
2	Manish Kapoor Independent Director	Chairperson (w.e.f. September 12, 2020) Member (w.e.f. May 29, 2020 upto September 11, 2020)	1 2	1 2
3	Amit Varadan, JS, DHI, Part-time Official Director (upto September 2, 2020)	Member	2	2
4	Amit Mehta, JS, DHI, Part-time Official Director (upto February 5, 2021)	Member (w.e.f. September 2, 2020)	1	1
5	Rajesh Sharma, Independent Director	Member	3	3
6	Subodh Gupta Director (Finance)	Member	3	3
7	Anil Kapoor Director (HR)	Member	3	3

Head (CSR), Corporate Office is Permanent Invitee. Company Secretary acts as Secretary to the Committee.

3. Provide the web-link where Composition of CSR Committee, CSR Policy and CSR Projects approved by the Board are disclosed on the website of the Company

Web-link ----- <https://www.bhel.com/csr>

4. Provide the details of Impact assessment of CSR Projects carried out in pursuance of sub-rule (3) of rule 8 of the Companies (Corporate Social Responsibility Policy) Rules, 2014, if applicable (attach the report).

An Impact Assessment of following completed CSR project valuing more than ₹1.00 Crore was got done from external agency. The details of project are as below.

Project	Implementing Agency	Impact Assessment done by
Construction of cemented roads, drains, community halls, boundary wall, etc. in villages of Bhandara District, Maharashtra	PWD, Maharashtra	M/s Surya Envirotech, Nagpur, Maharashtra

Executive summary of Impact assessment report is attached as **Annexure-B**

Detailed Impact Assessment report is available at the web link---- <https://www.bhel.com/csr>

5. Details of the amount available for set off in pursuance of sub-rule (3) of rule 7 of the Companies (Corporate Social Responsibility Policy) Rules, 2014 and amount required for set off for the financial year, if any

S.No.	Financial Year	Amount available for set-off from preceding Financial Year (in ₹)	Amount required to be set-off for the Financial Year, if any (in ₹)
	Nil	NIL	NIL
	Total		

6. Average net profit of the company as per section 135 (5) ₹1009.00 Crore
7. (a) Two percent of average net profit of the company as per section 135 (5) ₹20.18 Crore
- (b) Surplus arising out of the CSR Projects or Programmes or activities of the previous Financial Years. Nil
- (c) Amount required to be set off for the Financial Year, if any. Nil
- (d) Total CSR obligation for the Financial Year (7a + 7b + 7c) ₹20.18 Crore
8. (a) CSR amount spent or unspent for the Financial Year:

Total Amount Spent for the Financial Year (in ₹)	Amount Unspent (in ₹)				
	Total Amount transferred to Unspent CSR Account as per Section 135 (6)		Amount transferred to any fund specified under Schedule VII as per second proviso to section 135 (5)		
	Amount (In ₹Lakh)	Date of Transfer	Name of the Fund	Amount	Date of Transfer
1441.99 Lakh	2126.95	30.04.2021	Nil	Nil	N/A

(b) Details of CSR amount spent against ongoing projects for the financial year: **₹466.35 Lakhs Attached Annexure-C**

(c) Details of CSR amount spent against other than ongoing projects for the financial year: **₹903.54 Lakhs**

Attached Annexure-D

(d) Amount spent in Administrative Overheads-----**₹69.92 Lakh**

(e) Amount spent on Impact Assessment, if applicable----**₹2.18 Lakh**

(f) Total amount spent for the Financial Year -----**₹1441.99 Lakh**

(8b + 8c + 8d + 8e)

(g) Excess amount for set off, if any-----**Nil**-----

S. No.	Particular	Amount (in ₹lakh)
(i)	Two percent of average net profit of the company as per section 135 (5)	2018.00
(ii)	Total amount spent for the Financial Year	1441.99
(iii)	Excess amount spent for the financial year [(ii) – (i)]	Nil
(iv)	Surplus arising out of the CSR projects or programmes or activities of the previous financial years, if any	Nil
(v)	Amount available for set off in succeeding financial years [(iii) – (iv)]	Nil

9. (a) Details of Unspent CSR amount for the preceding three financial years:

S. No.	Preceding Financial Year	Amount transferred to Unspent CSR A/c under Sec 135 (6) (in ₹ Lakh)	Amount spent in the reporting Financial Year (in ₹ Lakh)	Amount transferred to any fund specified under Sch. VII as per sec. 135 (6), If any			Amount remaining to be spent in succeeding Financial years (in ₹ Lakh)
	2017-18	Nil	3316.08	Nil	Nil	N/A	3113.92
	2018-19	Nil	1601.45	Nil	Nil	N/A	2182.47
	2019-20	Nil	3511.53	Nil	Nil	N/A	1550.94
	2020-21	2126.95	1441.99	Nil	Nil	N/A	2126.95

(b) Details of CSR amount spent in the financial year for ongoing projects of the preceding financial year(s):

Details attached as Annexure-E

10. In case of creation or acquisition of capital asset, furnish the details relating to the asset so created acquired through CSR spent in the financial year.

(Asset-wise details). As tabulated below

(a) Date of creation or acquisition of the capital asset(s).

(b) Amount of CSR spent for creation or acquisition of capital asset.

(c) Details of the entity or public authority or beneficiary under whose name such capital asset is registered, their address etc.

(d) Provide details of the capital asset(s) created or acquired (including complete address and location of the capital asset).

S. No.	Date of creation or acquisition of the capital asset(s).	Amount of CSR spent for creation or acquisition of capital asset. (In ₹ Lakh)	Details of the entity or public authority or beneficiary under whose name such capital asset is registered, their address etc	Provide details of the capital asset(s) created or acquired (including complete address and location of the capital asset).
1	20.04.2020	2.00	New Delhi Railway Station	Electrostatic Disinfection Machine(EDM) for sanitization during COVID Address:- New Delhi Railway Station, New Delhi
2	09.05.2020	2.00	Office of Department of Heavy Industry (Govt. of India), New Delhi	Electrostatic Disinfection Machine(EDM) for sanitization during COVID Address:- Office of Heavy Industry, New Delhi
3	09.05.2020	2.00	Om Arogyam Yog mandir, Kankhal, Haridwar, Uttarakhand	Electrostatic Disinfection Machine(EDM) for sanitization during COVID Address:- Om Arogyam Yog mandir, S-8, Sandesh nagar, Kankhal, Haridwar, Uttarakhand
4	09.05.2020	2.00	Public Health Department, Noida Authority, Sec-39, Noida, Gautam Buddha nagar	Electrostatic Disinfection Machine(EDM) for sanitization during COVID Address:- Public Health Department, Noida Authority, Sec-39, Noida, Gautam Buddha nagar
5	01.07.2020	3.00	Noida Authority, Noida, Gautam Buddha nagar	Sanitising spray machine (BHEL Mister) for sanitizing during COVID Address:- Noida Authority, Noida, Gautam Buddha nagar
6	28.05.2020	3.00	District Development Officer, Vikas Bhawan, Kanpur	Sanitising spray machine (BHEL Mister) for sanitizing during COVID Address:- District Development Officer, Vikas Bhawan, Kanpur

11. Specify the reason(s), if the company has failed to spend two per cent of the average net profit as per section 135(5).

- Many projects taken during the year and others continuing from previous years stretch beyond 2020-21. Fund required for completing these projects shall be met from the fund already allocated to them from the CSR budget.
- Implementation of projects got impleaded due to imposition of lockdowns and other restrictions on movement of manpower due to COVID 19 pandemic.
- In line with CSR Policy of BHEL, CSR Budget for 2020-21 has been fully committed for CSR Projects, the Unspent committed amount will not lapse and will be used for CSR Projects in future.

12. We, hereby, declare that the implementation and monitoring of CSR Policy, is in compliance with CSR objectives and Policy of the company.



Chairman & Managing Director



Chairperson
CSR Committee

New Delhi
Date: 27.08.2021

Annexure-A

BHEL Corporate Social Responsibility (CSR) Policy Outline

CSR Vision: To be a responsible corporate citizen working towards a better tomorrow.

CSR Mission:

To sincerely & effectively discharge company's responsibility in the identified CSR thrust areas and other areas listed out in the Companies Act, 2013.

Objectives of the Policy:

- To define CSR projects or programs which BHEL plans to undertake and which fall within the purview of the Companies Act 2013, the Companies (CSR Policy) Rules, 2014 and the prevailing DPE Guidelines.
- Modalities of execution of such CSR projects or programs.
- Monitoring process of such CSR projects or programs.
- To make the stakeholders aware about CSR practices in BHEL.
- To work keeping in mind the larger objective of sustainable development in conduct of business and in pursuit of CSR agenda.

Salient Features of the Policy:

- It covers the requirements stated in the Companies Act-2013, the Companies (CSR Policy) Rules-2014 and DPE Guidelines on CSR & Sustainability;
- It defines the thrust areas for CSR activities, which are based on the activities mentioned in Schedule VII of the Companies Act, 2013.
- It specifies that 2% of average net profit during the three immediately preceding financial years will be allocated for CSR activities.
- The company shall give preference to the local areas for spending at least 75% of the amount earmarked for CSR activities.
- A project having total value equal to or more than ₹2 crore will be termed as Mega project and Impact assessment of such projects will be mandatorily got done through an external agency.
- There is a provision to reserve 5% of the annual CSR budget as Emergency Fund to take up relief activities for any disaster/calamity.
- It stipulates that 5% of total CSR expenditure for the year shall be kept as a reserve for capacity building including administrative overheads.
- It provides information about organizational structure for CSR in BHEL.

Web-Link to CSR Policy:

BHEL CSR Policy is hosted on www.bhel.com under CSR section and can be accessed through the link <https://www.bhel.com/csr>

Annexure-B

Executive Summary BHEL



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EXECUTIVE SUMMARY FOR IMPACT ASSESSMENT OF MEGA CSR PROJECT DISTRICT BHANDARA

1.0 Introduction

BHEL is one of the largest engineering and manufacturing companies of its kind in India engaged in design, engineering, construction, testing, commissioning and servicing of a wide range of products and services with over 180 product offerings to meet the ever-growing needs of the core sectors of economy.

The impact of implementation of Mega Corporate Social Responsibility Project in the village viz. Andhalgaon, Warthi, Karadi, Sihora, and Taluka Pauni and Sakoli is assessed and come to conclusion to find out the quality of life of the study area. The assessment is done on the basis of satisfactory level of the villagers and citizens in regard of transportation, communication, health, education and infrastructural resource based development.

1.1 Objectives of the study

- To prepare a demographic profile of the study area
- To assesses Existing Socio-Economic status of people in the study area
- To Identify and quantify nature of employment existing and future opportunities
- To assesses Quality of Life of people in the study area
- To evaluate infrastructure resource base, viz. medical, education, water resources, power supply
- To evaluate economic resource base, viz. agriculture, industries, forest, trade and commerce
- To evaluate health Status, viz. morbidity pattern with reference to prominent and endemic diseases (e.g. Covid – 19, Swain Flue, Dengue, Fluorosis, Malaria, Filarial)
- To evaluate cultural and aesthetic attributes in the study area including places of historical/ archaeological importance
- To evaluate occupational pattern, employment status and income category of people in the study area
- Quantification of economic resources, Health status, Cultural and Aesthetic attributes etc.

- To carryout impact assessment of CSR plan of the people in the study area

1.2 The study area

The present study area for the Mega Project of Corporate Social Responsibility at Bhandara district which comprises of two urban area of Sakoli as well as Pauni and four villages i.e. Andhalgaon, Warthi, Karadi in Taluka Mohadi and Sihora in Taluka Tumsar.

1.3 Impact Assessment of CSR Action Plan in the Study Area

The management of Bharat Heavy Electricals Ltd, BHEL had started implementation of CSR in the study area for the upliftment of the villagers to enhance their Quality of Life. According to need base analysis the CSR Action Plan is implemented in the study area from 2014.. The impact assessment is done by comparing Quality of Life of study area before and after implementation of CSR Action Plan.

1.4 Methodology

The study team keeping the objectives of Impact assessment of corporate social responsibility (CSR) in view has used a variety of data collection methods. The study of such nature requires a primary household survey. However for the limited purpose of CSR study the team collected data from two sources. Firstly, household survey of the project affected people of the study area, Secondly local offices as well as non-official source. Secondary Data from Government offices has been also collected to evaluate the quality of life of villages considered for survey by the management of BHEL. The methods applied for the data collection comprise of structured questionnaire, in depth interviews and focus group discussion.

The team went in each village at different days to conduct focused group discussions (FGD) of the villagers. Each of these FGDs comprises different group of Panchayat members, school teachers, leaders of informal / formal organization & village representatives. Each of the FGDs has very extensive lasting for at least 2 to 3 hours of duration. Besides, a keen personal observation of the team was a part of CSR. Moreover, secondary sources of data comprised various government department (local & district level) and project authorities.

2.0 Demographic Structure

The study area comprises of 06 villages from Bhandara District of Maharashtra.

Comparison of Socio- Economic Attributes of the area with Bhandara district and state is as follows:

Table
Demography at a Glance within the Study Area

Sr. No.	Demographic parameters	Details
1.	Number of villages	06
2.	Total no. of residential households	15560
3.	Total population	67251
4.	Scheduled caste %	12903 (19.2%)
5.	Scheduled tribe %	4027 (5.98%)
6.	Sex ratio (female per thousand male)	980.5
7.	Literates (%)	53218 (79.13%)
8.	Main workers (%)	18575 (27.62%)
9.	Marginal workers (%)	8536 (12.69%)
10.	Non workers (%)	40140 (59.68%)

Source: Primary Census Abstract CD-2011, Nagpur District Maharashtra State.

Table
Existing Quality of Life of the Villages in Study Area
Comparative Table (2005- 2015)

Sr. No.	Name of the villages	QoL(c) (2013)	QoL(c) (2020)
1	Warthi	0.53	0.59
2	Andhalgaon	0.525	0.59
3	Kardi	0.535	0.56
4	Sihora	0.57	0.58
5	Sakoli	0.57	0.61
6	Pauni	0.56	0.58
	Total	0.55	0.58

QoL(s) = Subjective Quality of Life

QoL(o) = Objective Quality of Life

QoL(c) = cumulative Quality of Life

3.0. Socio - Economic Impacts

Implementation of Mega Project of CSR by BHEL PSWR would create certain impacts with beneficial effects on the socio-economic environment. Some of these impacts would be more effective for the immediate vicinity with short term effects whereas the others would be of higher order or of long term in nature.

The impacts of Mega Project of CSR by BHEL PSWR on parameters of human interest have been assessed in terms of:

- The impact due to enhancement in transportation and communication with respect to the other support facilities

Beneficial Impacts

The impacts identified as beneficial support for Mega CSR project activities. They are:

- Trade opportunities for the local people as well as for those from the nearby surrounding area would increase due to increase in transportation facility
- Due to influx in population, the trade, business opportunity for the local people would increase, raising the economic status of the people around the study area
- Evolution towards urbanization as well as the influx of working people within the study area would lead to favorable changes in the existing infrastructure facilities, which may further improve the quality of life of the study area
- Due to urbanization there would be an overall development of the area and business opportunities, which may improve the quality of life of the study area.



Annexure-C

Details of CSR amount spent against ongoing projects for the financial year

(In ₹ Lakh)

S. No.	Name of the project	Item No. from schedule VII	Local Area (Yes/No)	Location of the Project	Amt. allocated	Amt. spent in FY 2020-21	Amt. transferred to unspent CSR A/c.	Implement-ation Mode Direct (Yes/ No)	Implementing Agency	
				State, District					Name	CSR Registration No
Amt. In ₹ Lakh										
1	Community Bio-digester Toilets Clusters along with drinking water facility	1, Clean India	Yes	Uttarakhand, Haridwar	565.00	37.08	95.51	No	FICCI	N/A
2	Cleft surgery of cleft patients	1, Healthy India	Yes	Uttarakhand, Haridwar	56.00	11.20	44.80	No	Mission Smile	N/A
3	Running of Mobile Medicare Unit in rural areas	1, Healthy India	Yes	Maharashtra, Raigad	33.00	28.02	4.98	No	Wockhardt Foundation	N/A
4	Running of Mobile Medicare Unit	1, Healthy India	Yes	Maharashtra, Ratnagiri	33.00	27.06	5.94	No	Wockhardt Foundation	N/A
5	Capacity building of ASHA workers of Kalyan Block, Thane	1, Healthy India	Yes	Maharashtra, Thane	18.00	6.00	0.00	No	Rambhau Mhalgi Prabodhini (RMP)	N/A
6	Construction of Girl's toilet at Govt. ITI	1, Clean India	Yes	TN, Vellore	10.00	6.09	3.91	Yes	BHEL	N/A
7	04 nos Eletrostatic Disinfection Machine for fighting against COVID-19	1, Healthy India	Yes	Uttarakhand (Haridwar), Delhi/NCR	10.00	8.00	2.00	Yes	BHEL	N/A
8	COVID Relief - Distributing Nutrition kits to labourers near Rourkela Site	1, Healthy India	Yes	Odisha, Sambalpur	9.93	9.55	0.39	Yes	BHEL	N/A
9	COVID Relief - Distributing Nutrition kits to villagers near North Karanpura site	1, Healthy India	Yes	Jharkhand, Chatra	9.80	9.28	0.52	Yes	BHEL	N/A
10	Eye Check-up Camp and cataract surgeries of poor patients	1, Healthy India	Yes	Uttarakhand, US Nagar	9.26	0.30	0.30	No	M/s I Care Hospital, Noida	N/A
11	Support for Medical accessories and Equipment to Hospice	1, Healthy India	Yes	MP, Jabalpur	9.00	9.00	0.00	No	Brahmrishi Mission Samiti	N/A
12	Face mask, PPE kits, sanitizers, gloves etc. for fight against COVID-19	1, Healthy India	Yes	Uttarakhand, Haridwar	8.98	5.06	3.92	Yes	BHEL	N/A
13	15 numbers baby warmers used in neonatal care in COVID wards at (PHCs)	1, Healthy India	Yes	Telangana, Sangareddy	6.26	5.93	0.34	Yes	BHEL	N/A
14	Construction of toilet blocks in 02 cemeteries	1, Clean India	Yes	MP, Bhopal	5.00	3.27	1.73	Yes	BHEL	N/A
15	Providing relief material to district administration for fight against COVID-19	1, Healthy India	Yes	Uttarakhand, Haridwar	5.00	4.80	0.20	Yes	BHEL	N/A

