



T&D Spend Accelerating...

...led by High Technology Areas and Intra-State segments

- During 1HFY15, PGCIL's ordering activity stood at INR85b (up 59% YoY) led by high technology areas (at 46% of project awards) and Transmission Towers (34%). Competitive intensity remains stable.
- Emerging areas like Green Energy Corridors, Intra State transmission projects, Substation automation to drive growth. Another important trend is that the share of UHV segment in Twelfth Plan (FY13-17E) is increasing to 30-32% from 5-7% earlier, and given that there are few players prequalified in this segment, the business economics should possibly improve.
- MNC players, particularly Alstom T&D (Not Rated) and ABB India (Neutral) are best positioned to capture the upsides from high-end products. CRG (Buy) has been expanding presence in the chain.

PGCIL project awards improving, led by high technology areas

During 1HFY15, PGCIL's ordering activity has shown meaningful improvement from the lows in FY14, with ordering activity at INR85b (up 59% YoY). Key takeaways are: i) Bulk of the project awards (at 46%) are from high technology segments like HVDC, STATCOM, GIS, etc where the competition was largely restricted to MNC players. In the recent concall, Alstom T&D stated that the FY15 growth in PGCIL awards will be led by high technology areas; excluding them, the awards will be muted and similar to FY14 levels. ii) Transmission tower project awards stand at INR29b in 1HFY15 (vs INR43b in FY14). Competitive intensity remains stable with 6 bidders averaging in most bids, vs elevated levels of 12-14 bids in FY12.

Emerging new growth areas to support spending

While PGCIL ordering is likely to plateau at ~INR170-200b pa in the medium term, after bouncing back from lows of INR109b in FY14; we believe that there exist upside possibilities from i) Green Energy Corridors (investment plan INR425b, Process initiated for Technical and Financial Assistance) and expect initial renewable energy grid project awards in FY15, ii) Intra-state transmission projects (as strengthening of the sub-transmission network in the states is an important part of the chain, and the investments during the Eleventh Plan has been just ~45-50% of the requirements) and iii) Substation automation (particularly post the blackouts in July 2012) including concentrators / PMUs, FACTS, etc for grid stability. Desert 2050 Plan also entails renewable energy addition of 300GW, and transmission spend of INR4.5t, of which INR198b is targeted in the Thirteenth Plan

(FY18-22). Another important driver, particularly for large players, is that the share of UHV segment in Twelfth Plan (FY13-17E) is increasing to 30-32% from 5-7% earlier, and given that there are few players prequalified in this segment, the business economics should possibly improve.

1QFY15 revenue growth in positive territory, Margins improving

Un-covered power product companies have reported 15% YoY revenue increase (ttm, as at end 1QFY15); margins have also improved from lows of ~1-1.1% ttm in 1HFY14 to 2.6% in 1QFY15. The margins had peaked at 17-18% in FY08/09 and thus the decline has been substantial, largely led by intense pricing pressure and negative operating leverage. Segmental analysis for the coverage companies indicates that ttm revenue growth stood at 12%, and ttm EBIT margins stabilizing at 6.9% (vs peak levels of 15% in FY08/09). With product prices bottoming out and competitive environment becoming more disciplined, margins should improve.

ABB, CRG, Alstom T&D best positioned

We believe that there are multiple levers at play, including increased share of high technology products and also the need to correct under-investments in intrastate transmission / distribution segment. MNC players, particularly **Alstom T&D** (Not Rated) and **ABB India** (Neutral) are best positioned to capture the upsides from high-end products, given the continuous focus on indigenization. **CRG** (Buy) has been expanding its presence in the chain, including 765kva Circuit Breakers, Substation Automation, GIS, etc and also has a market share of 18% in distribution segment in India.

Fulcrum aims to capture and analyze the emerging trends in different sub-segments of the Capital Goods sector. The discussion encompasses various products, companies, and segments that are likely to be impacted or touched by these emerging trends.

