

Chinese re-entry unlikely to disrupt transmission market

The Ministry of Power has allowed four Chinese entities having manufacturing units in India to bid for critical power projects. We hosted Mr. Bharanidharan Pandyan, Joint MD, Quality Power, to get his insights into this development on how it can impact the supply chain, pricing and competitive mapping of transformer players. He believes that out of the four players approved, three players will take significant capex and time to expand facilities in India as they currently have a limited scale in India, while the capacity of TBEA, one of the approved vendors, is still not sufficient to manage the demand-supply gap in transmission. We believe that the demand-supply situation still remains favorable for transformer players as incremental supplies from existing players will come in a staggered manner and the chosen Chinese players will take time to expand facilities in India. Only risk remains if the government decides to extend the concessions in terms of time of extension or direct imports. We do believe that over the next 1-2 years, domestic supplies too will start improving, which can soften the government's stance on this. We remain positive on the transmission sector and maintain BUY on GE Vernova T&D, Siemens Energy, CG Power and Atlanta and Neutral on Hitachi Energy.



**Mr. Bharanidharan
Pandyan**

Mr. Pandyan is the Joint Managing and Whole-time Director of Quality Power Electrical Equipments. He brings in over two decades of international leadership and technical expertise in high-voltage electrical equipment and power systems, with a career spanning 100+ countries across utilities, power products, automation, and emerging IoT applications.

Key highlights of the discussion

Government approval for select Chinese players to participate in power transmission projects

The Ministry of Power has allowed four Chinese entities with manufacturing units in India to bid for critical power projects. However, the exemption to these Chinese entities would involve manufacturing in India and the procurement of minimum 50-60% domestic content. Direct imports or CKD imports are not allowed by them. The government's move is directed to improving supplies for projects, which are stuck due to the non-availability of transformers and key components.

Component ecosystem in the transmission value chain

Component ecosystem in the transmission value chain: The transformer represents only a small portion of the overall transmission value chain. In a typical substation project worth ~INR5b, the transformer accounts for only ~INR800m, while the remaining value is distributed across switchgear, automation systems, instrument transformers, insulators, steel structures, cables and other balance-of-plant equipment. However, the inability of transformer manufacturers to deliver on time has emerged as the key bottleneck, delaying the commissioning of entire substations despite other equipment being ready. This has also constrained ordering across adjacent product categories, including STATCOMs and other grid equipment. According to the expert, TBEA has already achieved ~70-80% localization, with only a limited portion of components such as transformer tanks still being imported. Consequently, increased participation of domestic manufacturing facilities is expected to improve transformer availability and unlock execution across the broader transmission ecosystem, benefiting companies such as Hitachi Energy India, Siemens Energy India, GE Vernova T&D India, Quality Power, CG Power, Bharat Heavy Electricals (BHEL) and other equipment suppliers, rather than only transformer manufacturers.

Demand-supply situation still remains favorable for manufacturers

Demand-supply outlook remains favorable for EHV transformers: The expert expects favorable demand-supply dynamics to persist in the 400-765kV transformer segment, as capacity additions have remained limited in India and globally despite strong demand. High entry barriers, including qualification requirements and long performance track records, have prevented meaningful new entrants in the EHV segment over the past decade. While capacity additions are accelerating in the 132-220kV segment and could make the lower-voltage market adequately supplied over the next 12-18 months, established players such as Hitachi Energy India, Siemens Energy India, GE Vernova T&D India, and CG Power are expected to remain capacity constrained in the EHV segment.

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Demand for 5-10MVA solar inverter-duty and decoupling transformers also remains strong, driven primarily by US data centers and renewable projects. With customers prioritizing delivery over pricing, this presents a near- to medium-term export opportunity for Indian lower-kV transformer manufacturers. However, as capacities are being added globally across the US, Europe, Australia and other regions, the current supply would eventually catch up to the current demand over the next 3-4 years.

Chinese entities may take time to scale up as they have a small base in India currently

As per Mr. Pandyan and our discussions with other industry players -

- **TBEA** is already having a capacity in India of around 10,000 MVA and scalable up to 20,000 MVA in few years. TBEA is already catering to some private customers such as Adani and Reliance. Now TBEA can also provide grid supplies as compared to earlier company catering to private industries. With its current capacity, it is catering to export requirements too. Assuming its full capacity to be diverted for domestic tenders too, the demand-supply gap will still prevail.
- **Nanjing Electric** provides bushings/insulators, so they are more on components, and hence, any kind of production scale-up eases the supply chain itself, which will be positive for transformer players. Presently, Chinese bushing manufacturers, which are selling in India, are selling at a higher realization than Indian manufacturers, so the possibility of dumping or selling at lower prices is ruled out.
- **Other two players** - New North East electric and Taikai Electric are more on high-range GIS switch gears, where technology has upgraded to green gas switch gear and their plants are too small currently. If these players want to expand capacities, they would need firm commitment from the government before committing capex. Currently, in India, only four players make switchgear – Siemens Energy (400kV), Hitachi Energy (132kV-220kV), Hyosung (765kV) and GE Vernova (765kV). GIS is currently being imported for private projects.