Notice

Additional Information

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S. No.	Name of the project	Item No. from schedule VII	Local Area (Yes/No)	Location of the Project	Amt. allocated	Amt. spent in FY 2020-21	Amt. transferred to unspent CSR A/c.	Implementation Mode Direct (Yes/No)	Implementing Agency	
									Name	CSR Registration No
16	Hospital Bed, Mattresses etc for PHC Tandwa near North Karanpura site	1, Healthy India	Yes	Jharkhand, Chatra	4.28	4.22	0.06	Yes	BHEL	N/A
17	RO Plant 1500 liters/hr at Veerareddy Pally	1, Clean India	Yes	Telangana, Sangareddy	4.00	3.95	0.05	Yes	BHEL	N/A
18	Construction of Toilet Complex in Gurukul Mahavidyalay, Jwalpur	1, Clean India	Yes	Uttarakhand, Haridwar	3.37	3.37	0.00	Yes	BHEL	N/A
19	Construction of a female Toilet Complex in SMJN (PG), College	1, Clean India	Yes	Uttarakhand, Haridwar	3.34	3.34	0.00	No	Divya Prem Sewa Mission	N/A
20	Conducting camp for physically challenged children and providing prosthetic equipment	1, Healthy India	Yes	Tamil Nadu, Chennai	2.78	2.65	0.13	No	Freedom Trust, Chennai	N/A
21	Food to terminally ill Cancer patients undergoing Palliative Care	1, Healthy India	Yes	Telangana, Rangareddy	2.40	2.40	0.00	No	Pain Relief and Palliative Care Society, Hyderabad	N/A
22	COVID Relief work -Distribution of masks, gloves, medical equipment etc. near Sagardighi site	1, Healthy India	Yes	West Bengal, Murshidabad	1.75	1.71	0.05	Yes	BHEL	N/A
23	Distribution of food packets to needy in and around BHEL Township, Noida	1, Healthy India	Yes	UP, GB Nagar	1.50	1.17	0.33	No	Ladies Welfare Association	N/A
24	Yoga Classes	1, Healthy India	Yes	MP, Bhopal	1.37	1.32	0.05	Yes	BHEL	N/A
25	Medical Camps in 06 villages	1, Healthy India	Yes	MP, Bhopal	1.26	0.51	0.75	Yes	BHEL	N/A
26	Sports items and Fans & Tubelights at ADW Hostel	1, Healthy India	Yes	TN, Tiruchirappalli	1.00	1.00	0.00	Yes	BHEL	N/A
27	Free Medical Camp for Rural & Poor People	1, Healthy India	Yes	Uttarakhand, Haridwar	0.43	0.43	0.00	Yes	BHEL	N/A
28	R.O. Plant at Vennavelli Village, Kolluru Mandal.	1, Clean India	Yes	Telangana, Khammam	0.30	0.30	0.01	Yes	BHEL	N/A
29	Distribution of Face Mask for prevention of (COVID-19)	1, Healthy India	Yes	UP, GB Nagar	0.28	0.27	0.01	No	Ladies Welfare Association	N/A
30	Construction of Boy's & Girl's Hostel buildings at Govt. Polytechnic	2, Educated India	Yes	Telangana, Nizamabad	300.00	62.50	62.14	No	Dist. Panchayat Raj Engineer, PIU, Nizamabad	N/A

S. No.	Name of the project	Item No. from schedule VII	Local Area (Yes/No)	Location of the Project	Amt. allocated	Amt. spent in FY 2020-21	Amt. transferred to unspent CSR A/c.	Implementation Mode Direct (Yes/No)	Implementing Agency	
									Name	CSR Registration No
31	Construction of a Compound wall for Girraj Govt. Degree College	2, Educated India	Yes	Telangana, Nizamabad	100.00	12.85	26.12	No	Dist. Panchayat Raj Engineer, PIU, Nizamabad	N/A
32	Connect & Change Program for developing change makers through entrepreneurship & ideation for Inclusive Growth & Societal Development	2, Inclusive India	Yes	Maharashtra, Palghar, Rajgarh, Thane & Mumbai	18.00	1.00	0.00	No	Connecting Dreams Foundation (CDF)	N/A
33	Distribution of inspirational book & career counseling for KVS students	2, Educated India	Yes	Delhi/NCR	10.00	5.00	5.00	No	ISKCON New Delhi	N/A
34	Distribution of School Uniform and nutritional food to poor students	2, Educated India	Yes	UP, Ghaziabad	10.00	10.00	0.00	No	Menner Welfare Society	N/A
35	School uniform to underprivileged students	2, Educated India	Yes	Haryana & UP Faridabad & Niswara	9.45	4.73	0.00	No	Shirdi Sai Baba Temple Society, Faridabad	N/A
36	Road Safety Intervention program	2, Educated India	Yes	Delhi, Delhi	8.02	8.02	0.00	No	Community Against Drunken Driving, Delhi	N/A
37	Roofing for developing a multipurpose Hall at Boiler plant Girls Higher Secondary school Kailsapuram	2, Educated India	Yes	TN, Tiruchirappalli	8.00	6.57	1.43	Yes	BHEL	N/A
38	Toilets & water facility in Govt. aided school, Deepanjalingara	2, Educated India	Yes	Karnataka, Bangalore	6.80	6.08	0.72	Yes	BHEL	N/A
39	Furniture, computer, fans etc, to Govt. Primary/Junior schools	2, Educated India	Yes	UP, Amethi	6.00	6.00	0.00	Yes	BHEL	N/A
40	Construction of Dining/ Multi-Purpose Hall in Govt. Elementary School, Dhunda	2, Educated India	Yes	Punjab, Tarn Taran	5.00	4.56	0.44	Yes	BHEL	N/A
41	Demolishing and relocating the existing Toilets at Arivalayam, Kailsapuram	2, Educated India	Yes	TN, Tiruchirappalli	5.00	4.75	0.25	Yes	BHEL	N/A
42	Construction & repair works in Rajkiya Primary Vidyalaya no. 33, Haridwar	2, Educated India	Yes	Uttarakhand, Haridwar	3.56	3.53	0.03	Yes	BHEL	N/A

S. No.	Name of the project	Item No. from schedule VII	Local Area (Yes/No)	Location of the Project	Amt. allocated	Amt. spent in FY 2020-21	Amt. transferred to unspent CSR A/c.	Implementation Mode Direct (Yes/No)	Implementing Agency	
									Name	CSR Registration No
43	Education for Slum children for one year	2, Educated India	Yes	Telangana, Rangareddy	3.30	3.30	0.00	Yes	BHEL	N/A
44	Computers for development of visually impaired students	2, Educated India	Yes	UP, Varanasi	3.00	3.00	0.00	No	Divya Jyoti Society	N/A
45	Furniture etc., to Govt. High School, Basavantapur, Yadgir	2, Educated India	Yes	Karnataka, Yadgir	3.00	3.00	0.00	Yes	BHEL	N/A
46	Smart Class facilities, furniture etc., to Govt. High School, Allipur	2, Educated India	Yes	Karnataka, Yadgir	3.00	1.93	1.07	Yes	BHEL	N/A
47	Smart Class facilities & Furniture etc to High School (Govt. P.U. College), Yeragol	2, Educated India	Yes	Karnataka, Yadgir	3.00	1.93	1.07	Yes	BHEL	N/A
48	Part funding student fees and funding of special educator salary to Autism effected children of the poor and deprived sections.	2, Educated India	Yes	Telangana, Hyderabad	2.93	0.90	0.00	Yes	BHEL	N/A
49	Construction of toilets for school children, KV, Bowenpally	2, Educated India	Yes	Telangana, Hyderabad	2.79	2.75	0.04	Yes	BHEL	N/A
50	Fencing to the proposed playground at Govt. High School, Poolathur	2, Educated India	Yes	TN, Tiruchirappalli	2.65	2.65	0.00	Yes	BHEL	N/A
51	Scholarship to Orphans, Widow wards & differently abled students.	2, Educated India	Yes	MP, Bhopal	2.40	1.32	1.08	Yes	BHEL	N/A
52	Scholarship to Physically Challenged students of ITI & Polytechnic	2, Educated India	Yes	MP, Bhopal	2.25	2.25	0.00	Yes	BHEL	N/A
53	Construction work at Boys Higher secondary School, Vannivedu	2, Educated India	Yes	TN, Ranipet	2.00	0.42	1.58	Yes	BHEL	N/A
54	Vocational Training to Divyang Children	2, Inclusive India	Yes	AP, Vizag	2.00	2.00	0.00	No	Prajwala Vani Welfare Society, Vizag	N/A
55	Furniture for ZP High School, RC Puram	2, Educated India	Yes	Telangana, Sangareddy	2.00	1.99	0.01	Yes	BHEL	N/A
56	Furniture/ basic Infrastructure to ZPPS BHEL, RC Puram,	2, Educated India	Yes	Telangana, Sangareddy	2.00	1.98	0.02	Yes	BHEL	N/A
57	Furniture to ZPHS Madharam, Jinnaram Mandalam	2, Educated India	Yes	Telangana, Sangareddy	2.00	2.00	0.00	Yes	BHEL	N/A
58	Furniture/ basic Infrastructure to ZPHS Lemoor, Kandukur	2, Educated India	Yes	Telangana, Sangareddy	2.00	2.00	0.00	Yes	BHEL	N/A

S. No.	Name of the project	Item No. from schedule VII	Local Area (Yes/No)	Location of the Project	Amt. allocated	Amt. spent in FY 2020-21	Amt. transferred to unspent CSR A/c.	Implementation Mode Direct (Yes/No)	Implementing Agency	
									Name	CSR Registration No
59	Furniture/ basic Infrastructure in to Primary School Anantha sagar	2, Educated India	Yes	Telangana, Sangareddy	2.00	2.00	0.00	Yes	BHEL	N/A
60	Furniture for Collegiate Education at Govt Degree College for Women	2, Educated India	Yes	Telangana, Sangareddy	2.00	2.00	0.00	Yes	BHEL	N/A
61	Desks for ZPSS Chinthaguda(K), Khagaznagar mandal, Kumarambheem	2, Educated India	Yes	Telangana, Asifabad	2.00	2.00	0.00	Yes	BHEL	N/A
62	Desks for ZPSS Bhatpally, Khagaznagar mandal, Kumarambheem	2, Educated India	Yes	Telangana, Asifabad	2.00	2.00	0.00	Yes	BHEL	N/A
63	Aid for carrying out teaching activity at Community Centre, Chandanayak Nagar	2, Educated India	Yes	Telangana, Hyderabad	2.00	0.01	0.22	Yes	BHEL	N/A
64	Compound wall at Sri Paramahansa Nursery & Primary School, Kattur	2, Educated India	Yes	TN, Tiruchirappalli	2.00	0.90	1.10	Yes	BHEL	N/A
65	07 computers for starting a computer training center	2, Educated India	Yes	UP, Varanasi	1.90	1.90	0.00	No	Kutumb Samjothan Awam Punerwas Sanstha	N/A
66	Benches, Projector, Screen in Govt. Sr. Sec. School, Vein Puin	2, Educated India	Yes	Punjab, Tarn Taran	1.80	1.69	0.11	Yes	BHEL	N/A
67	E-Rickshaw for mobility of children and youth with disabilities	2, Educated India	Yes	Uttar Pradesh, Varanasi	1.65	1.65	0.00	No	KIRAN Society	N/A
68	Construction of Toilet for boys at Govt. ADW higher secondary school, Sholamadevi	2, Educated India	Yes	TN, Tiruchirappalli	1.55	1.14	0.41	Yes	BHEL	N/A
69	School Benches for underprivileged student	2, Educated India	Yes	UP, Varanasi	1.45	1.45	0.00	No	Saint Nirmal Educational Society	N/A
70	Benches in Govt. Sr. Sec. School, Goindwal Sahib	2, Educated India	Yes	Punjab, Tarn Taran	1.20	1.20	0.00	Yes	BHEL	N/A
71	Skill Development of Visually Impaired Children	2, Educated India	Yes	AP, Vizag	0.70	0.70	0.00	No	Vision Aid Charitable Services Society	N/A
72	Fencing for the Panchayat Union Middle School, Thekkattur	2, Educated India	Yes	TN, Pudukkottai	0.50	0.11	0.39	Yes	BHEL	N/A

S. No.	Name of the project	Item No. from schedule VII	Local Area (Yes/No)	Location of the Project	Amt. allocated	Amt. spent in FY 2020-21	Amt. transferred to unspent CSR A/c.	Implementation Mode Direct (Yes/No)	Implementing Agency	
									Name	CSR Registration No
73	RCC Slab Bridge at Makali to Horokyathanahalli Road	3, Responsible India	Yes	Karnataka, Bangalore	80.00	2.30	6.57	Yes	BHEL	N/A
74	Disabled friendly wheelchair accessible mini-bus for JNU	3, Responsible India	Yes	Delhi, Delhi	30.35	9.66	0.69	Yes	BHEL	N/A
75	LT lines & street lights at sangam of Alaknanda & Mandakini rivers	3, Responsible India	Yes	Uttarakhand, Rudraprayag	19.98	13.57	0.00	No	DM, Rudraprayag	N/A
76	Support to "Latika Vihar – Come one: Come All."	3, Responsible India	Yes	Uttarakhand, Dehradun	19.00	5.53	9.27	No	Latika Roy Memorial Foundation	N/A
77	Construction of Dining Hall in the Hostel of Divya Prem Sewa Mission Nyas (Reg)	3, Responsible India	Yes	Uttarakhand, Haridwar	6.00	1.50	0.00	Yes	BHEL	N/A
78	Development work in Anganvadi Center at Beerachandra Village, Devanhalli	3, Responsible India	Yes	Karnataka, Bangalore	2.50	2.13	0.37	Yes	BHEL	N/A
79	Development work in Anganvadi Center, Vijayapura - Kurappana Matta, Devanhalli	3, Responsible India	Yes	Karnataka, Bangalore	2.50	2.13	0.37	Yes	BHEL	N/A
80	Welfare Equipment to poor Divyangjan	3, Responsible India	Yes	Telangana, Rangareddy	2.00	1.94	0.06	No	ALIMCO	N/A
81	Replacing of Solar panels at Old Age Home, Kattur	3, Responsible India	Yes	TN, Tiruchirappalli	2.00	1.01	0.99	Yes	BHEL	N/A
82	10 no. wheel chairs to rural poor people	3, Responsible India	Yes	Tamil Nadu, Chennai	0.53	0.53	0.00	No	Wheel Chair Fencing Federation of India, Chennai	N/A
83	Installation of 4 Solar Water Pumps	4, Green India	No	Chhattisgarh & Assam, Bastar, Karimganj, Cachar	50.00	41.05	8.95	Yes	BHEL	N/A
					1584.05	466.35	296.48			

Annexure-D

Details of CSR amount spent against other than ongoing projects for the financial year

(In ₹ Lakh)

S. No.	Name of the project	Item No. from Schedule VII	Local Area (Yes/No)	Location of the Project	Amt. spent in FY 2020-21	Mode of Implementation Direct (Yes/No)	Implementing Agency	
			State, District			Name	CSR Registration No.	
1	Installation of sanitary napkin vending machines and incinerators in colleges and women hostels	1, Healthy India	Yes	Uttarakhand, Haridwar	52.07	No	Chief Development Office, Haridwar	N/A
2	Aids and Appliances to Divyangjan through ALIMCO	1, Healthy India	Yes	Uttarakhand, Telangana, MP, Bihar, Haridwar, Khammam, Damoh, Khagaria	25.06	No	ALIMCO	N/A
3	Medical items for COVID-19 centers set up by Distt. Admn	1, Healthy India	Yes	Uttarakhand, Haridwar	17.99	Yes	BHEL	N/A
4	Treatment of leprosy patients and procurement of equipment at TLMTI Hospital	1, Healthy India	Yes	AP, Bihar, Vizianagaram, Muzaffarpur	16.98	No	The Leprosy Mission Trust India, N. Delhi	N/A
5	Free Anti Hemophilic Factor (AHF) to Persons & Children with Hemophilia (P & Cwh) across India	1, Healthy India	Yes	Pan India	15.64	No	Hemophilia Federation India	N/A
6	Free cataract surgery of cataract-blind patients from nearby areas in Bihar and Jharkhand."	1, Healthy India	Yes	Jharkhand, Hazaribagh	11.66	No	Nav Bharat Jagriti Kendra, Hazaribag	N/A
7	Medical equipment (CTG Machines, Warmers, BP apparatus) to TVVP Hospital & PHC	1, Healthy India	Yes	Telangana, Sangareddy	9.95	Yes	BHEL	N/A
8	Treating children born with club foot disability	1, Healthy India	Yes	Uttarakhand, UP, Assam, Odisha, Rishikesh, Jhansi, Guwahati, Bhubaneswar	8.81	No	Cure International India Trust (CIIT), New Delhi	N/A
9	COVID cum Nutrition kits amongst 1150 villagers / labourers in and around PSER/ Sagardighi site	1, Healthy India	Yes	West Bengal, Murshidabad	8.38	Yes	BHEL	N/A
10	Healthcare Program in Nuh Dist., Haryana	1, Healthy India	Yes	Haryana, Nuh	8.17	No	Bisnouli Sarvodaya Gramodyog Sewa Sansthan	N/A
11	Sanitization of Public Roads , Shopping complexes , Schools and Slum area etc.	1, Healthy India	Yes	Madhya Pradesh, Bhopal	7.10	Yes	BHEL	N/A
12	Mask N95, PPE Kit and gloves for Govt. Hospitals KAPV & MGM	1, Healthy India	Yes	Tamil Nadu, Tiruchirapalli	7.00	Yes	BHEL	N/A
13	Medicines for fight against COVID-19 for poor and needy through Nagpur Municipal Corporation	1, Healthy India	Yes	Maharashtra, Nagpur	6.02	Yes	BHEL	N/A

