

ENGINEERING REVIEW

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India's Leading Industrial B2B Magazine

PROFILE

Committed towards a better tomorrow



(L-to-R) Mr. Gautam Seth, JMD Mr. Lalit Seth, CMD, & Mr. Rishi Seth, JMD, HPL Electric & Power Ltd.

As per DRHP, HPL Electric & Power Ltd is an established electric equipment manufacturing company in India, manufacturing a diverse portfolio of electric equipment, including, metering solutions, switchgears, lighting equipment and wires and cables, catering to consumer and institutional customers in the electrical equipment industry. We have the largest market share in the market for electricity energy meters in India in fiscal 2015, with one of the widest portfolios of meters in India and the fifth largest market share for LED lamps during the corresponding period (Source: Frost & Sullivan Report). Our manufacturing capabilities are supported by a large sales and distribution network with a pan-India presence. We currently manufacture and sell our products under the umbrella brand 'HPL', which has been registered in India since 1975.

DRHP states, we supply our products through a network of authorized dealers or distributors to institutional, non-institutional and corporate customers. We supply switchgears, lighting equipment and wires and cables, primarily through our pan-India authorized dealer network, which comprised of over 2,000 authorized dealers or distributors as on December 31, 2015, from our warehouses located in 21 states and union territories in India that are managed by our carrying and forwarding agents. Our authorized dealers or distributors further sell our products to over 12,000 retailers in

India. In addition, we supply our products to Power Utilities, which primarily includes supply of meters under direct contractual arrangements to electricity boards and power distribution companies, as well as through project contractors. Further, we supply our portfolio of products to developers of residential and commercial building projects, original equipment manufacturers ("OEMs") and to industrial customers through a mix of direct sales and supply through our authorized dealer network. Our sales and marketing activities are managed through over 90 branch offices and representative offices in India as on December 31, 2015.

Further DRHP states, we believe that our research and development capabilities have enabled us to keep abreast of technological developments in the electric equipment industry. We have a strong focus on consistently upgrading the technology that is used in our products and the processes used in manufacturing thereof, through our continuing research and development efforts. We have established two in-house research and development centres, one each at Kundli (Haryana) (the "Kundli R&D Centre") and Gurgaon (Haryana) (the "Gurgaon R&D Centre", and together with Kundli R&D Centre, the "R&D Centres"). Our research and development efforts include design and development of all types of energy metering solutions, including interactive communication between metering devices and metering

infrastructure that includes automatic meter reading ("AMR") and advanced metering infrastructure ("AMI"), prepayment metering solutions, solar net metering solutions, smart meters with two way communication and a complete range DLMS compliant meters, amongst others, and technologies and solutions that allow for active monitoring of energy consumption for electric equipment. For instance, we have developed a street lighting system that helps in saving manpower through automatic settings for sunset and sunrise timings and remote energy metering and dimming of such lights during off-peak hours to save energy. For details in relation to our research and development efforts, see "Research and Development" below. We also operate two tool rooms at Gurgaon (Haryana) and Kundli (Haryana), within our R&D Centres ("Tool Rooms"), where we have in-house component designing & tool designing facilities. As on December 31, 2015.

DRHP states that we have employed over 105 engineers at our R&D Centres, with a dedicated team of engineers to manage our Tool Rooms. Our Tool Rooms are used for making rapid prototypes, followed by tools that are used to ensure efficient moulding. The data for our Tool Rooms is generated using computer-aided design ("CAD") software and computer numerical control ("CNC") machines that assist in maintaining accuracy of the tools produced therein. We believe that our Tool Rooms allow us to easily adapt to changes in technology or modified specifications given by Power Utilities and/or institutional customers.

As per our DRHP, we currently own and operate six manufacturing facilities





- Arc Chute
- Terminal Shroud
- Phase Separator

a Blend of Design & Technology

At nearly 50% share of the entire market for changeover switches, HPL is one of the oldest manufacturers of LV switchgear in India enjoying significant brand recall and customer loyalty. Now HPL inducted Advanced version changeover switches with "Triple Safety Features" - Arc Chute, Terminal Shroud & Phase Barriers.