HVDC and STATCOM projects to remain protected

HVDC and STATCOM projects will remain largely insulated from Chinese competition despite the recent policy relaxation. Unlike conventional transformers, these systems rely on critical power electronics, automation systems and proprietary chips, where even a single chip failure or the lack of access to spares can impact the entire network. Chips used by one OEM cannot simply be replaced by another, making these projects strategically sensitive. Consequently, the Ministry of Defence has consistently opposed Chinese participation in such critical infrastructure, a stance also followed in global markets such as Europe, the US and Australia. As a result, these projects are expected to remain with established players such as Hitachi Energy, Siemens Energy and GE Vernova.

Ordering expected to revive 2Q-3QFY27 onward

Ordering activity in the transmission sector remained subdued over the past few months, as elevated raw material prices created a mismatch between project budgets and prevailing input costs. Utilities had floated tenders based on older cost assumptions, while sharp price increases in commodities such as copper, steel and transformer oil made bidding unviable for the manufacturers. Since most government contracts allow only limited price variation, vendors refrained from participating in several tenders, resulting in postponements. With commodity prices now beginning to soften, utilities are expected to revisit project budgets and re-tender projects where required, which should support a recovery in bidding activity and order inflows from 2Q-3QFY27 onward.

Our view on this development

We believe that 1) the demand-supply situation still remains favorable for transformer players, as incremental supplies will come in a staggered manner and we expect the demand-supply gap to remain for the next two years; 2) pricing may not get disrupted in the near to medium term as these players will not be quoting below-market prices given the expansion required; 3) Currently, we do not see any major impact on our estimates over next 1-2 years from this. However, any future action from the government to extend the participation tenure for these players or direct imports from China can disrupt the monopoly enjoyed by transformer players and can impact rich valuation multiples enjoyed by the sector. We do believe that over the next 1-2 years, domestic supplies too will start improving, which can soften the government's stance on this. We remain positive on the transmission sector and maintain BUY on GE Vernova T&D, Siemens Energy, CG Power and Atlanta and Neutral on Hitachi Energy.

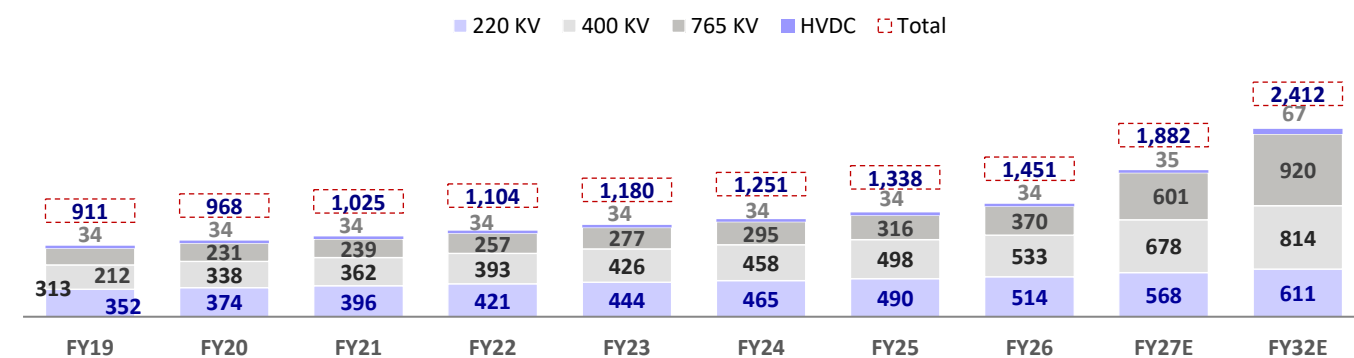
Key exhibits

Exhibit 1: Chinese players that are exempted from the ban, and their product offerings

Company	Product offerings
TBEA Energy India	❖ HV current transformer, inductive voltage transformer, combination transformer, current transformer with SF6 gas insulation, and capacity voltage transformer with voltage scope of 35kV to 765kV. HV, EHV XLPE cables, special cables, large cross-section diameter-extension conductors & bus bar and cable accessories.
Nanjing Electric India	❖ Transmission line insulators, particularly for 220kV, 400kV, 765kV class, as well as transformer bushings, and HV disconnectors.
New Northeast Electric India	❖ 145-1100kV GIS
Taikai Electric (India)	❖ 252-1100kV GIS, Dead Tank CB, Live Tank CB