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S. No.	Name of the project	Item No. from Schedule VII	Local Area (Yes/No)	Location of the Project	Amt. spent in FY 2020-21	Mode of Implementation Direct (Yes/No)	Implementing Agency	
			State, District			Name	CSR Registration No.	
14	Medicines and Surgical Equipment to Bal Mitra Foundation for conducting Paediatric Surgeries.	1, Healthy India	Yes	Maharashtra, Nagpur	5.98	Yes	BHEL	N/A
15	Emergency Purchase of Items for Kasturba Hospital under CSR to Prevent COVID-19	1, Healthy India	Yes	Madhya Pradesh, Bhopal	5.90	Yes	BHEL	N/A
16	Haematology Analyser, one BIPAP Machine and one Oxygen Concentrator	1, Healthy India	Yes	Delhi, Delhi	4.84	No	The Leprosy Mission Trust India, New Delhi	N/A
17	Masks, Sanitizers, Thermal scanners, Sodium Hypochlorite, PPE kits, Cotton cloth bags etc. to Govt. agencies & GVMC to fight against COVID	1, Healthy India	Yes	Andhra Pradesh, Vizag	4.51	Yes	BHEL	N/A
18	Livelihood and distribution of food packets to migrant worker and poor family in Meera Bhayandar Area	1, Healthy India	Yes	Maharashtra, Thane	4.50	No	Rambhau Mhalgi Prabodhini, Mumbai	N/A
19	Carry out door disinfection in vicinity of Sector-17, Noida by using BHEL Mister Machine	1, Healthy India	Yes	Uttar Pradesh, Gautam Budhh Nagar	4.42	Yes	BHEL	N/A
20	Sanitizers, Masks and Thermal Scanners to the Anganwadi Centers	1, Healthy India	Yes	Karnataka, Bangalore	4.36	Yes	BHEL	N/A
21	Free Healthcare to poor & needy through Dispensaries	1, Healthy India	Yes	Haryana & Delhi, Faridabad & Delhi	4.00	No	Shirdi Sai Baba Temple Society, Faridabad	N/A
22	Bed sheets to COVID-19 centres through Dist. Administration	1, Healthy India	Yes	Uttarakhand, Udhm Singh Nagar	3.99	Yes	BHEL	N/A
23	Ambulances, Taxis, Vehicles to Distt. Administration to fight against COVID-19	1, Healthy India	Yes	Uttarakhand, Haridwar	3.75	Yes	BHEL	N/A
24	COVID Relief – Distribution of Relief Material Kit distribution in Villages near Ennore Site	1, Healthy India	Yes	Tamil Nadu, Thiruvallur	3.33	Yes	BHEL	N/A
25	Medical equipment & other items to District Hospital for fighting COVID	1, Healthy India	Yes	Telangana, Sangareddy	3.22	Yes	BHEL	N/A
26	Drinking Water facilities to Covid centers/PHCs	1, Healthy India	Yes	UP, Jhansi	3.18	Yes	BHEL	N/A
27	BHEL Mister for labour colonies and nearby areas near Panki site	1, Healthy India	Yes	UP, Kanpur	3.00	Yes	BHEL	N/A
28	BHEL Mister (large spray machine- sanitization and hygiene) for labour colonies in Noida	1, Healthy India	Yes	UP, GB Nagar	3.00	Yes	BHEL	N/A
29	Medicine to COVID Warriors through Block Hospital (State Govt.), Patratu	1, Healthy India	Yes	Jharkhand, Ramgarh	3.00	Yes	BHEL	N/A

S. No.	Name of the project	Item No. from Schedule VII	Local Area (Yes/No)	Location of the Project	Amt. spent in FY 2020-21	Mode of Implementation Direct (Yes/No)	Implementing Agency	
			State, District			Name	CSR Registration No.	
30	Sanitizers, Masks and Thermal Scanners to the Anganwadi Centers	1, Healthy India	Yes	Karnataka, Bangalore	2.25	Yes	BHEL	N/A
31	Health care materials for Visually Impaired students	1, Healthy India	Yes	UP, Varanasi	2.02	No	Divya Jyoti Society, Varanasi	N/A
32	COVID care kits for kids of schools	1, Healthy India	Yes	Punjab, Tarn Taran	2.02	Yes	BHEL	N/A
33	Essential grocery items during lockdown due to COVID to deprived & needful near Gadarwara site	1, Healthy India	Yes	MP, Narsinghpur	2.02	Yes	BHEL	N/A
34	COVID Relief Material in Villages near Udanguri Site	1, Healthy India	Yes	TN, Tuticorin	2.00	Yes	BHEL	N/A
35	Free masks, sanitizers, hand wash, phenyl and toilet cleaners to the general public	1, Healthy India	Yes	UP, Varanasi	1.98	No	Kutumb Samajothan Ewam Punarwas Sanstha, Varanasi	N/A
36	Patient's waiting sheds (Lab and Isolation ward) of area for Primary Health Centre, Navalpattu Panchayat	1, Healthy India	Yes	TN, Tiruchirapalli	1.97	Yes	BHEL	N/A
37	Support to COVID centers	1, Healthy India	Yes	Punjab, Tarn Taran	1.88	No	District Administration	N/A
38	Single Tooth X-Ray Machine & Dental Chair to community Health Centre	1, Healthy India	Yes	Uttarakhand, Udham Singh Nagar	1.85	Yes	BHEL	N/A
39	Food packets distribution in villages near Ariyalur site	1, Healthy India	Yes	TN, kallakurchi	1.63	Yes	BHEL	N/A
40	Covid Relief Material to nearby Villages people near Vijayawada site	1, Healthy India	Yes	Andhra Pradesh, Vijayawada	1.42	Yes	BHEL	N/A
41	PPE Kit, gloves and Mask for PHC at Tiruverumbur	1, Healthy India	Yes	TN, Tiruchirapalli	1.10	Yes	BHEL	N/A
42	PPE Kits, Hand sanitizer set, Masks, gloves for Thuvakkudi Municipality.	1, Healthy India	Yes	TN, Tiruchirapalli	1.05	Yes	BHEL	N/A
43	Bleaching Powder, Lizol, sanitizer, phenyl, cleaning acid, hypo chloride, PPE kit, gloves, Mask etc, for Koothappar Town Panchayat	1, Healthy India	Yes	TN, Tiruchirapalli	1.05	Yes	BHEL	N/A
44	1 No FBD Tunnel to Director AIIMS Bhopal	1, Healthy India	Yes	Madhya Pradesh, Bhopal	1.00	Yes	BHEL	N/A
45	Food packets distribution in villages near Velallaviduthi site	1, Healthy India	Yes	Tamil Nadu, Pudukkottai	1.00	Yes	BHEL	N/A

S. No.	Name of the project	Item No. from Schedule VII	Local Area (Yes/No)	Location of the Project	Amt. spent in FY 2020-21	Mode of Implementation Direct (Yes/No)	Implementing Agency	
			State, District			Name	CSR Registration No.	
46	Distributing Food packets in villages near Jeerat site	1, Healthy India	Yes	WB, 24 Paraganas (N)	1.00	Yes	BHEL	N/A
47	PPE Kit, Masks, Disposable Cap, Disposable Gloves Plastic Apron for Govt Hospital Tiruverumbur.	1, Healthy India	Yes	TN, Tiruchirapalli	1.00	Yes	BHEL	N/A
48	Distributing Food packets in villages near Shamli site	1, Healthy India	Yes	UP, Muzaffar Nagar	0.99	Yes	BHEL	N/A
49	COVID Relief Material distribution to Girls Hostel of Thakkar Bappa Vidhyalaya, T Nagar Chennai	1, Healthy India	Yes	Tamil Nadu, Chennai	0.97	Yes	BHEL	N/A
50	Automated Sanitizer Dispenser and Nutrition Kit in different schools	1, Healthy India	Yes	UP, Gautam Budhh Nagar	0.96	No	Sai Kripa	N/A
51	Sanitizers & Disinfecting machines for nearby PHCs	1, Healthy India	Yes	UP, Jhansi	0.93	Yes	BHEL	N/A
52	Battery Power Sprayer, electronic power sprayer, Masks & Lizol for Navalpattu Panchayat.	1, Healthy India	Yes	TN, Tiruchirapalli	0.80	Yes	BHEL	N/A
53	Medical equipment (Digital B.P. Apparatus, Glucometer, Digital Colorimeter for CBP etc.) to PHC in RC Puram	1, Healthy India	Yes	Telangana, Sangareddy	0.77	Yes	BHEL	N/A
54	Essential grocery items to the affected families during flash flood	1, Healthy India	Yes	Uttarakhand, Chamoli	0.73	Yes	BHEL	N/A
55	9300 numbers of Viral Transport Media to BBMP Health Officials	1, Healthy India	Yes	Karnataka, Bangalore	0.70	Yes	BHEL	N/A
56	Equipment and consumables to Viral Research and Diagnostic Laboratory (VRDL), Vijayanagar, Bellary	1, Healthy India	Yes	Karnataka, Bellary	0.56	Yes	BHEL	N/A
57	BP/Sugar testing equipment & Sanitary pads	1, Healthy India	Yes	UP, Jhansi	0.53	Yes	BHEL	N/A
58	PPE Kit, 3 Channel ECG machine- to Mullakkadu Primary Health Centre near Tutucorin Site	1, Healthy India	Yes	TN, Tuticorin	0.49	Yes	BHEL	N/A
59	Water Purifiers for COVID Ward MLB Medical College	1, Healthy India	Yes	UP, Jhansi	0.36	Yes	BHEL	N/A
60	Essential grocery items during lockdown due to COVID to deprived & needful near Panki site	1, Healthy India	Yes	Uttar Pradesh, Kanpur	0.20	Yes	BHEL	N/A
61	Sanitization for protecting general public from COVID-19	1, Healthy India	Yes	Uttarakhand, Haridwar	0.18	Yes	BHEL	N/A
62	School Expenditure	2, Educated India	Yes	Uttarakhand, Haridwar	454.72	Yes	BHEL	N/A
63	School Expenditure	2, Educated India	Yes	UP, Jhansi	74.50	Yes	BHEL	N/A

S. No.	Name of the project	Item No. from Schedule VII	Local Area (Yes/No)	Location of the Project	Amt. spent in FY 2020-21	Mode of Implementation Direct (Yes/No)	Implementing Agency	
			State, District			Name	CSR Registration No.	
64	School Expenditure	2, Educated India	Yes	UP, Amethi	52.50	Yes	BHEL	N/A
65	School Expenditure	2, Educated India	Yes	Tamil Nadu, Vellore	9.00	Yes	BHEL	N/A
66	Professional Assistance for Motivating Agrarian communities of Kandhamal (Odisha) for their Economic Transformation	2, Educated India	No	Odisha, Kandhamal	6.34	No	Professional Assistance for Development Action, Noida	N/A
67	School Expenditure	2, Educated India	Yes	TN, Tiruchirapalli	5.84	Yes	BHEL	N/A
68	School Expenditure	2, Educated India	Yes	Telangana, Sangareddy	2.45	Yes	BHEL	N/A
69	School Expenditure	2, Educated India	Yes	Telangana, Hyderabad	0.99	Yes	BHEL	N/A
					903.54			

Annexure-E

Details of CSR amount spent in the financial year for ongoing projects of the preceding financial year(s):

(In ₹ Lakh)

Year	S. No.	Project ID	Name of the project	Financial Year in which the project was commenced	Project Duration	Total amount allocated for the Project (In ₹ Lakh)	Amount spent on the project in the reporting Financial year (In ₹ Lakh)	Cumulative amount spent at the end of the Financial Year (In ₹ Lakh)	Status of the project-completed/ ongoing
2014-15	1	CSR/HEEP/14-15/01	25 sets of Community Bio-digester Toilets Cluster with drinking water	2014-15	8	565.00	37.08	469.49	ongoing
2018-19	2	CSR/PSSR/18-19/01	Construction of Boys & Girls Hostel buildings at Govt. Polytechnic	2018-19	4	300.00	62.50	237.86	ongoing
2018-19	3	CSR/PSSR/18-19/02	Construction of a Compound wall for Girraj Govt. Degree College	2018-19	3	100.00	12.85	73.88	completed
2013-14	4	CSR/ISG/13-14/01	Construction of RCC Deck Slab Bridge at Makali to Horokyanahalli Road, Dasanapura Hobli	2013-14	7	80.00	2.30	73.43	ongoing
2019-20	5	CSR/HEEP/19-20/01	Support to "MISSION SMILE" for cleft surgery	2019-20	2	56.00	11.20	11.20	ongoing
2017-18	6	CSR/EDN/17-18/01	Installation of 4 Solar Water Pumps	2017-18	4	50.00	41.05	41.05	ongoing
2018-19	7	CSR/RODM/18-19/01	Running of Mobile Medicare Unit	2018-19	2	33.00	28.02	28.02	completed
2018-19	8	CSR/RODM/18-19/02	Running of Mobile Medicare Unit	2018-19	2	33.00	27.06	27.06	completed
2014-15	9	CSR/PEM/14-15/01	Disabled friendly wheelchair accessible mini-bus for facilitating students with disabilities	2014-15	2	30.35	9.66	29.66	completed
2018-19	10	CSR/HEEP/18-19/02	LT lines and LED street lights at the confluence of Alaknanda and Mandakini rivers	2018-19	2	19.98	13.57	19.98	completed
2019-20	11	CSR/HEEP/19-20/02	Support for "Latika Vihar – Come one: Come All."	2019-20	3	19.00	5.53	9.73	ongoing
2018-19	12	CSR/RODM/18-19/03	Capacity building of ASHA workers	2018-19	2	18.00	6.00	18.00	completed
2018-19	13	CSR/RODM/18-19/04	Support to Connect & Change Program for developing change makers through entrepreneurship & ideation for Inclusive Growth	2018-19	2	18.00	1.00	18.00	completed
2019-20	14	CSR/AA/19-20/02	Distribution of "You can be Happy" series books followed by health & career counseling for KVS students	2019-20	2	10.00	5.00	5.00	ongoing
2019-20	15	CSR/AA/19-20/05	School Uniform and nutritious food for students of Grace Academy School	2019-20	2	10.00	10.00	10.00	completed
2019-20	16	CSR/BAP/19-20/01	Construction of Girls toilet at Government ITI	2019-20	2	10.00	6.09	6.09	completed
2019-20	17	CSR/PEM/19-20/01	Electrostatic Disinfection Machines for fighting against COVID-19	2019-20	2	10.00	8.00	8.00	completed
2019-20	18	CSR/AA/19-20/01	School uniform to underprivileged students	2019-20	2	9.45	4.73	9.45	completed

Year	S. No.	Project ID	Name of the project	Financial Year in which the project was commenced	Project Duration	Total amount allocated for the Project (In ₹ Lakh)	Amount spent on the project in the reporting Financial year (In ₹ Lakh)	Cumulative amount spent at the end of the Financial Year (In ₹ Lakh)	Status of the project-completed/ongoing
2019-20	19	CSR/PSNR/19-20/01	Eye Check-up Camp and cataract surgeries	2019-20	2	9.26	0.30	8.96	completed
2019-20	20	CSR/RODM/19-20/02	Medical accessories and Equipments to Hospice	2019-20	2	9.00	9.00	9.00	completed
2019-20	21	CSR/AA/19-20/06	Road Safety Intervention program in Delhi to Educate Drivers practising Road Safety as part of their daily lives	2019-20	2	8.02	8.02	8.02	completed
2019-20	22	CSR/HPBP/19-20/03	Galvanized sheet roof and converting in to a multipurpose Hall at Girls Higher Secondary School	2019-20	2	8.00	6.57	6.57	completed
2018-19	23	CSR/EDN/18-19/01	Construction of Two Toilets with water facility in Govt. aided school	2018-19	2	6.80	6.08	6.08	ongoing
2019-20	24	CSR/HEEP/19-20/05	Construction of the Dining Hall in the Hostel of Divya Prem Sewa Mission Nyas for the Leprosy patients	2019-20	2	6.00	1.50	6.00	completed
2019-20	25	CSR/IP/1-20/01	Tables, Benches, computer, fans etc to Govt. Primary/Junior schools/Govt. aided school.	2019-20	2	6.00	6.00	6.00	completed
2019-20	26	CSR/HEP/19-20/01	Construction of toilet blocks in cemeteries	2019-20	2	5.00	3.27	3.27	ongoing
2019-20	27	CSR/HEEP/19-20/06	Relief items & sanitizers etc. to District Administration	2019-20	2	5.00	4.80	4.80	ongoing
2019-20	28	CSR/IVP/19-20/01	Dining/ Multi Purpose Hall in Govt. Elementary School, Dhunda	2019-20	2	5.00	4.56	4.56	completed
2019-20	29	CSR/HPBP/19-20/06	Demolishing and relocating the existing Toilets at Arivalayam	2019-20	2	5.00	4.75	4.75	completed
2019-20	30	CSR/HPEP/19-20/04	RO Plant at Veerareddy Pally	2019-20	2	4.00	3.95	3.95	completed
2019-20	31	CSR/HEEP/19-20/07	Construction of boundary wall and repair of school building of Rajkiya Primary Vidyalaya	2019-20	2	3.56	3.53	3.53	completed
2019-20	32	CSR/HEEP/19-20/08	Construction of Toilet Complex in Gurukul Mahavidyalay	2019-20	2	3.37	3.37	3.37	completed
2019-20	33	CSR/HEEP/19-20/04	Construction of a Toilet Complex in SMJN (PG), College	2019-20	2	3.34	3.34	3.34	completed
2019-20	34	CSR/HPEP/19-20/10	Education for Slum children for one year	2019-20	2	3.30	3.30	3.30	completed
2019-20	35	CSR/HERP/18-19/01	Desktops and softwares for development of visually impaired students	2019-20	2	3.00	3.00	3.00	completed
2019-20	36	CSR/ISG/19-20/01	Benches & Furniture etc., to Govt. High School	2019-20	2	3.00	3.00	3.00	completed
2019-20	37	CSR/ISG/19-20/02	Smart Class facilities & Furniture etc to High School	2019-20	2	3.00	1.93	1.93	ongoing
2019-20	38	CSR/ISG/19-20/05	Play equipment & Development of Kitchen Garden in Anganvadi Center	2019-20	2	3.00	1.93	1.93	ongoing