Satyam Agarwal (AgarwalS@MotilalOswal.com); +91 22 3982 5410

Amit Shah (Amit.Shah@MotilalOswal.com) / Nirav Vasa (Nirav.Vasa@MotilalOswal.com)



PGCIL project awards improving, led by high technology areas

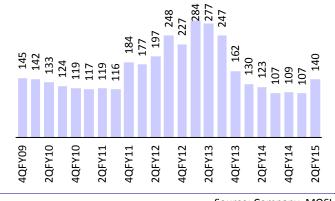
During 1HFY15, PGCIL's ordering activity has shown meaningful improvement from the lows in FY14, with ordering activity at INR85b (up 59% YoY). While the acceleration has been encouraging, the ttm project awards at INR140b, is still down 50% from peak levels of INR284b (ttm, 1QFY13). Key takeaways are:

- Order awards led by High technology areas: Key project awards in 1HFY15 have been: i) Champa Kurukshetra HVDC order of INR33b to Alstom Grid ii) STATCOM orders of INR4.9b to Siemens AG (first such project award). Thus, incrementally a large part of the ordering is skewed towards high technology projects including HVDC, STATCOMs, WAM, GIS, etc. In the recent concall, Alstom T&D stated that the growth in PGCIL awards in FY15 will be led by high technology areas; excluding them, the awards will be muted and similar to FY14 levels.
- Transmission tower order awards at INR29b (vs INR43b in FY14), competitive intensity remains stable: Transmission tower packages project awards stand at INR29b in 1HFY15 (vs INR43b in FY14), and are largely towards private IPPs like Lalitpur (1320MW), NCC Power (1320MW), IL&FS (1200MW), etc. Competitive intensity remains stable with 6 bidders averaging in most bids, vs elevated levels of 12-14 bids in FY12. Most of the companies have been guiding for stable margins in the segment.

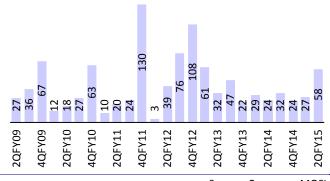
Order awards led by High technology areas

Project Awards (ttm, INR B) have improved from low levels



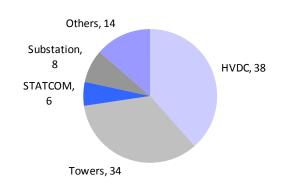






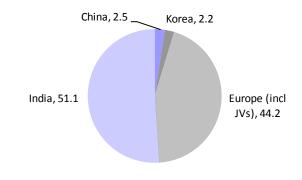
Source: Company, MOSL

1HFY15 Project Awards (ttm, INR B) led by HVDC, Towers and STATCOM orders



Source: Company, MOSL

1HFY15 awards largely bagged by European players (for HVDC, STATCOM, etc)

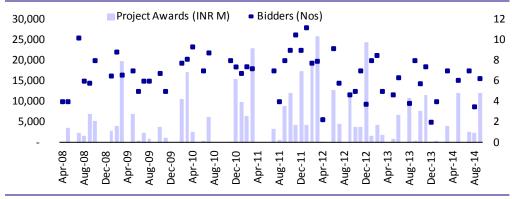


Source: Company, MOSL



Transmission tower order awards improve, competitive intensity stable

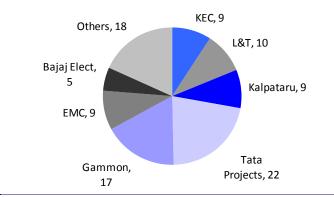
Transmission tower: competitive intensity remains stable with 6 bidders averaging in most bids, v/s elevated levels of 12-14 bids in FY12

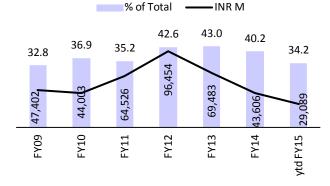


Source: MOSL, Company

1HFY15 Project wins largely by front-line players (% of total) Transmission tower awards

Transmission tower awards at ~35-40% of PGCIL awards





Source: Company, MOSL

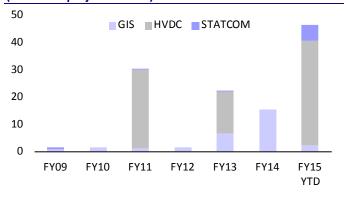
Source: Company, MOSL



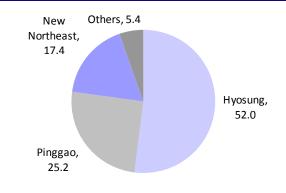
Incremental awards led by High technology areas; competition restricted