Onload Manual Changeover Switch

Fuse Changeover, By Pass, Load Break switches

Salient Features

- Range 63A to 3150A, 4P, AC23 A
- Complies to IS/IEC 60947-3
- Compact design, total safety
- Line load reversibility, vertical or lateral mounting
- Source Separator, Terminal Shroud, Phase Barrier & Fuse Shield as standard product
- Auxiliary Contact Plug-in mounting Kit
- Self extinguishing fiberglass re-inforced insulating body
- Castle Lock for interlocking scheme of 2 Changeover

Range of other Industrial Products



Air Circuit Breaker



Thermal Magnetic & Microprocessor based MCCB



MCCB Distribution Panel



Switch Fuse Unit



Switch Disconnector Fuse



Contactors & Overload Relays

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Switchgear

www.hplindia.com

a Blend of Design & Technology

At nearly 50% share of the entire market for changeover switches, HPL is one of the oldest manufacturers of LV switchgear in India enjoying significant brand recall and customer loyalty. Now HPL introduced Microprocessor MCCBs with various customer friendly features as per latest standard.



Thermal Magnetic & Microprocessor based MCCB

Salient Features

- Conforms to IS/IEC 60947-2.
- Available in rated current from 20A - 800A & in different breaking capacity (from 10kA to 65kA).
- Available in 1P, 2P, 3P & 4P Versions
- Type of Release: Microprocessor / Thermo-Magnetic
- 4P version available with neutral fully protected & 100% rated.
- Communication feature available (RS232 / 485 port).
- Line load reversibility, Low let through energy.
- Wide range of internal and external accessories.

Range of other Industrial Products



Air Circuit Breaker



Onload Manual Changeover Switch



MCCB Distribution Panel



Switch Fuse Unit



Switch Disconnector Fuse



Contactors & Overload Relays

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Switchgear

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Arc chute

Air Circuit Breaker

630A - 6300A



intelliPROTECT
intelligent protection

RANGE

Salient Features

- Range : 630A – 6300A
- Operational voltage upto 690V & above - on request
- Icu 50kA to 120kA at 500Vac
- Ics = 100% Icu throughout the range
- Icw : 50kA to 100kA (for 1 sec)
- Customer oriented Trip Relay - with advanced measurement functions & communication functions
- Tested & certified as per IS/IEC 60947-2

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Switchgear

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Technology of Measurement...

defined

Our Metering Product Range

- Digital Panel Meters
- Multi Function Meters
- Load Managers & Demand Controllers
- Single / Three Phase, Whole current counter/LCD type meters
- LT Trivector Meters
- Prepaid Metering Solution
- LPR (Zigbee) Metering Solution
- Data Acquisition & Billing Solutions



HPL serves wide range of metering solution with the commitment to modern technology. Offers range of meters with its Digital Panel Meters, Digital Energy meters, Multifunction Meters, Load Managers, Demand Controllers, Power Quality Meters with Metering solutions based on the wired and wireless technology such as Zigbee, GSM/GPRS etc.

Other Product Range



ébrt Range of Digital Panel Meter



Dual Source Multi-function Load Manager



Emfis range of Multi-function Meter



Power Factor Control Relays



LCD Mini



Trivector Meter



ISO-27001:2005



ISO-9001:2008
ISO-14000:2004



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HPL GLO

LED Bulb

Brightness that lasts on and on, illuminating every corner of your life.

Upto
20W

LOW
HEAT
generation

15,000hrs **
Extra long life



LED Bulb



Downlighter



LED Panel



Highbay



Street Light

*Nearest GLS equivalent/Guide only. **@2.7 hrs usage/day.



long life
15,000hrs**



eco light
solution



maintenance free



compact & sleek
design

When it comes to LED lighting technology, there is no better alternative than HPL. The most elegant range of LEDs: low on power consumption, low on maintenance and with customer satisfaction.

FEATURES:

- SMD LED's for good quality illumination and longer life
- Extruded aluminium heat sinks with specially designed fins
- Superior quality diffuser for glare free distribution
- Constant current drivers
- Highly efficient metal core PCB

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ho khushiyaan

HPL

LED
Lighting

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SAFETY OUTSIDE. SAFETY INSIDE.

Wiring a home is a once-in-a-lifetime event. Choosing the right quality product is absolutely critical. HPL's series of flame-retardant wires are made using 100% Electrolytic Annealed Bare Copper and offer increased insulation resistance.



HPL Wires
100% COPPER
FIRE RETARDANT
DOUBLE INSULATION
with Ultra Thin Layer



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Wires & Cables

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smART

ART MEETS STATE-OF-THE-ART

TESTED AS PER BIS SPECIFICATION

EASY-TO-USE SNAP FIT MODULES

ELEGANT DESIGN

SILVER NICKEL CONTACT FOR
ENHANCED ELECTRICAL LIFE

HIGH GRADE ENGINEERING PLASTIC

ANTI-SPARK SHIELD
and FINGER PROTECTED
TERMINALS

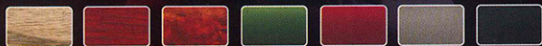
HIGH TENSILE BRASS SCREWS

FRONT INSERTION AND REMOVAL

HPL MODULAR SWITCHES.