Year	S. No.	Project ID	Name of the project	Financial Year in which the project was commenced	Project Duration	Total amount allocated for the Project (In ₹ Lakh)	Amount spent on the project in the reporting Financial year (In ₹ Lakh)	Cumulative amount spent at the end of the Financial Year (In ₹ Lakh)	Status of the project-completed/ongoing
2019-20	39	CSR/R&D/19-20/02	Part funding student fees and funding of special educator salary to Autism affected children	2019-20	2	2.93	0.90	2.93	completed
2019-20	40	CSR/R&D/19-20/04	Construction of toilets for school children, Kendriya Vidyalaya	2019-20	2	2.79	2.75	2.75	completed
2019-20	41	CSR/HPBP/19-20/07	Barbed wired fencing to the playground at Govt. High School	2019-20	2	2.65	2.65	2.65	completed
2019-20	42	CSR/ISG/19-20/03	Smart Class facilities & Furniture etc to High School	2019-20	2	2.50	2.13	2.13	ongoing
2019-20	43	CSR/ISG/19-20/04	Play equipment etc. & Development of Kitchen Garden in Anganvadi Center	2019-20	2	2.50	2.13	2.13	ongoing
2019-20	44	CSR/HPEP/19-20/01	Food to terminally ill Cancer patients undergoing Palliative Care	2019-20	2	2.40	2.40	2.40	completed
2019-20	45	CSR/BAP/19-20/02	Roofing to open school assembly ground at Boys Higher secondary School	2019-20	2	2.00	0.42	0.42	completed
2019-20	46	CSR/HPEP/19-20/02	Welfare Equipment to differently abled persons who are poor	2019-20	2	2.00	1.94	1.94	completed
2019-20	47	CSR/HPEP/19-20/05	Furniture for ZP High School	2019-20	2	2.00	1.99	1.99	completed
2019-20	48	CSR/HPEP/19-20/06	Furniture/ basic Infrastructure to ZPPS	2019-20	2	2.00	1.98	1.98	completed
2019-20	49	CSR/HPEP/19-20/07	Furniture to ZPHS Madharam, Jinnaram Mandalam	2019-20	2	2.00	2.00	2.00	completed
2019-20	50	CSR/HPEP/19-20/08	Providing furniture/ basic Infrastructure to ZPHS Lemoor	2019-20	2	2.00	2.00	2.00	completed
2019-20	51	CSR/HPEP/19-20/09	furniture/ basic Infrastructure to Primary School Anantha sagar,	2019-20	2	2.00	2.00	2.00	completed
2019-20	52	CSR/HPEP/19-20/11	Furniture for reading room for Collegiate Education at Govt Degree College for Women	2019-20	2	2.00	2.00	2.00	completed
2019-20	53	CSR/HPEP/19-20/12	Desks at ZPSS Chinthaguda	2019-20	2	2.00	2.00	2.00	completed
2019-20	54	CSR/HPEP/19-20/13	Desks at ZPSS Bhatpally, Khagaznagar mandal	2019-20	2	2.00	2.00	2.00	completed
2019-20	55	CSR/R&D/19-20/01	Aid for carrying out teaching activity at Community Centre	2019-20	2	2.00	0.01	1.78	ongoing
2019-20	56	CSR/HPBP/19-20/02	Raising the level of compound wall at Sri Paramahansa Nursery & Primary School	2019-20	2	2.00	0.90	0.90	ongoing
2019-20	57	CSR/HPBP/19-20/04	Replacing of Solar panels at Old Age Home	2019-20	2	2.00	1.01	1.01	ongoing
2019-20	58	CSR/HERP/18-19/04	Computers for starting a computer training centre	2019-20	2	1.90	1.90	1.90	completed
2019-20	59	CSR/IVP/19-20/03	School Benches in Govt. School	2019-20	2	1.80	1.69	1.69	completed

Year	S. No.	Project ID	Name of the project	Financial Year in which the project was commenced	Project Duration	Total amount allocated for the Project (In ₹ Lakh)	Amount spent on the project in the reporting Financial year (In ₹ Lakh)	Cumulative amount spent at the end of the Financial Year (In ₹ Lakh)	Status of the project-completed/ongoing
2019-20	60	CSR/HERP/18-19/03	E-Rickshaw for mobility of children and youth with disabilities	2019-20	2	1.65	1.65	1.65	completed
2019-20	61	CSR/HPBP/19-20/08	Construction of Toilets for boys at Govt. ADW higher secondary school	2019-20	2	1.55	1.14	1.14	completed
2019-20	62	CSR/AA/19-20/03	Food packets to needy people in and around BHEL Township, Noida	2019-20	2	1.50	1.17	1.17	completed
2019-20	63	CSR/HERP/18-19/02	Benches for underprivileged students	2019-20	2	1.45	1.45	1.45	completed
2019-20	64	CSR/IVP/19-20/02	Benches, Projector, Screen in Govt. Sr. Sec. School, Vein Puin	2019-20	2	1.20	1.20	1.20	completed
2019-20	65	CSR/HPBP/19-20/05	Sports items and Fans & lights at ADW Hostel	2019-20	2	1.00	1.00	1.00	completed
2019-20	66	CSR/PPPU/19-20/01	Construction of Fencing for the Panchayat Union Middle School	2019-20	2	0.50	0.11	0.11	ongoing
2019-20	67	CSR/HEEP/19-20/09	Medical Camp for Rural and Poor People	2019-20	2	0.43	0.43	0.43	completed
2019-20	68	CSR/HPEP/19-20/03	R.O.Plant at Vennavelli Village	2019-20	2	0.30	0.30	0.30	completed
2019-20	69	CSR/AA/19-20/04	Face Mask to nearby Slums Areas	2019-20	2	0.28	0.27	0.27	completed
						1529.75	419.34	1240.57	

Annexure-V to the Board's Report

Business Responsibility Report 2020-21

Section A: General Information about the Company

1	Corporate Identity Number (CIN) of the Company:	L74899DL1964GOI004281
2	Name of the Company:	BHARAT HEAVY ELECTRICALS LIMITED
3	Registered address:	BHEL House, Siri Fort, New Delhi – 110 049
4	Website:	www.bhel.com
5	E-mail id:	shareholderquery@bhel.in
6	Financial Year reported:	2020-21
7	Sectors that the Company is engaged in:	Refer to 'Corporate Profile', Annual Report 2020-21
8	List three key products/services that the Company manufactures/provides:	a) Construction of Power Plant (NIC Code: 4220) b) Manufacture of Steam Generators including auxiliary plant for use with steam generators (NIC Code: 2513) c) Manufacture of Turbine, Generator sets including auxiliaries (NIC Code: 2811) d) Manufacture of electric motors, transformers and electricity distribution and control apparatus etc. (NIC Code: 2710)
9	Total number of locations where business activity is undertaken by the Company:	a) Number of International Locations (Provide details of major 5) Major locations from where business activity is undertaken by BHEL are Dhaka, Bangladesh; Kathmandu, Nepal; Damascus, Syria; & Dubai, UAE (closed in June 2021). b) Number of National Locations The company has 16 manufacturing units, 2 repair units, 4 regional offices, 8 service centres, and 15 regional marketing centres.
10	Markets served by the Company:	BHEL serves domestic as well as international markets.

Section B: Financial Details of the Company (2020-21)

1	Paid up capital	:	₹696.41 crore
2	Total Turnover	:	₹16295.55 crore
3	Total Profit after Tax	:	₹(-) 2717.14 crore
4	Total expenses incurred on CSR	:	₹20.18 crore
5	List of activities in which expenditure on CSR has been incurred: Refer Annexure IV on 'Sustainable Development' under Directors Report, BHEL Annual Report 2020-21.		

Section C: Other Details

1. Does the Company have any Subsidiary Company/ Companies?

Yes, BHEL has one subsidiary company - BHEL Electrical Machines Ltd. (BHEL-EML), Kasargod as on 31-03-2021

2. Do the Subsidiary Company/Companies participate in the BR Initiatives of the parent company? If yes, then indicate the number of such subsidiary company(s)

No

3. Do any other entity/entities (e.g. suppliers, distributors etc.) that the Company does business with, participate in the BR initiatives of the Company? If yes, then indicate the percentage of such entity/entities? [Less than 30%, 30-60%, More than 60%]

No

Section D: BR Information

1. Details of Director/Directors responsible for BR

a) Details of the Director / BR Head responsible for implementation of the BR policy/policies

SN	Particulars	Details
i	DIN Number (if applicable)	08587329
ii	Name	Anil Kapoor
iii	Designation	Director (HR)
iv	Telephone number	011 26001003
v	e-mail id	akapoor@bhel.in

2. Principle-wise (as per NVGs) BR Policy/policies (Reply in Y/N)

The National Voluntary Guidelines on Social, Environmental and Economic Responsibilities of Business (NVGs) released by the Ministry of Corporate Affairs has adopted nine areas of Business Responsibility. These briefly are as under:

- P1: Businesses should conduct and govern themselves with ethics, transparency and accountability.
- P2: Businesses should provide goods and services that are safe and contribute to sustainability throughout life cycle.
- P3: Businesses should promote the well-being of all employees.
- P4: Businesses should respect the interests of, and be responsive towards all stakeholders, especially those who are disadvantaged, vulnerable and marginalized.
- P5: Businesses should respect and promote human rights.
- P6: Businesses should respect, protect and make efforts to restore the environment.
- P7: Businesses, when engaged in influencing public and regulatory policy, should do so in responsible manner.
- P8: Businesses should support inclusive growth and equitable development.
- P9: Businesses should engage with and provide value to their customers and consumers in a responsive manner.

SN	Questions	P1	P2	P3	P4	P5	P6	P7	P8	P9
1	Do you have policy/policies for ...	Y	Y	Y	Y	Y	Y	N	Y	Y
2	Has the policy being formulated in consultation with the relevant stakeholders?	Y	Y	Y	Y	Y	Y	-	Y	Y
3	Does the policy conform to any national /international standards? If yes, specify? (50 words)	Y	Y	Y	Y	Y	Y	-	Y	Y
4	Has the policy being approved by the Board? If yes, has it been signed by MD/owner/CEO/appropriate Board Director?	Y	Y	Y	Y	Y	Y	-	Y	Y
5	Does the company have a specified committee of the Board/ Director/Official to oversee the implementation of the policy?	Y	Y	Y	Y	Y	Y	-	Y	Y
6	Indicate the link for the policy to be viewed online?	Weblinks have been provided wherever applicable								
7	Has the policy been formally communicated to all relevant internal and external stakeholders?	Y	Y	Y	Y	Y	Y	-	Y	Y
8	Does the company have in-house structure to implement the policy/policies?	Y	Y	Y	Y	Y	Y	-	Y	Y
9	Does the Company have a grievance redressal mechanism related to the policy/policies to address stakeholders' grievances related to the policy/policies?	Y	Y	Y	Y	Y	Y	-	Y	Y
10	Has the company carried out independent audit/evaluation of the working of this policy by an internal or external agency	Y	Y	Y	Y	Y	Y	-	Y	Y

Notes

1. We have various practices established based on these principles, but do not have formal policy document with respect to one of them.
2. Once a policy is approved by the Board, it need not be necessarily signed by CMD/Board Director.
3. Policies and procedures of the organization are subject to audits/reviews during/by ISO 9001, ISO 14001, OHSAS 18001, CAG, Parliamentary Committees, Board of Directors, Committee of Functional Directors, Board Level Committees and/or Management Committee etc.

2a. If answer to S.No. 1 against any principle, is 'No', please explain why: (Tick up to 2 options)

In respect of Principle 7 referring to Policy Advocacy, we have established practices based on 'Policy advocacy in responsible manner'.

3. Governance related to BR

- Indicate the frequency with which the Board of Directors, Committee of the Board or CEO assess the BR performance of the Company. (Within 3 months, 3-6 months, Annually, More than 1 year)

In 2020-21, the Board Level Committee for CSR met three times, while assessment and review of CSR activities in BHEL was done in four Board meetings.

- Does the Company publish a BR or a Sustainability Report? What is the hyperlink for viewing this report? How frequently it is published?

BHEL publishes its Sustainability Report annually. Last 3 years' reports can be accessed at:

<https://www.bhel.com/sustainability-reports>

Section E: Principle-wise performance

Principle 1: Ethics, Transparency and Accountability

The company has a Board approved 'Code of Business Conduct & Ethics' for all Board Members and Senior Management personnel in compliance with the requirements of DPE Guidelines on Corporate Governance for CPSEs and SEBI's Listing Regulations.

<https://www.bhel.com/code-business-conduct-ethics-board-members-senior-management-personnel>

The Board has laid down Charter of the Board of Directors which clearly defines the roles and responsibilities of the Board and individual Directors. Further, the company endeavours to preserve the confidentiality of unpublished price sensitive information and prevent misuse of such information. Towards this a Board approved policy 'BHEL Code of Conduct for Regulating & Reporting Trading by Designated Persons & their Immediate Relatives and for Fair Disclosure' in line with SEBI (Prohibition of Insider Trading) Regulations - 2015 and Listing Regulations directs that Board members and other Designated Employees of the company have a duty to safeguard the confidentiality of all such information obtained in the course of their work at the company. The Code also provides for practices and procedures for fair disclosure of unpublished price sensitive information (UPSI).

<https://www.bhel.com/code-conduct-prevention-insider-trading>

For effective implementation of the Insider Trading Code, an internal Operating Guidelines is in place. A structured digital database containing names of all 'Designated Persons' along with details of additional persons with whom UPSI was shared is in place. Details of initial and continual disclosures are being submitted by these Designated Persons within prescribed timelines. In addition, emails notifying the 'Designated Persons' that they are in possession of UPSI and that they must ensure its confidentiality, is sent simultaneously along with the emails intimating Closure of Trading Window. A separate email is also sent to those persons with whom UPSI is shared by the 'Designated Persons'.

In line with the requirements of DPE Guidelines on Corporate

Governance and the Listing Regulations, BHEL provides progress reports on quarterly basis to DHI and stock exchanges. The audit of the Company's compliance with corporate governance requirements as well as secretarial audit of BHEL's compliance with statutory laws is conducted each year and the said reports form part of the Annual Report of the Company. In compliance with the Listing Regulations, all Board members and Senior Management personnel affirm annually that they have fully complied with the provisions of the Code of Business Conduct and Ethics during the relevant financial year and an affirmation to this effect is given by the Chairman & Managing Director in the Annual Report of the Company. For the purpose of the 'Code of Conduct for Regulating & Reporting Trading by Insiders and for Fair Disclosure, Director (Finance) is the compliance officer of the Company. In addition, the Chief Investor Relations Officer of the Company ensures compliance of 'Code of Practice and Procedure for Fair Disclosure'.

In addition, as a part of BHEL's persistent endeavour to set a high standard of conduct for its employees (other than those governed by standing orders), 'BHEL Conduct, Discipline and Appeal Rules, 1975' is in place. This is augmented by Fraud Prevention Policy and Whistle Blower Policy which not only arm the company against unacceptable practices but also act as a deterrent. The Company is subject to RTI Act 2005, audit by Statutory Auditors and CAG audit under section 139 of the Companies Act, 2013.

<https://www.bhel.com/bhel-fraud-prevention-policy-0>

<https://www.bhel.com/whistle-blower-policy-0>

BHEL has signed MoU with Transparency International India (TII) to adopt 'Integrity Pact' to make procurement and contracting more transparent by binding both the parties to ethical conduct. A panel of two Independent External Monitors (IEMs) has been appointed to oversee implementation of Integrity Pact in BHEL, with due approval of Central Vigilance Commission. Within BHEL, accountability is well defined for various functionaries through 'Delegation of Power'. Works Policy, Purchase Policy and other policy documents facilitate transparency in BHEL's working and commitment of highest order of integrity. In addition, Internal Audit carries out independent audit of purchase/ works contracts. Four representations received from suppliers during 2020-21 under Integrity Pact have been resolved by the IEMs.

The Company has a Stakeholders Relationship Committee specifically to look into matters related to redressal of shareholders and investors complaints. As reported by KFin Technologies Private Limited (RTA of the Company upto December 31, 2020) and Alankit Assignments Limited (RTA of the Company w.e.f. January 1, 2021), 265 complaints were received from the shareholders during the year under review and all complaints were redressed up to March 31, 2021.

In addition, a total of 225 public grievance complaints were received from the general public under the Centralized Public Grievance Redressal and Monitoring Scheme during the year 2020-21. All the grievances were satisfactorily resolved.

Principle 2: Products Life Cycle Sustainability

BHEL is contributing to a greener environment through development of environment friendly technologies and improvement in efficiency of equipment. Continuous improvement in power cycle efficiency and reduced emissions from coal based power plants have been achieved over the time by evolution of technology from sub-critical to supercritical. Attributes of BHEL supplied power plant equipment

such as lower auxiliary power consumption, higher plant efficiency, lower design heat rate and higher operating availability help in attaining lower life cycle cost.

Major products which address environmental concerns in their design are power plants operating with steam at supercritical parameters, Flue-gas Desulfurization (FGD) systems, Selective Catalytic Reduction (SCR) systems, Solar Photovoltaic plants, Electrostatic Precipitators (ESP), Effluent Treatment Plants and Sewage Treatment Plant (STP). There is also conscious effort towards reduction of embodied carbon in products. Company has opted to replace polluting fuels with cleaner ones, e.g., gas is now used as a source of heat energy (instead of coal earlier) during production of products like ceralin.