- In HVDC, expect Raigarh Poglur (Tamilnadu, +/-600kv, 4GW) project to be possibly awarded in FY15. In addition, there are few more projects that are expected in next 2-3 years, which includes the 2.5GW West North Connection and Sri Lanka India connection. Since FY11, PGCIL has awarded three HVDC projects, aggregating INR111b, with two projects being won by Alstom T&D and one by ABB-BHEL. We understand that the localization levels in both the projects are likely at ~35-45%, given the pre-qualification norms; and the quantum is expected to improve. Bidders for the last project were: ABB, Alstom T&D and BHEL.
- In **STATCOM**, Siemens AG won the first such order for three sub-stations by PGCIL at INR4.9b. ABB in a recent concall had stated that the PGCIL plans to award 12 such projects, with each at ~USD100m; and thus the opportunity pie is significant. PGCIL had rejected the bids of Hyosung, Toshiba, China EPRI Science & Technology and Rongxin Power; and thus the bidders were ABB, Siemens and Alstom T&D.
- GIS is also witnessing increased traction, with project awards of INR27b in FY13/14; and another INR1.9b in 1HFY15. Of this, bulk of the orders has been bagged by Korean and Chinese players: with Hyosung (Korea) at INR15b, Pinggao (Korea) INR7b and North East Electric Group (China) INR5b. Alstom T&D has localized GIS manufacturing in India, with the Chennai factory commissioned in FY10. Also, ABB has recently commissioned the GIS factory in November 2013, and supplied the first 420kva GIS in 1QFY15. The company is still not prequalified by PGCIL for bidding, with three instances of bids rejected over the last one year.

High Technology Products contribute 46% of 1HFY15 awards (% of total project awards)



Market share in GIS project awards wef FY13; dominated by Chinese and Koreans (%)



Source: Company, MOSL Source: Company, MOSL



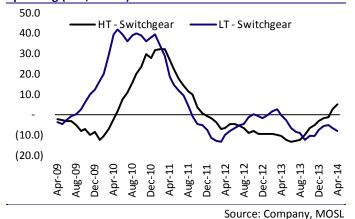
T&D spend to accelerate: SEBs / grid efficiency provide avenues

Emerging new growth areas to support T&D spending

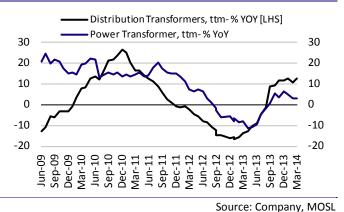
While PGCIL ordering is likely to plateau at ~INR170-200b pa in the medium term, after bouncing back from lows of INR109b in FY14; we believe that there exist upside possibilities from i) Green Energy Corridors (investment plan INR425b, Process initiated for Technical and Financial Assistance) and expect few renewable energy grid project awards in FY15, ii) Intra-state transmission projects (as strengthening of the sub-transmission network in the states is an important part of the chain, and the investments during the Eleventh Plan has been just ~45-50% of the requirements) and iii) Substation automation (particularly post the blackouts in July 2012) including concentrators / PMUs, FACTS, etc for grid stability. Desert 2050 Plan also entails renewable energy capacity addition of 300GW, and transmission spending of INR4.5t, of which INR198b is targeted in the Thirteenth Plan (FY18-22).

We understand that few of these project awards should possibly accelerate. Several of these projects will necessitate the need for technology up-gradation by Indian companies, while MNC players would benefit on the back of technological edge. In 4QFY14, PGCIL awarded orders for supply of ~1,300 PMUs to Alstom (INR3.6b) and recently awarded STATCOMs for three substations to Siemens (INR4.9b). Another important demand driver, particularly for large players, is that the share of ultrahigh voltage segment in the Twelfth Plan is increasing to 30-32% from 5-7% earlier, and given that there are few players prequalified in this segment, the business economics should possibly improve.