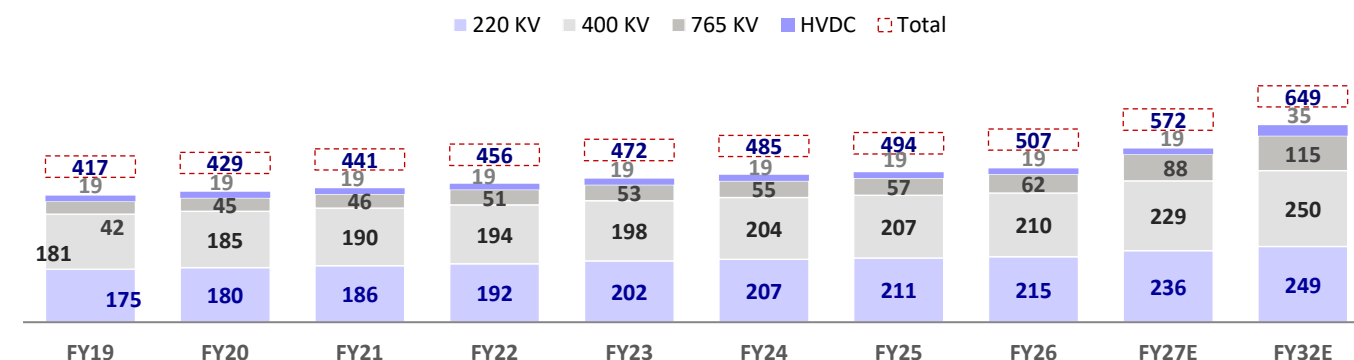
Source: Company, MOFSL

Exhibit 2: As per CEA, transformation substation capacity across the 765kV range is expected to surge 3x by FY32 end (in GVA)



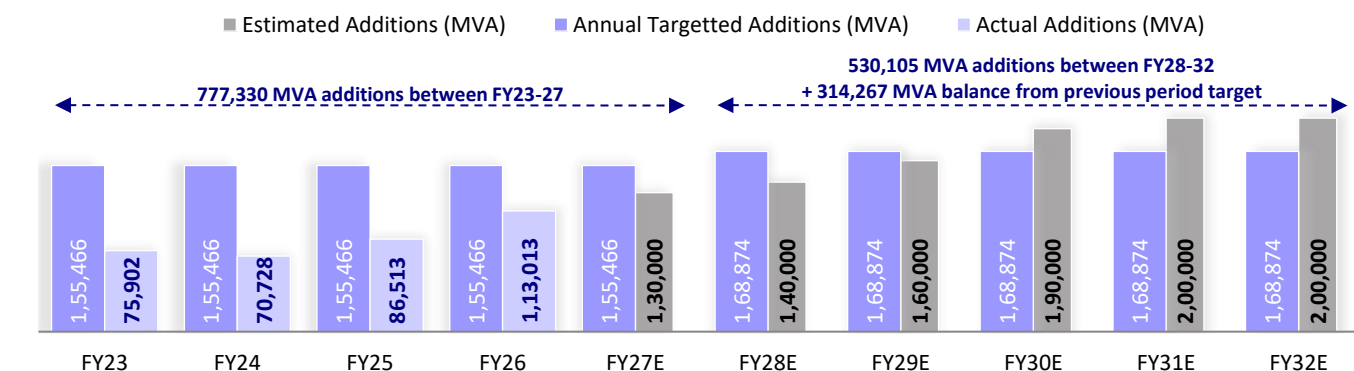
Source: CEA, MOFSL

Exhibit 3: Total installed transformation lines (>220 kV) over the years (in '000ckm) also expected to grow meaningfully



Source: Company, MOFSL

Exhibit 4: Annual additions in transmission substations have fallen short of yearly targets but has seen good growth in FY25/26



Source: CEA, MOFSL

Exhibit 5: Total transformer manufacturing capacity in India going forward based on the additional capacities announced/under construction by the companies with total investment worth INR66b (in GVA)
Existing production capacity: 375 GVA (FY25)

❖ **Additional capacity announced/under-construction:** 315 GVA. Siemens Energy India has announced additional capex to expand its capacities further by 30 GVA, which is expected to commence operations by FY30-32.