BHEL has been supporting Micro and Small Enterprises (MSEs) and local suppliers in and around manufacturing units on various fronts. Also, as mandated in Public Procurement Policy for Micro and Small Enterprises (MSEs) Amendment Order, 2018 for MSEs (issued by Ministry of MSME-Gol), 25% of BHEL's total procurement is from MSEs during 2020-21. Regular vendor meets and supplier development programs are organized by BHEL units, specifically for MSEs (including local suppliers) as well as specific to SC/STs, which serves as a platform for identification of needs and formulation of action plan for mutual benefits.

Your company is also working towards supplier/ partner development (especially MSMEs), and organized a workshop-SAMVAAD under the aegis of Ministry of Heavy Industries, for promoting collaborations between PSUs, private industry as well as R&D institutions & academia. BHEL identified items worth more than Rs 3,000 Crore for import substitution through development of local suppliers and hosted an EOI on its website for the same. BHEL has conducted more than ten online workshops- during December 2020 to February 2021, with the support of Ministry of Heavy Industries (M/o HI), Department for Promotion of Industry and Internal Trade (DPIIT) and Ministry of MSME.

Company's manufacturing processes generate fair amount of metal scrap. Some of the scrap subsequently undergoes recycling within the company and is reused. For example, Central Foundry Forge Plant (CFFP) in Haridwar manufactures Steel Forgings and Castings for which steel scrap is a major raw material. Reusable material is also used in packaging manufactured goods. Balance scrap is disposed as per laid down Govt. guidelines.

Principle 3: Employee's Well-being

BHEL has been a frontrunner in the area of Human Resource Management (HRM). The guiding principle for company's HRM policy is to ensure availability of competent, motivated and effectively contributing human resources and to facilitate achievement of their full potential at all times to realize organizational mission. Company has documented HRM policies and rules in the form of a 'Personnel Manual' to ensure transparency and uniformity of implementation for regulating employment relationship, career growth/ development and employees' emoluments/ benefits, healthcare and well-being. These policies are further complemented by a grievance redressal mechanism through two schemes – one for workers and other for staff & officers. A grievance for the purpose of the scheme means a grievance relating to any individual employee arising out of the implementation of Company policies/ rules or Management Decisions. Both these schemes provide for three-tier resolution. Defined timelines are laid down for resolution

of grievance at each stage. Besides, an appellate mechanism is also provided under the scheme, in the case of grievance redressal scheme for staff & officers, which an aggrieved employee can use in case he/she is not satisfied with the resolution of the grievance.

BHEL has a Health, Safety & Environment (HSE) policy which underlines the commitment of the organization to provide safe and healthy work environment to all its employees as well as other stakeholders giving due consideration for the safeguard of environment. The policy conforms to the requirements of ISO 14001 & OHSAS 18001/ ISO 45001 management system certification standards and can be accessed through the link <https://www.bhel.com/sites/default/files/HSEPOLICY.pdf>. HSE cells at all units/ divisions implement this policy and Corporate HSE department provides strategic guidance related to HSE matters at organization level. The HSE policy is prominently displayed at all workplaces to create awareness amongst the employees and other stakeholders about the same and is also translated into local language. Periodic audits by internal as well as external agencies are carried out to ensure the effectiveness of ISO 14001 and OHSAS 18001/ ISO 45001 management systems implemented at workplaces which includes the working of the policy and its critical elements.

1. Total number of regular employee as on 31-03-2021: 32,131
2. Total number of employees hired on temporary/ contractual basis: BHEL does not hire employees on temporary/ casual basis. However, BHEL awards job/works contracts to contractors at its various Units/ Divisions/ Departments as per organizational needs. The number of workers with contractors varies from time to time.
3. Number of permanent women employees as on 31-03-2021: 1893
4. Number of permanent employees with disabilities as on 31-03-2021: 861
5. BHEL has 29 participative trade unions represented in the apex level bipartite body, namely the Joint Committee for BHEL for discussing workers' and Company's interest related issues with the worker representatives, based on the principle of participative management. Besides the above, there are two employee associations, one each for executives and supervisors in BHEL.
6. All three categories of employees viz. Executives, Supervisors and Workers are represented by their respective association/ trade unions. However, since there is no check-off facility to ascertain the exact membership of executive/supervisory associations and workers' unions, a firm number in respect of the three classes of employees is not available.
7. In 2020-21, the company received one complaint on sexual harassment and one pending at the end of financial year. No complaint of child labor/ forced labor/ involuntary labor/ discriminatory employment has been received.
8. During the year 2020-21, number of average training man-days per employee is 4.54. Company is actively involved in imparting training in technical, functional as well as behavioral skills to its employees. Considering the importance of Health Safety & Environment (HSE) it is kept as an essential element of BHEL's induction training Programme. Additionally, separate programs for HSE training are also conducted regularly at all BHEL establishments across the nation for the benefit of its employees. Training is conducted by both internal and external

faculty members and HSE training programs are also conducted for casual/ temporary/ contractual workers coming through job/ work contracts with contractors. Percentage of employees who were given safety and skill (both technical and behavioral) up-gradation training in 2020-21:

- | | |
|-------------------------------|-----|
| a. Permanent Employees- | 43% |
| b. Permanent Woman Employees- | 56% |

COVID response

BHEL launched a speedy and comprehensive response to the COVID crisis on multiple fronts, including strict implementation of Government guidelines, support and facilitation to its employees and their families as well as the society at large and worked with local administration to ensure continuity of work across various manufacturing units and project sites. All possible efforts were made to ensure safety, security and well-being of all its employees and their families.

With the second wave of the Covid-19 pandemic developing into an unprecedented crisis for the nation, BHEL worked on a war footing to supply medical oxygen and enable the nation to grapple with a grave situation. Further details have been provided at **page no 31 of the Report of the Board Of Directors.**

Principle 4: Stakeholder Engagement

BHEL has identified 'Customers', 'Employees', 'Shareholders', 'Vendors' and 'Society' as its stakeholders. Processes are in place to ensure inclusion of stakeholder expectations and concerns. Key issues are identified through stakeholder engagement and addressed by programmes or action plans with clear and measurable targets. BHEL units regularly organize vendor meets specifically for MSEs (including local suppliers) towards capacity and capability building, which also provides opportunities for open communication, mutual benefit and support. Customers are engaged through several modes like customers meets, surveys. Investor community is engaged through meetings, conferences, publications etc and is provided with relevant information pertaining to their investment decisions.

BHEL has clearly identified the disadvantaged, vulnerable, poor, needy & marginalized stakeholders in the vicinity of the BHEL manufacturing units / regions / divisions / sites / offices and their concerns are addressed as per BHEL's CSR Policy which is in compliance with section 135 & Schedule VII of the Companies Act 2013 and rules made thereunder as well as DPE Guidelines on CSR & Sustainability for CPSEs.

https://www.bhel.com/sites/default/files/BHEL_CSR_Policy_July2017.pdf

Principle 5 - Human Rights

BHEL policies are in line with the principles of Human Rights, The Constitution of India, and applicable laws. BHEL has special provisions for ensuring safeguard of women employees at the workplace. In context of human rights abuse, no such instance has been reported in the Company.

BHEL is one of the founding member of Global Compact Network, India (GCNI) and is a part of its initiatives in India. The company reports its performance on ten principles of UNGC on annual basis since 2001 through Communication on Progress (CoP) which includes BHEL's commitment towards upholding the principles of UNGC. This CoP can be accessed through the webpage:

<https://www.bhel.com/commitment-ungc-programme>

Principle 6: Environment

BHEL has a well-established Environmental Management System (EMS) accredited to ISO 14001. Based on the corporate HSE policy, all manufacturing units and regions have derived their HSE systems in line with the requirement of ISO 14001 'Environmental Management System' standard. The EMS provides an excellent framework to proactively identify and manage the risks related to environment in a systematic manner. HSE cells at all BHEL units as well as Power Sector regions oversee the implementation of HSE policy supported by Corporate HSE department at apex level to provide strategic guidance. Periodic audits are carried out by the certifying body to ensure the compliance to the EMS and requirements of ISO 14001 are met. The company's HSE policy is available on the internet and can be accessed through the web link: <https://www.bhel.com/sites/default/files/HSEPOLICY.pdf>

As a responsible global citizen, the organization acknowledges the relation between Green House Gas (GHG) emissions and climate change. To address this global challenge, BHEL has been putting efforts in reducing carbon footprint of its products and services, thereby enabling the customers to generate power in a sustainable manner with reduced environmental footprints over the life cycle of the plant. In internal operations also, the organization is putting a major thrust in energy efficiency and use of renewable energy sources. The company has established a total of 28 MWp of Solar Photo Voltaic (ground mounted and roof-top) plants at various BHEL locations which has helped company in making its energy mix more sustainable. Company's inventory of renewable application also includes solar water heaters, solar street lighting etc. As a result of such initiatives, BHEL achieved carbon footprint avoidance of 26,118 MT CO₂-e during 2020-21. Total energy generated through various renewable energy systems stood at 27.2 million units during 2020-21. The Company has also taken a number of projects related to water and energy conservation, tree plantation, waste management, resource conservation, etc.

Having already introduced supercritical technology in India, the company is working further towards reducing the carbon footprint of BHEL made products during their operational lifecycle. In association with IGCAR and NTPC, BHEL has developed Advanced Ultra Supercritical Technology under the aegis of the National Mission on Clean Coal Technology. The technology will yield targeted efficiency of ~46% against efficiency of ~38% of subcritical and ~41-42% of supercritical sets. As a result, coal consumption and CO₂ emission will further reduce by about 11% as compared to supercritical power plants and by about 20% as compared to subcritical power plants for single unit of power generation. The R&D phase of the project has been completed successfully.

BHEL is already offering solutions required to meet the stipulated emission norms which are in force for generation utilities. The company is executing jobs like modification in boiler design, modifications in the wind box and firing system of Boilers, installation of FGD systems for reduction of SO_x emissions and improvement in particulate collection efficiency of ESPs. BHEL has indigenously developed SCR technology exclusively for high ash coal fired Indian thermal power plants through its dedicated R&D efforts and the same has been demonstrated at NTPC Simhadri. BHEL has already entered into Technology Collaboration Agreement (TCA) with NANO Co. Ltd., Republic of Korea for design & manufacture of SCR Catalysts and with Babcock Power Environmental Inc., USA for

SCR system catering to De-NOx business in Coal fired power plants. BHEL is in the process of commissioning the facility developed for conversion of high ash Indian coal to methanol. Successful implementation of this technology will help generating methanol at industrial scale for its use in blending with petrol which can significantly curb the rising crude oil import bill of the country and improve the energy security of India.

BHEL has indigenously developed Passivated Emitter Rear Contact (PERC) technology for high efficiency c-Si solar cells. Maximum efficiency achieved in the PERC solar cells using optimized processes is 21.7% while an average efficiency achieved is 21.08%. With this development, BHEL has the know-how of PERC technology and process design. The dedicated R&D facility has developed capabilities to support migration from non-PERC manufacturing technology processes to PERC technology.

In urban mobility area, there is favourable movement towards Electric mobility as the future mode of transportation. BHEL has developed E-Bus, Permanent magnet motors, Induction motors & IGBT controller for E-buses, Electric Charging Stations for E-mobility infrastructure.

All the emissions and discharges from the premises are maintained within the limits prescribed by respective SPCBs. One notice received from MPPCB is pending resolution for which work is already in progress.

Principle 7: Policy Advocacy

BHEL is a member of many industry bodies/ Chambers viz., Confederation of Indian Industry (CII), Federation of Indian Chambers of Commerce and Industry (FICCI), Associated Chambers of Commerce and Industry of India (ASSOCHAM), Indian Electrical and Electronics Manufacturers Association (IEEMA) and Standing Conference of Public Enterprises (SCOPE). BHEL uses various mechanisms of interaction with such bodies (e.g. participation in seminars & meetings, participation in working groups etc.) for putting forth its views and opinions in matter related to policy.

Company's interests are represented via inputs to government queries, knowledge sharing, response to surveys, feedback on industry needs, formation of government policies like GST, fiscal budget, foreign trade, Company Law, Industrial Policy, Capital Goods Policy, Export Promotion etc. The company's views are presented in various inter-governmental forums such as Joint Ministerial Commission (JMC), Joint Steering Committee (JSC), Joint Working Group (JWG), Joint Trade Committee (JTC), Joint Economic and Trade Committee (JETCO), Joint Commission Economic Corporation (JCEC), Working Group on Trade (WGT), etc. to facilitate international trade and collaboration. Company also interacts with government bodies like DHI, DPE, DIPP, NITI Aayog and participates in policy formulation like National Electricity Policy, challenges of employment generation, growth and skill development, promotion of in-house R & D, Make in India, AatmaNirbhar Bharat Abhiyan for self-reliant India etc.

Company has actively contributed in a responsible manner towards development of policies meant for strengthening of technology base in country, skill development, development of Indian power sector, development of capital goods sector and Indian manufacturing industry, exports, and growth of Public Sector Enterprises.

Principle 8: Inclusive Growth

BHEL has a well-structured organizational set-up, policy

& procedures through which various CSR programmes are implemented. The CSR policy has identified several activities from Schedule-VII of the Companies Act, 2013 as its thrust areas. These activities have been categorized under seven headings namely Clean India, Green India, Healthy India, Heritage India, Inclusive India, Educated India and Responsible India. The policy is hosted on website link https://www.bhel.com/sites/default/files/BHEL_CSR_Policy_July2017.pdf and is fully in conformance with requirements of Section 135 of the Companies Act 2013.

The policy is implemented through a three-tier structure at the corporate level (Board level committee on CSR, Level-1 committee & Level-2 Committee for screening and approval of proposals) along with unit level CSR Committee. Company supports numerous social initiatives across the country targeting poor, needy and economically weaker sections of society through specialized agencies such as NGOs, govt. agencies etc. in line with the CSR Policy. BHEL has undertaken several CSR initiatives in the field of health, education, Swachh Bharat, environment protection, vocational training, skill development programmes, infrastructure development and community development programmes, which ultimately contributed to holistic welfare and inclusive growth of the society. CSR projects are closely monitored and supervised with an objective to provide maximum benefits to the society and to ensure fruitfulness of the initiatives undertaken.

During 2020-21, the CSR activities carried out are listed in Annexure IV of Annual Report. Further, project details are listed on the link <https://www.bhel.com/our-projects>

Apart from inclusive growth through CSR, the company takes affirmative action in recruitment and promotion for representation of employees from socio-economically backward sections of society, minorities and women as mandated by the Govt. of India. The company is an equal opportunity employer and does not discriminate on the basis of gender, race, caste, religion, linguistic, region etc. in recruitment and employment relationship.

Principle 9: Customer Value

Customer value is an integral part of BHEL's culture which is also been reflected in our Vision, Mission and Values statement. Company is constantly working towards creating value for customer through products and services. Every product offering of BHEL is labelled with detailed product labels/ name plates/ test certificates as per the requirement and terms of contracts with customers besides the mandatory requirement of the applicable law.

Given BHEL's diverse and large scale nature of operations, customer complaints get registered and resolved through multiple ways. Two dedicated centralized online complaint systems, i.e., Customer Care Management System (CCMS) and Site Action Request (SAR)/ Commissioning Action Request (CAR) are in operation. Major quality issues reported were taken up for Root Cause Analysis (RCA) and are being resolved. Over the year, this has led to a decreasing trend in numbers of major quality issues. Apart from complaints, customer feedback is taken through customer satisfaction surveys, customers' meets, face-to-face interactions, video-conferencing and appreciation letters.

There is no case filed by any stakeholder against the company regarding unfair trade practices, irresponsible advertising and/or anti-competitive behavior during the last five years and pending as on end of financial year i.e., 31 March, 2021.

Making the *the Sun* COUNT!

BHEL is one of the few companies in India which provides end-to-end in-house solutions for all solar power needs. BHEL's solar portfolio is 1200 MW+ with solar PV plants commissioned across the Nation- ground mounted, roof top, canal top & floating solar PV plants.

BHEL is Nation's leading EPC player in the floating solar PV segment. Several large scale floating solar power plants including 100 MW NTPC Ramagundam, 25 MW NTPC Simhadri, and 22 MW NTPC Kayamkulam are being executed simultaneously currently. BHEL also commissioned 5 MW Floating SPV plant at Sagardighi, one of the largest floating solar power plants in India at the time of its commissioning, in addition to 5MW floating SPV plant at Simhadri during the year.

Strengthening its technology capabilities, BHEL has indigenously developed Passivated Emitter and Rear Cell (PERC) technology for high efficiency c-Si solar cells, with maximum efficiency of 21.7%, and average efficiency of 21.08%.



A large graphic of a head silhouette, composed of a dark blue base and a light beige upper portion. The upper portion is densely packed with numerous colorful icons representing various fields of knowledge and disciplines. These include scientific symbols like DNA helices, test tubes, and microscopes; mathematical and logical symbols like gears, puzzle pieces, and a target; artistic symbols like a mountain, a chess knight, and a diamond; and general educational symbols like graduation caps, magnifying glasses, and checklists. The entire composition is set against a solid light beige background, which also features scattered small decorative elements like plus signs and crosses in teal, yellow, and red.

Annexure-VI to the Board's Report

Research & Development and Technological Achievements

6.1 Innovation

BHEL is one of the highest spenders on R&D and innovation in its field, with consistent expenditure of over 2.5% of its revenue over the past many years. As a result, BHEL's products have been in line with the latest technologies and consistently displayed high reliability, efficiency and cost-competitiveness. However, recent times have witnessed a rapid change in the technological landscape, which has had a far reaching impact on existing businesses as well as thrown up many new hitherto unaddressed opportunities. The company's innovation ecosystem has been revamped over the past year with renewed focus on introducing new products and services as per market requirements in the shorter term as well as working in emerging and futuristic areas in line with the GOI's policy for a decarbonized economy. The company aims to achieve this by a judicious mix of in-house development coupled with collaborations

with technology leaders/ global OEMs as well as academia.

BHEL's engineering and R&D base is now focused on in-house development of new products in areas like renewables, railway transportation, defence and aerospace, Industry 4.0, EVs and chargers, etc. The R&D set up is also working on development of ambitious future technologies like Hydrogen, clean coal, etc. to ensure the country's technology leadership in technologies of tomorrow.