HT Switchgears have witnessed traction, led by PGCIL spending (ttm, % YoY)



Distribution Transformers growth rates higher than Power Transformers (ttm, % YoY)



1QFY15 revenue growth in positive territory, Margins improving

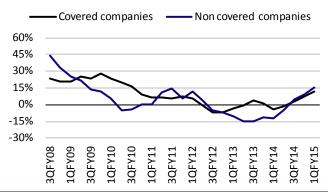
- Un-covered power product companies have reported a meaningful 15% YoY revenue increase (ttm, as at end 1QFY15) and the growth rates have been building up; ttm margins have also improved from lows of ~1-1.1% in 1HFY14 to 2.6% in 1QFY15. The margins for the un-covered companies had peaked at 17-18% in FY08/09 and thus the decline has been substantial, largely led by intense pricing pressure and negative operating leverage.
- Segmental analysis for the coverage companies indicates that ttm revenue growth stood at 12%, and is up meaningfully. Revenue growth is also being



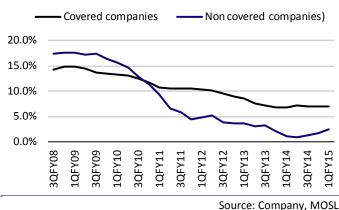
supported by exports, particularly for the coverage companies. In the case of covered companies, the ttm EBIT margins have halved from peak levels of 14.8% in FY08/09 to 6.9% in 1QFY15. This has largely been a function of increased competitive intensity resulting in a fall of 25-30% in transformer prices and poor fixed cost absorption. With prices showing signs of bottoming out and competitive environment becoming more disciplined, the margins are showing signs of stabilization, although at significantly lower levels in comparison to historic peaks.

Management commentary has been positive; and the industry should bounce back to a much more normative growth level. Also, transformer prices have stabilized, albeit at lower levels. Competitive intensity is showing signs of moderation given the poor execution track record of new entrants / stringent evaluation by PGCIL including a 2-stage bidding process / decline in participation by Koreans given requirement of domestic manufacturing.

Power products revenues improve, for both coverage and other companies



Margins have also shown signs of improvement, albeit at lower levels and are a function of operating leverage



Source: Company, MOSL

Capital Goods: Valuation summary

		M-Cap	CMP	EPS (INR)			P/E			EV/EBITDA			RoE (%)		
Company	Rating	USD	INR	FY15E	FY16E	FY17E	FY15E	FY16E	FY17E	FY15E	FY16E	FY17E	FY15E	FY16E	FY17E
ABB#	Neutral	4.0	1,146	13.0	19.4	30.3	82.3	55.1	35.4	36.7	27.7	19.8	10.0	14.0	19.7
BHEL	Buy	9.0	221	10.2	14.6	19.5	21.4	15.0	11.2	11.2	7.1	4.6	7.3	9.8	12.1
Crompton	Buy	2.2	204	6.4	11.8	16.8	31.9	17.3	12.2	15.9	10.9	7.9	10.5	17.2	20.8
Cummins	Buy	3.1	673	23.3	29.3	37.1	29.6	23.5	18.5	24.0	19.4	16.0	23.6	27.0	30.6
L&T	Buy	22.6	1,460	46.2	64.7	85.4	31.3	22.3	16.9	19.3	15.9	13.0	13.7	14.9	16.0
Siemens##	Sell	4.8	810	8.3	13.8	18.5	99.5	59.4	44.3	44.8	29.5	23.1	7.1	11.3	14.2
Thermax	Buy	1.7	850	20.8	33.1	50.2	41.7	26.2	17.3	24.9	16.4	11.0	11.8	17.2	22.7
Havells	Neutral	2.8	266	9.4	11.7	14.7	28.5	23.0	18.2	17.0	13.8	11.0	29.1	29.7	30.6
Voltas	Buy	1.3	227	9.7	12.8	16.1	24.6	18.5	14.8	20.4	16.4	11.0	12.4	18.1	19.6
Bharat															
Electronics	Buy	2.7	2,009	120.5	143.6	167.9	16.6	13.9	11.9	11.7	8.9	7.1	12.4	13.3	13.9
KEC															
International	NR	0.4	103	6.0	9.5	12.3	17.4	10.9	8.5	6.7	5.3	4.4	10.5	14.8	16.7
Alstom T&D*	NR	1.5	333	7.9	11.2	13.7	42.2	29.7	24.3	21.0	16.3	14.0	14.9	18.4	19.3
VA Tech															
Wabag	Buy	0.7	1,640	51.1	71.1	86.1	32.6	23.4	19.4	15.1	10.5	8.7	14.2	17.1	17.8