❖ **Total investments:** ~INR66b

❖ **Major Players:** Atlanta, Bharat Bijlee, BHEL, CG Power, GE Vernova, Hitachi Energy, Kanohar, Siemens Energy, Technical Associates, Toshiba, T&R, Voltamp

Domestic transformers manufacturing capacities	FY25	FY26E	FY27E	FY28E
Total manufacturing capacity (in GVA)	375	470	650	690
Capacity additions (in GVA)		95	180	40

Source: IEEMA, MOFSL

Exhibit 6: Planned expansion of domestic transformer players (including above 220 kV)

Company Name	Number of Mfg Units	Current Capacity (MVA)	Proposed Capacity (MVA)	Total Capacity (MVA)	Comments on additional capacities
Transformers & Rectifiers	3	40,200	37,000	77,200	❖ 15,000 MVA to commence from 1QFY27 22,000 MVA to commence from 2QFY27
Siemens Energy India	1	15,000	45,000	60,000	❖ 15,000 MVA to commence from 2HCY26 30,000 MVA to commence from FY30-31
CG Power & Industrial Solutions	2	40,000	70,000	110,000	❖ To commence from FY27-28
Atlanta Electricals	3	16,740	46,320	63,060	❖ Commissioned
Voltamp Transformers	2	14,000	6,000	20,000	❖ INR2b for 220 kV transformer capacity
Meiden T&D (India)	1	15,000	NA	15,000	
TBEA Energy (India) Pvt Ltd.	1	20,000	NA	20,000	
Toshiba T&D Systems (India) Pvt Ltd.	1	NA	NA	NA	
ECE Industries	2	12,000	NA	12,000	
Technical Associates	1	20,000	NA	20,000	
Indotech Transformers	1	7,500	NA	7,500	
Bharat Bijlee	1	18,000	NA	18,000	
Kanohar Electricals	1	10,500	NA	10,500	
Shirdi Sai Electricals	2	33,500	19,500	53,000	
Vishvas Power Engineering Services Pvt. Ltd.	1	NA	NA	NA	
Hitachi Energy India	2	NA	NA	NA	❖ Planned capex of INR20b towards capacity enhancement and factory expansion. Plans another fast-track capex of ~INR20b announced in May'26
GE Vernova T&D India	3	NA	NA	NA	❖ Planned capex of INR9.4b towards capacity expansion
Danish Power	2	4,681	6,319	11,000	

Source: Company, Industry, MOFSL

Exhibit 7: Relative valuation of Indian transmission equipment players

Companies	CMP (INR)	Mcap (INR b)	EPS (INR)			P/E (X)			ROE (%)			EBITDA margin (%)			FY26-28E CAGR		
			FY26	FY27E	FY28E	FY26	FY27E	FY28E	FY26	FY27E	FY28E	FY26	FY27E	FY28E	Rev	EBITDA	PAT
CG Power	925	1,456	7.9	10.2	13.7	117.5	90.6	67.6	21.0	18.6	21.1	13.1	13.9	15.1	25.4	34.9	31.8
Atlanta Electricals	1,693	130	26.4	36.9	56.0	64.1	45.9	30.2	21.8	23.4	26.2	18.6	19.0	20.0	35.8	40.8	45.6
GE Vernova T&D	4,553	1,166	50.0	65.5	86.3	91.0	69.5	52.8	57.4	50.0	45.2	27.1	28.0	28.0	29.4	31.4	31.3
Hitachi Energy	32,357	1,443	234.6	327.7	480.0	137.9	98.7	67.4	20.2	22.1	24.5	15.4	17.2	19.0	32.0	46.5	43.1
Siemens Energy*	3,419	1,218	30.9	42.5	61.5	110.6	80.5	55.6	25.1	25.9	27.3	19.3	21.0	21.5	30.5	37.7	41.1
Voltamp#	9,854	100	301.8	494.6	571.1	32.6	19.9	17.3	18.1	25.3	24.2	16.5	22.3	21.8	17.3	34.8	37.5
TRIL#	341	102	8.8	12.2	14.5	38.7	28.0	23.5	19.1	21.3	21.0	14.8	15.9	15.9	30.5	35.2	26.5

Source: Company, Bloomberg, MOFSL

Note: *For Siemens Energy India, FY26/FY27E/FY28E indicate data for periods Sep'25/Sep'26E/Sep'27E year-ends

indicates Bloomberg estimates

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Ms. Hemangi Date	022 40548000 / 022 67490600	query@motilaloswal.com
Ms. Kumud Upadhyay	022 40548082	servicehead@motilaloswal.com
Mr. Ajay Menon	022 40548083	am@motilaloswal.com

Registration details of group entities.: Motilal Oswal Financial Services Ltd. (MOFSL): INZ000158836 (BSE/NSE/MCX/NCDEX); CDSL and NSDL: IN-DP-16-2015; Research Analyst: INH000000412 . AMFI: ARN : 146822. IRDA Corporate Agent – CA0579. Motilal Oswal Financial Services Ltd. is a distributor of Mutual Funds, PMS, Fixed Deposit, Insurance, Bond, NCDs and IPO products.

Customer having any query/feedback/ clarification may write to query@motilaloswal.com. In case of grievances for any of the services rendered by Motilal Oswal Financial Services Limited (MOFSL) write to grievances@motilaloswal.com, for DP to dpgrievances@motilaloswal.com.