Continual strengthening of knowledge and information throughout its innovation ecosystem for the intellectual growth of its workforce is a vital part of the R&D strategy.

6.2 R&D Strategy

BHEL's five-pronged R&D strategy comprises of Strategic Direction, Portfolio Management, Partnerships & Alliances, Knowledge Management and Enabler to address its growth needs.



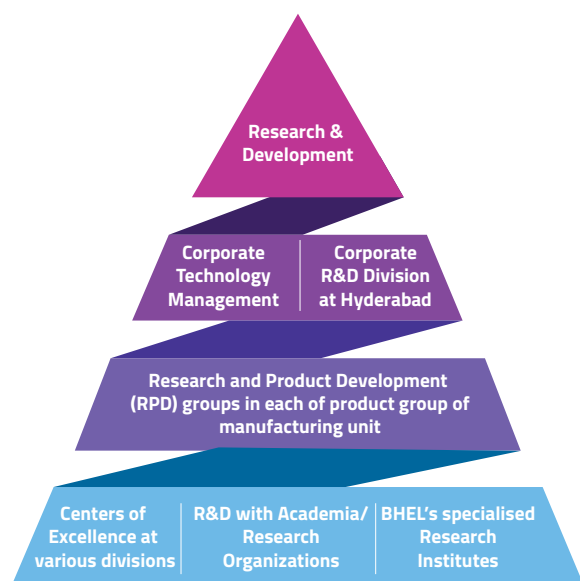


Unique High Temperature Spin Test Rig (HTSTR) established for testing of advanced materials for AUSC mission project

6.3 R&D Structure

The R&D structure of the Company is headed by Director (E, R&D), supported by Corporate Technology Management (CTM) and Corporate R&D at apex level. CTM is mandated to set out the company's overall R&D strategy so as to enhance its engineering and R&D capabilities for engineering and product development in line with market demands, while the Corporate R&D Division located at Hyderabad works towards in-house technology development. The R&D efforts at corporate level are complemented by various Research & Product Development (RPD) groups in manufacturing units. For engineering processes, the innovation focus is on design optimization and reducing cycle time.

These groups are supported by well-equipped state-of-the-art R&D infrastructure benchmarked with the best in the world. The R&D infrastructure includes laboratories at Corporate R&D Division and manufacturing Units, Centres of Excellence, and specialized Research Institutes, etc.



BHEL's 14 Centres of Excellence include establishments at Corporate R&D Hyderabad (e.g. Intelligent Machines and Robotics, Machine Dynamics, UHV Laboratory, Computational Fluid Dynamics, Permanent Magnet Machines, etc.), HPBP Tiruchirapalli (e.g. Coal Research Centre) and EDN Bengaluru (e.g. Power Electronics, IGBT & controller Technology).

BHEL also has 5 Specialized Research Institutes, namely Pollution Control & Research Institute (PCRI), Haridwar, Welding Research Institute (WRI), Trichy, Ceramic Technological Institute (CTI), Bengaluru, Centre for Electric Transportation (CET), Bhopal and Amorphous Silicon Solar Cell Plant (ASSCP), Gurugram.

Industry – academia collaboration is a key determinant of the success of application of innovation for product as well as process improvements. BHEL has partnered with leading academic and research institutions of the country including IITs, NITs, CSIR, ARAI, etc. for applied research in focus areas.

In areas where in-house innovation efforts need to be supplemented with technology support from established players due to market requirements, BHEL enters into technology collaboration agreements with global engineering and manufacturing leaders. There is a continuous push towards fast absorption and indigenisation of such technology to meet Indian market requirements.

Major Ongoing Technology Collaboration Agreements

Indian Organisations

Sl.	Name of Collaborator	Product
1	Indian Space Research Organisation (ISRO), India	Space Grade Lithium Ion Cells
2	CSIR- IIP, Dehradun	PVSA based Oxygen Plant

Global OEMs

Sl.	Name of Collaborator	Product
1	Mitsubishi Heavy Industries Ltd, Japan	Pumps
2	Siemens AG, Germany	Steam Turbines, Generators and Lateral/Axial Condensers
3	Mitsubishi Power Ltd, Japan	Flue Gas Desulphurization
4	Oto Melara, Italy ** (** now Leonardo S.p.A., Italy)	76/62 Super Rapid Gun Mount
5	Vogt Power International Inc., USA	Heat Recovery Steam Generators
6	Kawasaki Heavy Industries Limited, Japan	Stainless steel coaches and bogies for metros
7	HLB Power Co. Ltd., Korea	Gates and Dampers
8	NANO Co. Ltd., Korea	SCR Catalyst for De-NOx applications
9	Babcock Power Environmental Inc., USA	SCR System De-NOx applications
10	General Electric Technology GmbH, Switzerland	700 MWe Steam Turbine for Nuclear Power Plants
11	Valmet Automation Oy, Finland	New Generation C&I Automation



Electron microscope at Welding Research Institute (WRI), Trichy

6.4 Achievements during the year

Company's committed R&D efforts towards development of new and improved products, processes and systems have led to the following major developments:

- **Development of Advanced Ultra Supercritical (AUSC) Technology** for coal based Thermal Power Plants was identified by Govt. of India (GoI) as a Mission Project as part of the National Action Plan on Climate Change (NAPCC). Under the aegis of Ministry of Heavy Industries and Principal Scientific Advisor (PSA) to GoI, a consortium of BHEL, NTPC and IGCAR was formed to develop AUSC technology to reduce Carbon Emissions & achieve higher efficiency of ~46%. Steered by DHI, the AUSC R&D phase of technology development

has been completed in Dec'2020. BHEL is now geared to set up 800 MW Technology Demonstration Plant at NTPC Sipat site in the next phase, and has signed an MoU with NTPC for the same. A major landmark in this journey is the design of HP&IP AUSC steam turbine, which included many firsts such as welding of dissimilar metals, machining of new materials and advanced testing methodologies, including Test rig for design validation of creep-fatigue damage estimation of turbine rotor, a first-of-a-kind facility in the world.

- The successful completion of design and manufacturing of **HP Bypass valves for Ultra Super critical parameters** has added a new product in BHEL's portfolio.
- Successful commissioning of a **Digital Substation** with the first indigenously designed and developed BHEL-make 420 kV Fiber Optic Current Transformers (FOCTs), IEC 61850 compliant Intelligent Electronic Devices (IEDs), Switchgear Controller Unit (SCU), and Bay Control Unit (BCU) at POWERGRID's 400/220 kV Bhiwadi Sub-station, as part of a collaborative project between BHEL and POWERGRID identified in the action plan of CPSE Conclave for Vision New India 2022, steered by Honorable Prime Minister of India. This is a major step towards complete digitization of the Sub-Station Automation System and its indigenization.
- BHEL has successfully **designed and manufactured a prototype of 22 ft long Container**. Such containers are presently being imported in the country and your company has established manufacturing facilities for executing these orders.
- For the first time in India, **BHEL has successfully conceptualized, designed, commissioned and synchronized a 1.7 MW Solar PV Plant along the railway trackside for Indian Railways at Bina**, Madhya Pradesh to feed power to 25kV traction line. The project includes development of 850 kW single phase Power Conditioning Unit (PCU), 400/25 kV dry type transformers and PV SCADA for managing the operation of solar power plant.
- BHEL has **indigenously developed Passivated Emitter Rear Cell (PERC) technology for high efficiency c-Si solar cells** with funding from Ministry of New and Renewable Energy (MNRE). Maximum efficiency achieved in the new PERC solar cells is 21.7%, with average efficiency of 21.08%. With this development, BHEL has the know-how and dedicated cell level R&D facility to support upgradation of PERC technology and also carry out research in upcoming technologies.
- To address the upcoming 1.5 kV solar PV system business, **BHEL has developed, designed and manufactured in-house prototype of 1500V, 325Wp multi-crystalline cell PV Module**. With the successful conduction of type & safety qualification tests, BHEL is ready to address this future segment of solar business.
- **BHEL has developed a Francis turbine model with specific speed of 260 m-kW**. The hydraulic design was finalized along with complete water passage design including optimized runner profile through exhaustive CFD analysis. The prototype model has been tested successfully for designed parameters. BHEL is ready for future business of Francis turbine with this high specific speed range.
- To support the fight against COVID-19, BHEL developed **atomized liquid sanitizing equipment called BHELMISTER**. More than 150 Nos. of BHEL MISTERS have been delivered to various parts of the country.

- BHEL has for the first time designed & manufactured India's highest rating **500 MVA, 400/220/33 kV, 3-Phase Interconnecting Transformer (ICT)**, which has been successfully dynamic short circuit tested at NHPTL Bina.
- BHEL has indigenously developed and commissioned **3-phase propulsion electrics for 9000 HP WAG9HH** electric locomotives for Indian Railways which includes traction & auxiliary convertor, traction transformer and 3-phase AC traction motor.
- BHEL has successfully developed and supplied **3-phase AC Induction Motors and Traction Alternators for 3000 HP cape gauge locomotive** applications for Mozambique Railways. This is first ever export order for 3-phase AC Induction Motors and Traction Alternators.
- BHEL has developed **Composite Insulators with 1600 mm creepage** for usage of 25kV AC in overhead traction lines in high-polluted zones for Indian Railways. The prototypes have successfully passed all the required type tests as per the latest specifications of RDSO.
- As a part of indigenization of imported equipment in strategic applications, BHEL has developed a **350 kW, 104 Hz, 520 rpm, reversible, permanent magnet, synchronous Reserve Propulsion Machine**. The machine has successfully completed endurance testing of 2500 hours of continuous operation.
- BHEL has developed a compact two cylinder reheat steam turbine module of a HP Back Pressure steam turbine (HNG63/50-3) and a combined IPLP Reheat Condensing Turbine (HNK80/5-3) coupled through flexible coupling. The module enables significant improvement in cycle heat rate, resulting in higher efficiency and enhanced reliability.

6.5 Focus areas for R&D & technology development

BHEL is building and consolidating R&D capabilities in the following emerging and existing areas:

- Total solutions for rail transportation in areas of three-phase AC drive system for electric locos, MEMU, coach manufacturing for Metro & High speed train-sets.
- Establishing technology demonstration plant with Advanced Ultra Super Critical (AUSC) Technology for Thermal Power Plants.



Centre for Electric Transportation (CET) at BHEL Bhopal

- Indigenization of Flue Gas Desulphurization (FGD) systems technology which will also help reduce the import bill of the country.
- Indigenization of higher capacity axial compressors for blast furnace in Steel industries under the AatmaNirbhar Bharat Abhiyaan.
- Products & systems for Hydrogen economy and fuel cells applications.
- Development of indigenous technology to generate green fuels (Methanol, Hydrogen, etc.) from high ash Indian coal.
- Products and systems for digital substation and advanced power transmission like ± 800 kV HVDC, 765 kV, 1200 kV transmission systems.
- Development of high efficiency solar cells, grid connected renewable energy Solar PV applications.
- Products and systems for strategic applications.
- Application of Industry 4.0 with deployment of new technologies including Intelligent machines & robotics and Advanced Manufacturing Technologies.
- Development of solutions for E-mobility ecosystem including E-Bus, power train, charging stations, energy storage systems, etc.



Centre for Excellence for Computational Fluid Dynamics (CFD) at Corp R&D, Hyderabad

Annexure –VII to the Board’s Report

7.1 Conservation of Energy

Sustainable Development tenets are ingrained in the business processes of BHEL. Our mission statement “Providing Sustainable business solutions in the fields of Energy, Industry & Infrastructure” also bear testimony to this. This is a continuous journey for reaching newer heights of corporate excellence through implementation of reduced environmental footprint of our products & services and enhancing stakeholder value. This ideology is implemented for all our internal processes as well, promoting inclusive growth in the society.

Sustainable use of energy across our premises is an important element of business decision making process. Energy conservation/ efficiency projects undertaken have resulted into significant saving in energy consumption. Detailed energy audit process has been undertaken and subsequently ISO 50001 certification has been obtained which will harness energy saving opportunities to the extent feasible. Reduction in lighting load through switching to energy efficient lighting fixtures in offices/ street lighting is a regular activity in our organization. Energy Conservation projects have been implemented in FY 20-21 which include Replacement of conventional lights with energy efficient LEDs; Replacement of old ACs with energy-efficient 5-star AC, Installation of about 120kWs roof top solar, etc..

Generation of Renewable Energy for captive use has gained momentum in the recent years in our organization. 28 MWp of in-house installed capacity of solar power plants comprise of ground mounted as well as rooftop solar systems. It has resulted into lesser dependence on DG sets and achieve sustainable energy mix in our operations.

7.2 Technology Absorption and Research & Development

Research & Development

1. Specific areas in which R&D carried out by the Company	}	Given in the Directors' Report under Annexure-VI "R&D and Technological Achievements"
2. Benefits derived as a result of the above R&D		
3. Future Focus areas		
4. Expenditure on R&D		
Total	..	₹726.49 crore
a) Recurring	..	₹719.78 crore
b) Capital		₹6.71 crore
Expenditure as a percentage of revenue	..	4.45 %

7.3 Technology Absorption

Details of technology acquired during the last 5 years:

Technology	Year of import	Absorption status
Stainless Steel Metro Coaches & Bogies	2017	Technology absorption in progress
Gates and Dampers	2018	
Selective Catalytic Reduction (SCR) Catalyst	2018	
SCR System	2018	
Steam Turbine for Nuclear PHWR application	2018	
New Generation C&I Automation	2020	

7.4 Foreign Exchange Earnings and Outgoings (₹ Crore)

Particulars	2020-21	2019-20
Foreign Exchange Used	1598	4031
Foreign Exchange Earned	1743	3880

For and on behalf of the Board of Directors of
BHARAT HEAVY ELECTRICALS LTD.



Dr. Nalin Shinghal
Chairman & Managing Director

Place : New Delhi
Dated: 27.08.2021

Annexure –VII A to the Board's Report

7A.1 Implementation of Official Language

Official Language Implementation Committee has been constituted under the Chairmanship of Head of the unit / division in all the units of BHEL. Quarterly meetings were held in all the units /divisions including Corporate Office. Hindi Divas/ Week/Fortnight/ Month was celebrated in all the units/ divisions including Corporate Office during which various competitions, seminars, cultural programmes and Kavi Sammelans were organized. Hindi Day message of Chairman and Managing Director was sent to all BHEL employees through e-mail on September 14, 2020. Besides, Hindi Day Function was organized through a pan India VC, under the Chairmanship of Dr. Nalin Shinghal, Chairman and Managing Director and Mr. Vinay Vinamra, well-known poet, was invited as the Chief Guest on the occasion.

Rajbhasha Ullas Parva Valediction and Award Distribution Function was held on September 30, 2020 at Corporate Office. Dr. Sumeet Jerath, Secretary (OL), Ministry of Home Affairs, Government of India graced the occasion as Chief Guest. Secretary (Rajbhasha) appreciated the innovative effort of forming "Rajbhasha Chakra" at BHEL as well as the programs organized across the Company. To speed up the pace of implementation of Official Language in the company, more than 30 nos. of Rajbhasha Chakra were formed across the Company.

BHEL is playing an active role in Town Official Language Implementation Committees (TOLIC) located in different cities. Heads of all the units / divisions are members of the TOLIC located in their respective cities. Many interesting competitions, seminars, conferences and programmes are organized under the auspices of these committees. BHEL is making significant contribution in organizing TOLIC competitions as well as other activities and our employees enthusiastically participate in all the competitions and

win many prizes. BHEL was awarded First prize for Rajbhasha implementation and our Hindi patrika Arunima was awarded consolation prize by TOLIC, Delhi. Many of our units were also awarded by their respective TOLICs.

BHEL was also ranked in the category of uploading more than 5000 TMs (Translation memory (sentences)) in Memory based Translation software Kanthasth in a competition held by **Department of Official Language, Ministry of Home Affairs, Govt. of India.**

A total of 17 Hindi magazines are published across the Company. 27 employees from various units/divisions were awarded cash prize for their excellent articles published in these magazines. 14 units/divisions of the Company were bestowed Rajbhasha Shield for excellent Rajbhasha implementation. 3 BHEL employees were awarded cash prize for writing books in Hindi.

For celebrating Vishva Hindi Divas, various competitions / programs were organized in all units / divisions. Winners of the competitions were awarded by Chairman and Managing Director on the occasion of Republic Day Celebration. An online Hindi Quiz was organized by Corporate Office on April 22, 2020. A total of 1030 employees from various units/divisions participated in the quiz.

Inspection of Power Sector-PEM and Power Sector-NR was made by Parliamentary Committee on Official Language on October 9, 2020 & November 25, 2020 respectively. The Committee appreciated the efforts being made towards implementation of Official Language and gave suggestions to achieve the targets.

18 sessions on various topics relating to Rajbhasha were organized during the year covering 1664 participants from various units/ divisions.



Rajbhasha Ullas Parva was observed in BHEL in September 2020



CMD BHEL administered the Integrity Pledge on the inaugural day of Vigilance Awareness Week 2020

All BHEL Rajbhasha Coordinators Meet was held through video conferencing on March 23, 2021. A total of 70 officials across the Company participated in the Meet.

7A.2 Vigil Mechanism

Transparency, fairness and objectivity form the basis for all decision making processes for the company. The Company has in place a full-fledged Vigil Mechanism consisting of Vigilance Department, Internal Audit, Whistle-blower Policy mechanism, Independent External Monitor(s), as well as Board Level Audit Committee.

The Vigilance function of BHEL is headed by Chief Vigilance Officer who acts as an extended arm of Central Vigilance Commission (CVC) in the Company. All units & divisions of BHEL have a Vigilance set-up headed by a Senior Officer reporting to the CVO.

Preventive Vigilance has been the focus area of BHEL and during the year 2020-21, 108 number of Training programmes/ Workshops on Preventive Vigilance were organized for employees associated with decision making process across the Units/Regio. Session on preventive vigilance has been added in all the General Management / Strategic Management / Young Managers Programmes organized by BHEL's Corporate Learning & Development (CLD) Department. However, as suggested by the Commission, a two days training programme on 'Preventive Vigilance' has been included in the induction training and mid-career training programmes for executives from January, 2021.