Year end December; ## Year end September, Sep 16=FY17, * Bloomberg Estimates

Source: Company, MOSL



NOTES

Disclosures

This research report has been prepared by MOSt to provide information about the company(ies) and sector(s), if any, covered in the report and may be distributed by it and/or its affiliated company(ies). This report is for personal information of the select recipient and does not construe to be any investment, legal or taxation advice to you. This research report does not constitute an offer, invitation or inducement to invest in securities or other investments and Motilal Oswal Securities Limited (hereinafter referred as MOSt) is not soliciting any action based upon it. This report is not for public distribution and has been furnished to you solely for your general information and should not be reproduced or redistributed to any other person in any form. This report does not constitute a personal recommendation or take into account the particular investment objectives, financial situations, or needs of individual clients. Before acting on any advice or recommendation in this material, investors should consider whether it is suitable for their particular circumstances and, if necessary, seek professional advice. The price and value of the investments referred to in this material and the income from them may go down as well as up, and investors may realize losses on any investments. Past performance is not a guide for future performance, future returns are not guaranteed and a loss of original capital may occur.

MOSt and its affiliates are a full-service, integrated investment banking, investment management, brokerage and financing group. We and our affiliates have investment banking and other business relationships with a significant percentage of the companies covered by our Research Department Our research professionals provide important input into our investment banking and other business selection processes. Investors should assume that MOSt and/or its affiliates are seeking or will seek investment banking or other business from the company or companies that are the subject of this material and that the research professionals who were involved in preparing this material may participate in the solicitation of such business. The research professionals responsible for the preparation of this document may interact with trading desk personnel, sales personnel and other parties for the purpose of gathering, applying and interpreting market information. Our research professionals are paid in part based on the profitability of MOSt which include earnings from investment banking and other business. MOSt generally prohibits its analysts, persons reporting to analysts, and members of their households from maintaining a financial interest in the securities or derivatives of any companies that the analysts cover. Additionally, MOSt generally prohibits its analysts and persons reporting to analysts from serving as an officer, director, or advisory board member of any companies that the analysts cover. Our salespeople, traders, and other professionals or affiliates may provide oral or written market commentary or trading strategies to our clients that reflect opinions that are contrary to the opinions expressed herein, and our proprietary trading and investing businesses may make investment decisions that are inconsistent with the recommendations expressed herein. In reviewing these materials, you should be aware that any or all o the foregoing, among other things, may give rise to real or potential conflicts of interest. MOSt a

Unauthorized disclosure, use, dissemination or copying (either whole or partial) of this information, is prohibited. The person accessing this information specifically agrees to exempt MOSt or any of its affiliates or employees from, any and all responsibility/liability arising from such misuse and agrees not to hold MOSt or any of its affiliates or employees responsible for any such misuse and further agrees to hold MOSt or any of its affiliates or employees free and harmless from all losses, costs, damages, expenses that may be suffered by the person accessing this information due to any errors and delays. The information contained herein is based on publicly available data or other sources believed to be reliable. Any statements contained in this report attributed to a third party represent MOSt's interpretation of the data, information and/or opinions provided by that third party either publicly or through a subscription service, and such use and interpretation have not been reviewed by the third party. This Report is not intended to be a complete statement or summary of the securities, markets or developments referred to in the document. While we would endeavor to update the information herein on reasonable basis, MOSt and/or its affiliates are under no obligation to update the information. Also there may be regulatory, compliance, or other reasons that may prevent MOSt and/or its affiliates from doing so. MOSt or any of its affiliates or employees shall not be in any way responsible and liable for any loss or damage that may arise to any person from any inadvertent error in the information contained in this report. MOSt or any of merchantability. fitness for a particular purpose, and non-infringement. The recipients of this report should rely on their own investigations.