ELEGANT DESIGN MEETS ADVANCED TECHNOLOGY.

CHOOSE FROM
A RANGE OF
OVER 21 COLOURS,
TEXTURES
AND FINISHES.



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Founded in 1956, the HPL Group is an established player in Indian electrical industry with a commitment to modern technology for manufacturing electric equipments. HPL Group has been serving the nation for the last 59 years modern & trusted products. The HPL range of products are quality products that are technologically upgraded and enjoys significant brand recall and customer loyalty in the LV switchgear market, increasing its presence across other switchgear products in the industrial and residential segments.

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located across the states of Haryana and Himachal Pradesh, having in-house testing capabilities. All our manufacturing facilities have been accredited with management system certificates for compliance with ISO 9001 requirements. Further, certain of our products are 51 also certified to be compliant with various national and international quality standards, including the ISI mark issued by the BIS, the CE mark and KEMA certification for conformity with requisite European quality standards.

Our Strengths

We believe that our competitive strengths include the following:

- Established brand in the electric equipment industry
- Large product portfolio
- Robust manufacturing facilities with a focus on technology upgradation
- Pan-India sales and distribution network
- Established relationship with institutional customers and strong pre-qualification credentials
- Experienced management team and skilled workforce

Our Strategies

The key components of our competitive and growth strategy are as follow:

- Expand our product range with focus on value added products
- Expand our business and capture growth opportunities
- Increase our geographical reach and expansion of addressable market
- Strengthen customer base with focus on increasing customer spend on our products
- Continue to enhance our brand through innovative and focused marketing initiatives
- To focus on newer technologies & innovative product developments

Overview of the power sector in India

The Indian Power sector has witnessed a considerable change and evolution in the last two decades owing to several policy and regulatory measures. Further, continuous growth in population and increasing urbanization and 42 industrialization have constantly added to the electricity demand



in India, with 300 million of existing population yet to receive electricity connections and the remaining one billion populations having intermittent access to electricity. Programmes such as rural electrification and 'Power for All' have been accelerating power generation capacities and further, helping in building effective systems for demand-side management to ensure overall efficiency improvements across generation, transmission and distribution. In September 2015, the total installed capacity for power generation in India was 278,734 MW, of which the states contributed 96,455 MW or 34.6%, and the central government and the private sector contributed 74,171 MW 26.6% and 108,108 MW or 38.8%, respectively.

Demand for power in India

India's energy demand is expected to grow by 132% by 2035 and is likely to surpass China in the energy demand growth and double the aggregate demand of non-OECD countries. The primary growth drivers for rapid expansion in India's energy demand include growth in population, rising per capita energy consumption levels and investments in industrial and infrastructure development.

Supply of power in India

The country's installed capacity has been growing and almost doubled during the past decade and tripled between 1991 and 2012, boosted by the substantial contribution from the private sector. During fiscal 2015, 22,566 MW of generation capacity was added to the existing installed capacity and is expected to scale up to 266 GW by the end of fiscal 2017 and further increase to 366 GW and 516 GW by fiscal 2022 and fiscal 2027, respectively.

Towards this objective, the Government of India has taken various initiatives, brief details of which are set forth below.

- Increased focus on renewable energy
- Smart grid initiatives
- Rural electrification
- Financial revival of state distribution companies
- Promoting public private partnerships in the distribution system
- However, the power sector in India continues to face several challenges, including:
 - Aggregate technical and commercial losses ("AT&C Losses")
 - Power theft and pilferage;
 - High dependency on coal as part of India's fuel mix for power generation; &
 - Political interference and lack of proper corporate governance in Power Utilities

Overview of the Indian power transmission and distribution sector

The increased focus on power generation has resulted in relatively lesser investment in the transmission and distribution sector. While India has adequate power generation capacity, there is significant power deficit primarily due to inadequate transmission and distribution infrastructure and high AT&C Losses and power thefts. Several measures are being undertaken to curb these losses, such as investing in new and advanced technologies like 1200, 765 and 400 kV transmission lines, planning new smart grids and establishment of a national grid by Power Grid Corporation of India Limited as of 2014. These steps have further helped efficient and effective use of power by transferring electricity from power surplus areas to power deficit ones.