The Do's & Don'ts for Finance-Works & Purchase, Civil structural Works execution, IT applications, Procurement, vendor registration and Quality & Third Party Inspections were finalized and released. These Do's and Don'ts aims to act as a ready reckoner for all dealing officials facilitating them in discharging their work effectively and efficiently.

During the year 2020-21, 29 cases were taken up for investigation, 70 penalties (22 major and 48 minor) were imposed and 14 warning / advisory letters were also issued. Further, out of 200 outstanding complaints (185 received during the year 2020-21) 197 were

disposed off and rest are under different stages of disposals.

Annual Property returns of about 4830 employees (about 28.5% of employee covered under CDA Rules) were scrutinized during the year 2020-21.

Random checks of the activities in the organization were conducted through routine inspections, surprise checks, system studies, CTE type inspection etc. Based on the findings of these inspections/ scrutinies, Improvements were suggested on various provisions of BHEL Policies / Guidelines / Manuals so as to minimize discretionary powers and to bring clarity in provisions where there is scope for misinterpretation. Accordingly, Revised Reverse Auction (RA) Guidelines-2020 and Amendment to Guidelines for Suspension of Business Dealings with Suppliers/Contractors have been issued.

During the year 2020-21, recoveries of approx. ₹482.45 lakh have been made from various agencies, employees, vendors and contractors, on the advice of Vigilance.

As per directives issued by CVC vide circular no. 020/VGL/036/459673 dated 8th September, 2020, the Vigilance Awareness Week (VAW)-2020 was observed from 27th October to 2nd November, 2020 on the theme 'सतर्क भारत – समृद्ध भारत (Vigilant India – Prosperous India)' in Corporate Office, Manufacturing Divisions, Power Sector Regions, offices and Project Sites of BHEL.

Vigilance Department organized various programmes (approx. 230) on the theme of Vigilance Awareness Week i.e. debates, elocutions, panel discussions, essay writing, quiz, slogans/ cartoon / poster competitions etc. for employees, their wards and students of schools and colleges in various cities across India keeping in view the COVID-19 guidelines.

An online quiz competition on PAN BHEL basis was organized by Corporate Vigilance Department to generate awareness about rules, regulations & policies. A total of about 900 employees participated in the online quiz. Further, an online crossword was also organized wherein a total of about 540 employees participated.

To address the grievances of vendors a centralized Vendor Grievance Redressal System (SUVIDHA), where vendors can lodge as well as view and track the status of grievance(s) lodged, was developed and launched during VAW-2020. As a part of awareness series, 09 nos. animated clips (VAW Theme, policy matters, lodging of complaints, CDA Rules, password protection, Whistle Blower Policy, Medical Dependency etc.) were developed in-house and released during the VAW. These clips were shared with employees and were also uploaded on the BHEL's website / social media platforms.

Vigilance Department publishes quarterly e-Newsletter 'DISHA' with a view to create awareness about procurement policy, rules and procedures etc., to disseminate the instructions/ guidelines issued by CVC and Government of India from time to time and to share best practices, case studies and articles. Four issues were published during the year and thirty-two issues have so far been published since 2013. The e-newsletter is given wider publicity and is sent to all employees through e-mail and also hosted on BHEL's units/ Regions Intranet webpage.

7A.3 Health, Safety & Environment (HSE)

It has always been our endeavour to consolidate good HSE practices and make them a part of our work culture. In view of the same, an online Site Safety Assessment System was developed and launched for monthly self-assessment by all the active sites

across Power Sector-Regions. This will help the Project Sites to improve their safety performance continually, through regular self-assessment.

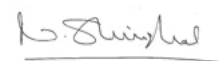
BHEL conducted HSE Trainings / Expert Talks / Webinars on regular basis for their employees and sub-contractors' employees. In addition to the structured trainings, BHEL spread awareness among their employees and society on large scale during HSE campaigns i.e. Environment Awareness Month (5th June – 30th June, 2020), Swachhta Pakhwada (16th – 31st August 2020), National Safety Fortnight (4th – 18th March 2021) etc.

BHEL has made all-out effort to make its townships "Single Use Plastic Free" and get the 3rd party audit / surveillance audit conducted for declaring them as "Single Use Plastic Free Townships". All 14 townships of BHEL have been declared as "Single Use Plastic Free Townships".

BHEL's effort in increasing its safety performance and environmental enrichment has been well appreciated and BHEL has received many awards as a recognition of these efforts. The awards received during the year include:

- Golden Peacock Environment Management Award (GPEMA) - 2020 in Power Equipment Sector for exemplary contribution to environment management by Institution of Directors.
- Apex India "Gold Award" 2020 under Occupational Health & Safety in Engineering Sector for exemplary contribution in OHS at BHEL.

For and on behalf of the Board of Directors of
BHARAT HEAVY ELECTRICALS LTD.



Dr. Nalin Shinghal
Chairman & Managing Director

Place: New Delhi
Date: 27.08.2021

Annexure – VIII to the Board Report

Form AOC- I

(Pursuant to first proviso to sub-section (3) of section 129 read with rule 5 of Companies (Accounts) Rules, 2014)

Statement containing salient features of the financial statement of subsidiaries/associate Companies/joint ventures

Part "A": Subsidiaries

(Information in respect of each subsidiary to be presented with amounts in ₹Crore)

1. Sl. No.	01
2. Name of the subsidiary	BHEL ELECTRICAL MACHINES LIMITED
3. The date since when subsidiary was acquired	19 th January, 2011
4. Reporting period for the subsidiary concerned, if different from the holding company's reporting period	N.A.
5. Reporting currency and Exchange rate as on the last date of the relevant Financial year in the case of foreign subsidiaries.	N.A.
6. Share capital	10.50
7. Reserves & surplus	(34.23)
8. Total assets	24.64
9. Total Liabilities	48.36
10. Investments	NIL
11. Turnover	0.25
12. Profit/(loss) before taxation	(7.05)
13. Provision for taxation	(1.77)
14. Profit/(loss) after taxation	(5.28)
15. Proposed Dividend	NIL
16. % of shareholding	51%

Figures given in brackets are negative

The proposal for transfer of 51% stake in BHEL EML, sent by BHEL to Department of Heavy Industry, Govt. of India for approval, has been approved on 11th May 2021. Appropriate action to execute the Agreement with Govt of Kerela and to complete the necessary activities for transfer of Company's 51% stake in BHEL EML to Govt of Kerela at a consideration of ₹1 only and waiver of working capital loan of ₹3 Crore along with interest accrued thereon given by BHEL to BHEL EML is being taken.

1. Names of subsidiaries which are yet to commence operations	NIL
2. Names of subsidiaries which have been liquidated or sold during the year.	NIL

Part "B": Associates and Joint Ventures

Statement pursuant to Section 129 (3) of the Companies Act, 2013 related to Associate Companies and Joint Ventures

(₹ Crore)

Name of Joint Ventures	BHEL-GE Gas Turbine Services P. Ltd.	NTPC BHEL Power Projects Pvt Ltd	Raichur Power Corporation Ltd.
1. Latest Audited Balance Sheet Date	31.03.2021	31.03.2020	31.03.2020
2. Date on which Associate or Joint Venture was associated or acquired	5 th May , 1997	28 th April, 2008	15 th April, 2009
3. Shares of JVs held by BHEL on the year end			
No.	2379999	50000000	664040000
Amount of investment	2.38	50.00	664.04
Extent of Holding %	50% minus one share	50%	27.97%
4. Description of how there is significant influence	Jointly controlled entities		
5. Reason why the associate/ JV is not consolidated	N.A.	N.A.	N.A.
6. Net worth attributable to Shareholding as per latest audited Balance Sheet	181.50	NIL	NIL
7. Profit/ (Loss) for the year	As per equity method		
i. Considered in consolidation	44.14	NIL	NIL
ii. Not considered in Consolidation	-	(12.26)	(152)

Figures given in brackets are negative. In RPCL, 300 shares are held by BHEL in the name of its nominee.

M/s Power Plant Performance Improvement Ltd. is under liquidation and hence not considered in consolidation. The investment in this JV amounting ₹2.00 crore has been fully provided for.

Dada Dhuniwale Khandwa Power Limited (DDKPL) stands dissolved vide NCLT order dated 2nd November, 2020.

For and on behalf of Board of Director



(Rajeev Kalra)
Company Secretary
M.No.14567



(Subodh Gupta)
Director (Finance)
DIN:08113460



(Dr. Nalin Shinghal)
Chairman and Managing Director
DIN: 01176857

As per our report of even date attached

For Raj Har Gopal & Co.
Chartered Accountants
FRN 002074N



(CA Gopal Krishan)
Partner
M.No.081085

For Tiwari & Associates
Chartered Accountants
FRN- 002870N



(CA Sandeep Sandill)
Partner
M. No. 085747

For Mahesh C. Solanki & Co.
Chartered Accountants
FRN- 006228C



(CA. Priyanka Jajoo)
Partner
M. No. 411739

Place : New Delhi

Date : June 11, 2021

Form No. AOC-2

(Pursuant to clause (h) of sub-section (3) of section 134 of the Act and Rule 8(2) of the Companies (Accounts) Rules, 2014)

Form for disclosure of particulars of contracts/arrangements entered into by the company with related parties referred to in sub-section (1) of section 188 of the Companies Act, 2013 including certain arm's length transactions under third proviso thereto

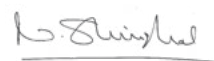
1. Details of contracts or arrangements or transactions not at arm's length basis

(a)	Name(s) of the related party and nature of relationship	:	NIL
(b)	Nature of contracts/arrangements/transactions	:	NIL
(c)	Duration of the contracts / arrangements/transactions	:	NIL
(d)	Salient terms of the contracts or arrangements or transactions including the value, if any	:	NIL
(e)	Justification for entering into such contracts or arrangements or transactions	:	NIL
(f)	Date(s) of approval by the Board	:	NIL
(g)	Amount paid as advances, if any	:	NIL
(h)	Date on which the special resolution was passed in general meeting as required under proviso to section 188	:	NIL

2. Details of material contracts or arrangements or transactions at arm's length basis:

(a)	Name(s) of the related party and nature of relationship	:	NIL
(b)	Nature of contracts/arrangements/transactions	:	NIL
(c)	Duration of the contracts / arrangements/transactions	:	NIL
(d)	Salient terms of the contracts or arrangements or transactions including the value, if any	:	NIL
(e)	Date(s) of approval by the Board, if any	:	NIL
(f)	Amount paid as advances, if any	:	NIL

For and on behalf of the Board of Directors of
BHARAT HEAVY ELECTRICALS LTD.



Dr. Nalin Shinghal
Chairman & Managing Director

Place: New Delhi
Dated: 27.08.2021

Annexure - IX to the Board's Report

INDEPENDENT AUDITOR'S REPORT

To the Members of
Bharat Heavy Electricals Limited

Report on the Audit of the Standalone Financial Statements

Opinion

We have audited the accompanying standalone financial statements of **Bharat Heavy Electricals Limited ("the Company")**, which comprise the Balance Sheet as at March 31, 2021, the Statement of Profit and Loss (including Other Comprehensive Income), the Statement of Changes in Equity and the Statement of Cash Flows for the year then ended, and a summary of the significant accounting policies and other explanatory information (hereinafter referred to as "the Standalone financial statements") in which are incorporated the returns for the year ended on that date for 19 branches audited by us and 10 branches audited by the branch auditors of the company.

In our opinion and to the best of our information and according to the explanations given to us, the aforesaid financial statements give the information required by the Companies Act, 2013 ("the Act") in the manner so required and give a true and fair view in conformity with the Indian Accounting Standards prescribed under section 133 of the Act read with the Companies (Indian Accounting Standards) Rules 2015, as amended, ("Ind AS") and other accounting principles generally accepted in India, of the state of affairs of the Company as at March 31, 2021, the loss and total comprehensive income, changes in equity and its cash flow for the year ended on that date.

Basis for Opinion

We conducted our audit of the standalone financial statements in accordance with the Standards on Auditing (SAs) specified under section 143 (10) of the Companies Act, 2013. Our responsibilities under those Standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Company in accordance with the Code of Ethics issued by the Institute of Chartered Accountants of India together with the ethical requirements that are relevant to our audit of the standalone financial statements under the provisions of the Companies Act, 2013 and the Rules thereunder, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the Code of Ethics. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion on the standalone financial statements.

Key Audit Matters

Key audit matters are those matters that in our professional judgement were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the standalone financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. We have determined the matters described below to be the key audit matters to be communicated in our report.

Key Audit Matter	Auditor's Response
<p>Accuracy of recognition, measurement, presentation and disclosures of revenues and other related balances in respect of "Revenue from contracts with Customers" under Ind AS 115.</p> <p>The application of this revenue accounting standard involves certain key judgments relating to identification of distinct performance obligations, determination of transaction price of identified performance obligations, the appropriateness of the basis used to measure revenue recognized over a period, and disclosures including presentations of balances in the financial statements.</p> <p>Estimated efforts is a critical estimate to determine revenue, as it requires consideration of progress of the contract, efforts incurred till date, efforts required to complete the remaining performance obligation.</p> <p>Refer Note 49 to the standalone financial statements</p>	<p>Principal Audit Procedures</p> <p>Our audit approach consisted testing of the design and operating effectiveness of internal controls and procedures as follows:</p> <ul style="list-style-type: none"> ▪ Evaluated the effectiveness of controls over the preparation of information that are designed to ensure the completeness and accuracy. ▪ Selected a sample of existing continuing contracts and new contracts, and tested the operating effectiveness of the internal control, relating to identification of the distinct performance obligations and determination of transaction price. ▪ Tested the relevant information, accounting systems and change relating to contracts and related information used in recording and disclosing revenue in accordance with Ind AS 115. ▪ Reviewed a sample of contracts to identify possible delays in achieving milestones, which require change in estimated efforts to complete the remaining performance obligations. ▪ Performed analytical procedures and test of details for reasonableness and other related material items.
<p>Assessment and recoverability of Trade Receivables and Contract Assets</p> <p>The Company has trade receivables outstanding (net) of ₹7213.37 crore and contract assets of ₹24079.25 crore at the end of March 31, 2021</p> <p>These balances are related to revenue recognized in line with Ind AS 115 "Revenue from contracts with customers" for ongoing contracts and completed contracts. The assessment of its recoverability is a key audit matters in the audit due to its size, pending balance confirmation of letters sent and high level of management judgment</p> <p>Refer Notes 6,9,11,17,49 to the standalone financial statements.</p>	<p>Principal Audit Procedures</p> <p>We have assessed the Company's internal process to recognize the revenue and review mechanism of trade receivables and contract assets. Our audit approach consisted testing of the design and operating effectiveness of internal controls and procedures as follows:</p> <ul style="list-style-type: none"> ▪ Evaluated the process of invoicing, verifications, and reconciliations with customers. ▪ Obtained the list of project wise outstanding details and its review mechanism by the management. ▪ Reviewed the guidelines and policies of the Company on impairment of trade receivables and contract assets. ▪ Tested the accuracy of aging of trade receivables and contract assets at the year-end on sample basis. ▪ Performed analytical procedures and test of details for reasonableness, recoverability and other related material items.

Information Other than the Standalone Financial Statements and Auditor's Report Thereon

The Company's Board of Directors is responsible for the preparation of the other information. The other information comprises the information included in Management Discussion and Analysis, Board's Report including Annexures to Board's Report, Business Responsibility Report, Corporate Governance and Shareholder's information, but does not include the standalone financial statements and our auditor's report thereon.

Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the standalone financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Management's Responsibility for the Standalone Financial Statements

The Company's Board of Directors is responsible for the matters stated in Section 134(5) of the Companies Act, 2013 ("the Act") with respect to the preparation of these financial statements that give a true and fair view of the financial position, financial performance, total comprehensive income, changes in equity and cash flows of the Company in accordance with the Ind AS and other accounting principles generally accepted in India. This responsibility also includes maintenance of adequate accounting records in accordance with the provisions of the Act for safeguarding the assets of the company and for preventing and detecting frauds and other irregularities; selection and application of appropriate accounting policies; making judgments and estimates that are reasonable and prudent; and design, implementation and maintenance of adequate internal financial controls, that were operating effectively for ensuring the accuracy and completeness of the accounting records, relevant to the preparation and presentation of the financial statements that give a true and fair view and are free from material

misstatement, whether due to fraud or error.

In preparing the standalone financial statements, Management of Company is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Management of Company either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

The Board of Directors are responsible for overseeing the Company's financial reporting process.

Auditor's Responsibilities for the Audit of the Standalone Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with SAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these standalone financial statements.

As part of an audit in accordance with SAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal financial controls relevant to the audit in order to design audit procedures that are appropriate in the circumstances. Under section 143(3) (i) of the Companies Act, 2013, we are also responsible for

expressing our opinion on whether the company has adequate internal financial controls system in place and the operating effectiveness of such controls.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the standalone financial statements, including the disclosures, and whether the standalone financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

Materiality is the magnitude of misstatements in the standalone financial statements that, individually or in aggregate, makes it probable that the economic decisions of a reasonably knowledgeable user of the financial statements may be influenced. We consider quantitative materiality and qualitative factors in (i) planning the scope of our audit work and in evaluating the results of our work; and (ii) to evaluate the effect of any identified misstatements in the financial statements.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with

governance, we determine those matters that were of most significance in the audit of the standalone financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Other Matters

We did not audit the financial statements/information of 10 (Ten) branches included in the standalone financial statements of the Company whose financial statements / financial information reflect total assets of **₹33345 crore** as at 31st March, 2021 and total revenue of **₹9454 crore** for the year ended on that date, as considered in the standalone financial statements. The financial statements/information of these branches have been audited by the branch auditors whose reports have been furnished to us, and our opinion in so far as it relates to the amounts and disclosures included in respect of these branches, is based solely on the report of such branch auditors.

Our opinion is not modified in respect of these matters.