Recipients who are not institutional investors should seek advice of their independent financial advisor prior to taking any investment decision based on this report or for any necessary explanation of its contents.

MOSt and/or its affiliates and/or employees may have interests/positions, financial or otherwise in the securities mentioned in this report. To enhance transparency, MOSt has incorporated a Disclosure of Interest Statement in this document. This should, however, not be treated as endorsement of the views expressed in the report.

Disclosure of Interest Statement

Companies where there is interest

Analyst ownership of the stock

Analyst Certification

The views expressed in this research report accurately reflect the personal views of the analyst(s) about the subject securities or issues, and no part of the compensation of the research analyst(s) was, is, or will be directly or indirectly related to the specific recommendations and views expressed by research analyst(s) in this report. The research analysts, strategists, or research associates principally responsible for preparation of MOSt research receive compensation based upon various factors, including quality of research, investor client feedback, stock picking, competitive factors and firm revenues.

Regional Disclosures (outside India)

This report is not directed or intended for distribution to or use by any person or entity resident in a state, country or any jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject MOSt & its group companies to registration or licensing requirements within such jurisdictions.

For U.K.

This report is intended for distribution only to persons having professional experience in matters relating to investments as described in Article 19 of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (referred to as "investment professionals"). This document must not be acted on or relied on by persons who are not investment professionals. Any investment or investment activity to which this document relates is only available to investment professionals and will be engaged in only with such persons.

For U.S

Motilal Oswal Securities Limited (MOSL) is not a registered broker - dealer under the U.S. Securities Exchange Act of 1934, as amended (the "1934 act") and under applicable state laws in the United States. In addition MOSL is not a registered investment adviser under the U.S. Investment Advisers Act of 1940, as amended (the "Advisers Act" and together with the 1934 Act, the "Acts), and under applicable state laws in the United States. Accordingly, in the absence of specific exemption under the Acts, any brokerage and investment services provided by MOSL, including the products and services described herein are not available to or intended for U.S. persons.

This report is intended for distribution only to "Major Institutional Investors" as defined by Rule 15a-6(b)(4) of the Exchange Act and interpretations thereof by SEC (henceforth referred to as "major institutional investors"). This document must not be acted on or relied on by persons who are not major institutional investors. Any investment or investment activity to which this document relates is only available to major institutional investors and will be engaged in only with major institutional investors. In reliance on the exemption from registration provided by Rule 15a-6 of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act") and interpretations thereof by the U.S. Securities and Exchange Commission ("SEC") in order to conduct business with Institutional Investors based in the U.S., MOSL has entered into a chaperoning agreement with a U.S. registered broker-dealer, Motilal Oswal Securities International Private Limited. ("MOSIPL"). Any business interaction pursuant to this report will have to be executed within the provisions of this chaperoning agreement.

The Research Analysts contributing to the report may not be registered /qualified as research analyst with FINRA. Such research analyst may not be associated persons of the U.S. registered broker-dealer, MOSIPL, and therefore, may not be subject to NASD rule 2711 and NYSE Rule 472 restrictions on communication with a subject company, public appearances and trading securities held by a research analyst account.

For Singapore

Motilal Oswal Capital Markets Singapore Pte Limited is acting as an exempt financial advisor under section 23(1)(f) of the Financial Advisers Act(FAA) read with regulation 17(1)(d) of the Financial Advisors Regulations and is a subsidiary of Motilal Oswal Securities Limited in India. This research is distributed in Singapore by Motilal Oswal Capital Markets Singapore Pte Limited and it is only directed in Singapore to accredited investors, as defined in the Financial Advisers Regulations and the Securities and Futures Act (Chapter 289), as amended from time to time.

In respect of any matter arising from or in connection with the research you could contact the following representatives of Motilal Oswal Capital Markets Singapore Pte Limited:

Anosh Koppikar

Email:anosh.Koppikar@motilaloswal.com Contact(+65)68189232 Office Address:21 (Suite 31),16 Collyer Quay,Singapore 04931 Kadambari Balachandran

Email: kadambari.balachandran@motilaloswal.com Contact: (+65) 68189233 / 65249115