Continuous reforms have been undertaken to reduce AT&C Losses to 15% levels through investments in automation and smart metering. Further, peak power and energy deficit has been decreased significantly over the last few years primarily due to low power demand coupled with



improved power generation in India. Additionally, the financial restructuring plans of the Government of India announced in September, 2013 are expected to improve the financial condition of the state power distribution companies that have been affected by poor financial health and corporate mismanagement for years.

Overview of the electrical equipment industry

The Indian electrical equipment industry is immensely diversified, comprising manufacturing capabilities for high technology equipment on one hand, to low technology electrical components. The electrical equipment industry contributes 9.9% in value to the entire Indian manufacturing sector, translating to 1.4% of India's GDP. The Indian electrical equipment industry is estimated at grow at a CAGR of 8–12% during 2016–2020, varying across electrical equipment. Low tension ("LT") electrical equipment such as switchgears, energy meters and wires and cables are expected to witness a faster growth in comparison to generation equipment. Further, the generation equipment segment is targeted to reach a size of ₹ 125,000 crore and the transmission and distribution equipment ("T&D Equipment") segment is targeted to reach a size of ₹ 375,000 crore by 2022.

The Indian electrical equipment industry comprises power generation equipment and T&D Equipment. The power generation equipment includes boilers, turbines and generators, whereas T&D Equipment includes transformers, switchgears, transmission towers, wires and cables, energy meters and other equipment such as capacitors, instrument transformers and surge arrestors. T&D Equipment is further classified into high tension ("HT")

and LT electrical equipment. LV electrical equipment include LV switchgears such as air circuit breakers, moulded case circuit breakers ("MCCB"), changeover switches; LV control gear such as contactors, relays and capacitors; energy meters for household electricity metering purposes, panel meters for industrial metering purposes and utility meters; LT wires and cables used as part of industrial and commercial wiring; building wires and flexible wires used as part of residential wiring; lighting products such as compact fluorescent lamps ("CFL"), LED lamps, incandescent lamps; and residential and commercial protection devices such as miniature circuit breakers ("MCB") and residual current device.

Key demand drivers for the electrical equipment industry

- Establishment of smart cities and real estate growth
- Affordable housing
- Open markets favouring a competitive landscape
- Capacity addition and investments in the power sector
- Modernization drives and new technology adoption
- Indian Electrical Equipment Industry Mission Plan 2012-2022

Government Initiatives:

The Government of India has announced various schemes and plans, including for the establishment of 'smart cities' in India in a phased manner and by facilitating growth of the electric equipment industry, including pursuant to the Mission Plan 2012-2022. Based on the 'smart cities' initiative, the Government of India aims at revamping the urban infrastructure of India. The Mission Plan 2012-2022 sets the guidelines for

making India the choice for production of electrical equipment. This would drive for domestic production of electrical equipment within the country. The major areas focused on under the Mission Plan 2012-2022 include achieving industry competitiveness, technology up gradation, skill development and promotion of exports. Further, Government of India initiatives such as the 'Make in India' campaign, which has plans to create a brand image of India as one of the leading manufacturers of electrical equipment globally, will help the sector to become a key participant in the global industry. Under the 'Make in India' policy, 100% FDI through the automatic route has been permitted in construction, operation, and maintenance in specified rail infrastructure projects, which is expected to necessitate demand for LED lamps for domestic consumption. We believe that these initiatives of the Government of India will drive the demand for domestic and industrial electric equipment, including for electric equipment that we manufacture. Further, increasing urbanization in India coupled with rising income levels have resulted in progressively increasing demand for housing, particularly quality housing, across Indian cities.

We believe that this growing demand for quality housing will drive demand for quality electric equipment and accessories, including those we manufacture. Any failure in the effective implementation of such plans would significantly and adversely affect our business, financial condition and results of operations. Further, other policies and regulatory changes by the state and central Government and related agencies can also impact our business results of operations. For example, the minimum wages of workers in the state of Haryana has recently been increased significantly. Since a majority of our facilities are located in the state of Haryana, we may incur significant expenses towards payment of wages of workers in our facilities. In 2015, the Government of India mandated BIS certification for LED lamps to be sold in India. While this initiative is expected to give impetus to Indian manufacturers of LED lamps and acts as an entry barrier for cheaper imports, the implementation and effectiveness of this regulatory requirement is presently uncertain. ■