Report on Other Legal and Regulatory Requirements

- (1) As required by the Companies (Auditor's Report) Order, 2016 ("the Order") issued by the Central Government of India in terms of sub-section (11) of section 143 of the Act, we give in the **"Annexure A"** a statement on the matters specified in paragraphs 3 and 4 of the Order, to the extent applicable.
- (2) As required by Section 143 (3) of the Act, based on our audit we report that:
 - a. We have sought and obtained all the information and explanations, which to the best of our knowledge and belief were necessary for the purposes of our audit.
 - b. In our opinion, proper books of account as required by law have been kept by the company so far as it appears from our examination of those books. and proper returns adequate for the purpose of our audit have been received from the branches not visited by us.
 - c. The reports on the accounts of the branch offices of the Company audited under Section 143(8) of the Act by branch

auditors have been sent to us and have been properly dealt with by us in preparing this report

- d. The Balance Sheet, the Statement of Profit and Loss (including other comprehensive income), Statement of Changes in Equity and the Statement of Cash Flow dealt with by this Report are in agreement with the books of account
- e. In our opinion, the aforesaid financial statements comply with the Indian Accounting Standards prescribed under Section 133 of the Act, read with Companies (Indian Accounting Standards) Rules 2015.
- f. In terms of Notification no. G.S.R. 463 (E) dt. 05-06-2015 issued by Ministry of Corporate Affairs, the Provision of Section 164(2) of the Companies Act, 2013 in respect of disqualification of directors are not applicable to the Company.
- g. With respect to the adequacy of the internal financial controls over financial reporting of the Company and the operating effectiveness of such controls, refer to our separate Report in "Annexure B".
- h. With respect to the other matters to be included in the Auditor's Report in accordance with Rule 11 of the Companies (Audit and Auditors) Rules, 2014, in our opinion

and to the best of our information and according to the explanations given to us:

- i) The company has disclosed the impact of pending litigations on its financial position in its standalone financial statements. **Refer Note 41** to the financial statements.
 - ii) The company has made provision, as required under the applicable law or accounting standards, for material foreseeable losses, if any, on long-term contracts including derivative contracts. **Refer Note 48** to the financial statements.
 - iii) There has been no delay in transferring the amount, required to be transferred in accordance with the relevant provisions of the Companies Act, 2013 and the rules made thereunder, to the Investor Education and Protection Fund by the Company.
- (3) On the basis of such checks of the books and records of the Company, as we considered appropriate and according to the information and explanations given to us, we are enclosing our report in terms of Section 143(5) of the Act, on the directions and sub directions issued by the Comptroller and Auditor General of India in "Annexure C".

For Raj Har Gopal & Co.
Chartered Accountants
FRN - 002074N



(CA. Gopal Krishan)
Partner
M. No. 081085
UDIN:21081085AAAAJL3015

For Tiwari & Associates
Chartered Accountants
FRN - 002870N



(CA. Sandeep Sandill)
Partner
M. No. 085747
UDIN:21085747AAAAABA2627

For Mahesh C. Solanki & Co.
Chartered Accountants
FRN - 006228C



(CA. Priyanka Jajoo)
Partner
M. No. 411739
UDIN:21411739AAAAADH6304

Place : New Delhi
Date : June 11, 2021

“Annexure A” to Independent Auditors’ Report

(Referred to in Paragraph 1 under the heading “Report on Other Legal and Regulatory Requirements” of our report of even date on the standalone financial statements of Bharat Heavy Electricals Limited (“the Company”), for the year ended March 31, 2021]

- i) (a) The Company has maintained proper records showing full particulars including quantitative details and situation of its fixed assets.
- (b) According to the information and explanations given to us, physical verification of fixed assets is being conducted in a phased manner by the management under a programme designed to cover all the property, plant and equipment including intangible assets over a period of three years, which, in our opinion, is reasonable having regard to the size of the Company and nature of its business and no material discrepancies were noticed on such verification to the extent verification was made during the year.
- (c) The details of title deeds of immovable properties not held in the name of the Company are given in note no. 3.1 (a to f) to the Financial Statements.
- ii) As explained to us physical verification of inventory has been conducted by the management under Perpetual Inventory Programme at regular intervals during the year except for stock of work in progress and finished goods in few units where these are verified at the year end with reference to the inspection reports and production reports of the Production Planning Department of such units. In regard to stocks lying with contractors/fabricators and other parties, confirmations were received in few cases only. In our opinion the frequency of verification is reasonable. No material discrepancies has been reported.
- iii) According to the information given to us, the Company has not granted any loans or advances in the nature of loans, secured or unsecured to companies, firms, Limited Liability Partnerships or other parties listed in the register maintained under section 189 of the Companies Act, 2013. Therefore, clauses (iii) (a), (iii) (b) and (iii) (c) of Paragraph 3 of the Order are not applicable to the Company.
- iv) The Company has complied with the provisions of section 185 and 186 of the Companies Act, 2013 in respect of loans, investments, guarantees and securities.
- v) Based on our examination of the Company’s records and according to the information and explanations given to us, the Company has not accepted any deposits from public during the year within the meaning of sections 73 to 76 or any other relevant provisions of the Companies Act, 2013 and the Companies (Acceptance of Deposits) Rules 2014.
- vi) We have broadly reviewed the books of account and records

maintained by the Company pursuant to the Companies (Cost Records and Audit) Rules 2014 prescribed by the Central Government under section 148(1) of the Companies Act, 2013 and are of the opinion that prima facie the prescribed accounts and records have been made and maintained. However, we are not required to and have not carried out any detailed examination of such accounts and records.

- vii) (a) According to the information and explanations given to us, in our opinion, the Company is generally regular in depositing with appropriate authorities undisputed statutory dues including Provident Fund, Employees’ State Insurance, Income Tax, Sales Tax, Service Tax, duty of Customs, duty of Excise, Value Added Tax, Goods and Service Tax, Cess and any other statutory dues as applicable to it.
- (b) According to the information and explanations given to us, no undisputed amounts payable in respect of Provident Fund, Employees State Insurance, Income Tax, Sales Tax, Service Tax, duty of Customs, duty of Excise, Value Added Tax, Goods and Service Tax, Cess and any other statutory dues were outstanding as at March 31, 2021 for a period of more than six months from the date they became payable.
- (c) According to the information and explanations given to us, the particulars of Income Tax, Sales Tax, Service Tax, duty of Customs, duty of Excise, Value Added Tax, Goods and Service Tax which have not been deposited on account of dispute are as under:

(₹ in crore)

Sl. No.	Name of the Statute	Nature of the Dues	Pending Amount	Amount paid under protest	Forum where dispute is pending
1	Central Sales Tax Act, Value Added Tax and Sales Tax Act of various States	Sales Tax, VAT	14.17	6.99	Assessing Officer
			277.36	55.73	Dy. Commissioner/ Jt. Commissioner/ Commissioner (Appeals)
			306.96	125.89	Appellate Tribunal
			69.10	7.80	High Court
			4.84	4.84	Supreme Court
			284.18	3.98	Various Appellate Authorities

(₹ in crore)

Sl. No.	Name of the Statute	Nature of the Dues	Pending Amount	Amount paid under protest	Forum where dispute is pending
2	Central Excise Act, 1944	Excise Duty	43.79	-	Assessing Officer
			32.51	-	Commissioner (Appeals)
			57.43	4.39	Appellate Tribunal
			27.49	-	High Court
			0.55	0.55	Supreme Court
3	Service Tax under the Finance Act, 1994	Service Tax	8.00	0.21	Commissioner (Appeals)
			681.61	16.36	Appellate Tribunal
			6.43	-	Various Appellate Authorities
4	Customs Act, 1962	Custom Duty	5.80	5.80	High Court

viii) According to the records of the Company examined by us and the information and explanations given to us, the Company has not defaulted in repayment of loans or borrowings to financial institutions, banks or Government. The Company has not issued any debentures.

ix) According to the records of the Company examined by us and the information and explanations given to us, the Company has not raised any monies by way of initial public offer or further public offer (including debt instruments) and term loans. Hence, the same is not applicable to the Company.

x) During the course of our examination of the books and records of the Company, carried out in accordance with the generally accepted auditing practices in India, and according to the information and explanations given to us, no fraud by the Company or any fraud on the Company by its officers or employees has been noticed or reported during the year.

xi) In terms of Notification no. G.S.R. 463(E) dt. 05-06-2015 issued by the Ministry of Corporate Affairs, the provisions of section 197 of the Companies Act, 2013 relating to managerial remuneration are not applicable to the Company.

xii) Since the Company is not a nidhi Company, provisions of clause no. 3(xii) do not apply to the Company;

xiii) According to the records of the Company examined by us and the information and explanations given to us, the related party transactions are in compliance with section 177 and 188 of the Companies Act, 2013 and have been disclosed in the Financial Statements.

xiv) Based on our examination and the information and explanations given to us, the Company has not made any preferential allotment or private placement of shares or debentures during the year under review. Therefore, provision of clause no. (xiv) is not applicable to the Company.

xv) Based on our examination and the information and explanations given to us, the Company has not entered into any non-cash transactions with directors or persons connected with them.

xvi) Based on our examination and the information and explanations given to us, the Company is not required to be registered under section 45-IA of the Reserve Bank of India. Act, 1934.

For Raj Har Gopal & Co.
Chartered Accountants
FRN - 002074N

(CA. Gopal Krishan)

Partner

M. No. 081085

UDIN:21081085AAAAJL3015

For Tiwari & Associates
Chartered Accountants
FRN - 002870N

(CA. Sandeep Sandill)

Partner

M. No. 085747

UDIN:21085747AAAABA2627

For Mahesh C. Solanki & Co.
Chartered Accountants
FRN - 006228C

(CA. Priyanka Jajoo)

Partner

M. No. 411739

UDIN:21411739AAAADH6304

Place : New Delhi

Date : June 11, 2021

"ANNEXURE B"

TO THE INDEPENDENT AUDITORS' REPORT OF EVEN DATE ON THE STAND-ALONE FINANCIAL STATEMENTS OF BHARAT HEAVY ELECTRICALS LIMITED

Report on the Internal Financial Controls under Clause (i) of Sub-section 3 of Section 143 of the Companies Act, 2013 ("the Act")

We have audited the internal financial controls over financial reporting of Bharat Heavy Electricals Limited ("the Company") as of March 31, 2021 in conjunction with our audit of the Standalone financial statements of the Company for the year ended on that date.

Management's Responsibility for Internal Financial Controls

The Company's management is responsible for establishing and maintaining internal financial controls based on the internal control over financial reporting criteria established by the Company considering the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls over Financial Reporting issued by the Institute of Chartered Accountants of India. These responsibilities include the design, implementation and maintenance of adequate internal financial controls that were operating effectively for ensuring the orderly and efficient conduct of its business, including adherence to Company's policies, the safeguarding of its assets, the prevention and detection of frauds and errors, the accuracy and completeness of the accounting records, and the timely preparation of reliable financial information, as required under the Companies Act, 2013.

Auditors' Responsibility

Our responsibility is to express an opinion on the Company's internal financial controls over financial reporting based on our audit. We conducted our audit in accordance with the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting (the "Guidance Note") and the Standards on Auditing, issued by ICAI and deemed to be prescribed under section 143(10) of the Companies Act, 2013, to the extent applicable to an audit of internal financial controls, both applicable to an audit of Internal Financial Controls and, both issued by the Institute of Chartered Accountants of India. Those Standards and the Guidance Note require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether adequate internal financial controls over financial reporting was established and maintained and if such controls operated effectively in all material respects.

Our audit involves performing procedures to obtain audit evidence about the adequacy of the internal financial controls system over financial reporting and their operating effectiveness. Our audit

of internal financial controls over financial reporting included obtaining an understanding of internal financial controls over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. The procedures selected depend on the Auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the Company's internal financial controls system over financial reporting.

Meaning of Internal Financial Controls Over Financial Reporting

A Company's internal financial control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A Company's internal financial control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorisations of management and directors of the Company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorised acquisition, use, or disposition of the Company's assets that could have a material effect on the financial statements.

Inherent Limitations of Internal Financial Controls Over Financial Reporting

Because of the inherent limitations of internal financial controls over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of the internal financial controls over financial

reporting to future periods are subject to the risk that the internal financial control over financial reporting may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Opinion

In our opinion, the Company has, in all material respects, an adequate

internal financial controls system over financial reporting and such internal financial controls over financial reporting were operating effectively as at March 31, 2021, based on the internal control over financial reporting criteria established by the Company considering the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting issued by the Institute of Chartered Accountants of India.

For Raj Har Gopal & Co.
Chartered Accountants
FRN - 002074N



(CA. Gopal Krishan)
Partner
M. No. 081085
UDIN:21081085AAAAJL3015

For Tiwari & Associates
Chartered Accountants
FRN - 002870N



(CA. Sandeep Sandill)
Partner
M. No. 085747
UDIN:21085747AAAABA2627

For Mahesh C. Solanki & Co.
Chartered Accountants
FRN - 006228C



(CA. Priyanka Jajoo)
Partner
M. No. 411739
UDIN:21411739AAAADH6304

Place : New Delhi
Date : June 11, 2021

"ANNEXURE C" TO INDEPENDENT AUDITOR'S REPORT

Directions issued by the Comptroller & Auditor General of India under Section 143(5) of the Companies Act, 2013 indicating the areas to be examined by the Statutory Auditors during the course of audit of annual accounts of Bharat Heavy Electricals Limited (Standalone) for the year 2020-21

S. No.	Areas Examined	Replies
1	Whether the Company has system in place to process all the accounting transactions through IT system. If yes, the implications of processing of accounting transactions outside IT system on the integrity of the accounts along with the financial implications, if any may be stated.	Yes, the Company has system in place to process all the accounting transactions through IT system.
2	Whether there is any restructuring of an existing loan or cases of waiver / write off of debts / loans / interest etc. made by a lender due to the company's inability to repay the loan? If yes, the financial impact may be stated.	According to the information and explanations given to us and based on our examination of the records of the company, there has been no restructuring/ waiver/ write off of debts/loans/ interest etc. made by a lender due to the company's inability to repay the loan
3	Whether fund received / receivable for specific schemes from Central / State agencies were properly accounted for /utilized as per its term and conditions? List the cases of deviation.	Fund received / receivable for specific schemes from Central / State agencies were properly accounted for /utilized as per its term and conditions

For Raj Har Gopal & Co.
Chartered Accountants
FRN - 002074N



(CA. Gopal Krishan)
Partner
M. No. 081085
UDIN:21081085AAAAJL3015

For Tiwari & Associates
Chartered Accountants
FRN - 002870N



(CA. Sandeep Sandill)
Partner
M. No. 085747
UDIN:21085747AAAABA2627

For Mahesh C. Solanki & Co.
Chartered Accountants
FRN - 006228C



(CA. Priyanka Jajoo)
Partner
M. No. 411739
UDIN:21411739AAAADH6304

Place : New Delhi
Date : June 11, 2021



DL(AE)P/01-G/A/CS-BMEL/2021-22/Vol-D/294
गोपनीय

भारतीय लेखापरीक्षा और लेखा विभाग
कार्यालय महा निदेशक लेखापरीक्षा (ऊर्जा)
नई दिल्ली
INDIAN AUDIT & ACCOUNTS DEPARTMENT
Office of the Director General of Audit (Energy)
New Delhi

Dated: 12/8/2021

सेवा में,

अध्यक्ष एवं प्रबंध-निदेशक,
भारत हेवी इलेक्ट्रिकल्स लिमिटेड
नई दिल्ली

महोदय,

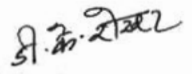
विषय:- 31 मार्च 2021 को समाप्त वर्ष के लिए भारत हेवी इलेक्ट्रिकल्स लिमिटेड, नई दिल्ली के लेखाओं पर कम्पनी अधिनियम 2013 की धारा 143(6)(b) के अंतर्गत भारत के नियंत्रक एवं महालेखापरीक्षक की टिप्पणियाँ।

मैं, भारत हेवी इलेक्ट्रिकल्स लिमिटेड, नई दिल्ली के 31 मार्च 2021 को समाप्त वर्ष के लेखाओं पर कम्पनी अधिनियम 2013 की धारा 143(6)(b) के अंतर्गत भारत के नियंत्रक एवं महालेखापरीक्षक की टिप्पणियाँ अग्रेषित कर रहा हूँ।

कृपया इस पत्र की संलग्नकों सहित प्राप्ति की पावती भेजी जाए।

भवदीय,

संलग्नक:- यथोपरि।


(डी. के. शेखर)
महानिदेशक


COMMENTS OF THE COMPTROLLER AND AUDITOR GENERAL OF INDIA UNDER SECTION 143(6)(b) OF THE COMPANIES ACT, 2013 ON THE FINANCIAL STATEMENTS OF BHARAT HEAVY ELECTRICALS LIMITED FOR THE YEAR ENDED 31 MARCH 2021

The preparation of financial statements of Bharat Heavy Electricals Limited for the year ended 31 March 2021 in accordance with the financial reporting framework prescribed under the Companies Act, 2013 (Act) is the responsibility of the management of the company. The statutory auditors appointed by the Comptroller and Auditor General of India under section 139 (5) of the Act are responsible for expressing opinion on the financial statements under section 143 of the Act based on independent audit in accordance with the standards on auditing prescribed under section 143(10) of the Act. This is stated to have been done by them vide their Audit Report dated 11 June 2021.

I, on behalf of the Comptroller and Auditor General of India, have conducted a supplementary audit of the financial statements of Bharat Heavy Electricals Limited for the year ended 31 March 2021 under section 143(6)(a) of the Act. This supplementary audit has been carried out independently without access to the working papers of the statutory auditors and is limited primarily to inquiries of the statutory auditors and company personnel and a selective examination of some of the accounting records.

On the basis of my supplementary audit nothing significant has come to my knowledge which would give rise to any comment upon or supplement to statutory auditors' report under section 143(6)(b) of the Act.

For and on behalf of the
Comptroller & Auditor General of India



(D.K. Sekar)
Director General of Audit (Energy),
Delhi

Place: New Delhi
Dated: 12 August 2021