

Genus Power Infrastructure Ltd - BUY

Set to ride the metering market boom

Genus is the largest player in the domestic electric metering market with a 27% market share and installation base of 42mn units across the globe. Post the FY17 blip, domestic metering market is expected to bounce back stronger over the next three years even as DISCOMS work towards reducing AT&C losses to meet UDAY targets. Further, demand for smart meters is expected to jump multifold as AMI would be integral to the creation of smart grids. The technology tie-ups with Silver Spring Network (SSN) and Global Utilities Management Co (GUMCO), Nigeria have thrown open a plethora of export market opportunities. ECC business is also expected to turnaround as execution picks up in two large projects. The above factors would collectively lead to revenue CAGR of 23.5% over FY17-19. Margins are expected to expand 110bps over the said span with strong growth in metering volumes, higher share of smart meters and turnaround in ECC business. We believe valuations are attractive at 11.2x FY19E P/E with an earnings CAGR of 27.9% over FY17-19. The stock would witness re-rating on the back of strong growth in the domestic metering market. **We initiate coverage on the stock with a BUY rating and target price of Rs.74 (16x FY19 P/E).**

Metering market to surge from H2 FY18

Metering market has been steadily growing at 10-15% yoy over FY10-16. However, in FY17 it witnessed a sharp fall of 40% yoy following the disagreement between the State and Central government on the procurement policy of metering instruments. With the issue getting resolved in Q4 FY17, we expect demand to be robust, considering 25mn unmetered connections, 54mn households are yet deprived of electricity and 25-30mn new connections are expected to happen by 2020. **Currently, ~27mn units of meters are under tender evaluation by various utilities, and expected to be awarded over the next six months. Metering market is likely to jump to Rs.28-30bn in FY18 from Rs.20bn in FY17, and would further grow by +20% in FY19.**

Analyst: Tarang Bhanushali, Rahul Jain

CMP (Rs) (As on Sep 26, 2017)	52	SECTOR: CAPITAL GOODS	
12-mts Target (Rs)	74	Market cap (Rs mn)	13,710
Upside	42.6%	Enterprise value (Rs mn)	13,879

Figure 1: Financial summary

Y/e 31 Mar (Rs m)	FY16	FY17	FY18E	FY19E	FY20E
Revenues	8,577	6,424	8,208	9,794	11,411
yoy growth (%)	(6.3)	(25.1)	27.8	19.3	16.5
OPM (%)	14.4	13.5	14.2	14.6	15.1
Reported PAT	919	651	830	1,064	1,311
yoy growth (%)	27.2	(25.3)	28.2	28.1	23.2
EPS (Rs)	4.0	2.8	3.6	4.6	5.7
P/E (x)	13.0	18.4	14.4	11.2	9.1
Price/Book (x)	1.9	1.8	1.6	1.5	1.3
EV/EBITDA (x)	11.0	15.7	11.8	9.5	7.9
Debt/Equity (x)	0.4	0.3	0.3	0.2	0.2
RoE	17.8	10.1	11.8	13.6	15.0
RoCE (%)	17.2	12.0	14.1	16.0	17.5

Source: Company, IIFL Research

Smart meters- the way forward

Advanced Metering Infrastructure (AMI) would be integral to the creation of smart grids as it is an efficient tool in monitoring and reducing power theft/pilferage in the distribution system. The Government is also promoting installation of smart meters through various policy initiatives. **Under the UDAY scheme, only 1% of the overall target of 22.5mn smart meters has been installed so far, given that smart meters are 4-5 times costlier than normal meters. To reduce the burden on the dwindling balance sheets of DISCOMs, the Centre is now planning to source smart meters through EESL for leasing them to state DISCOMs. The government has recently launched a global tender for procurement of 5mn units.** Genus has a 70% market share in domestic smart meters market and is set to benefit from the huge increase in demand for smart meter over the next three years.

Global tie-ups and execution of Singapore order to magnify export opportunities

Over the past 2-3 years, Genus has setup a dedicated team to expand its reach in the global market. It has also entered into technology tie-ups with Silver Spring Network (SSN) and Global Utilities Management Co. (GUMCO), Nigeria. The tie-ups virtually throw open a plethora of export market opportunities for the company. Genus has already received an order for smart meters from Singapore utility. With the execution of this order, Genus would qualify to bid in South East Asian countries. Margins on export orders are higher as anti-tamper technology required for export orders is quite lower compared to domestic market. The company targets to increase export revenues from Rs.120mn in FY17 to Rs1,000-1,250mn annually over the next two years.

ECC business to turnaround from FY18

ECC business is expected to turnaround in FY18 led by execution of the two large orders. In FY17, lack of clearance at customer end led to minimal execution and the company reported a loss at the operating level. The management expects execution to pick up from H2 FY18 as both projects have received clearances. ECC order book of Rs.2.76bn is expected to be executed over the next two years. We expect Rs.800mn revenues from this division in FY18 and Rs.1,000mn in FY19, lower than the management guidance of Rs.1,000+mn.

Re-rating to continue

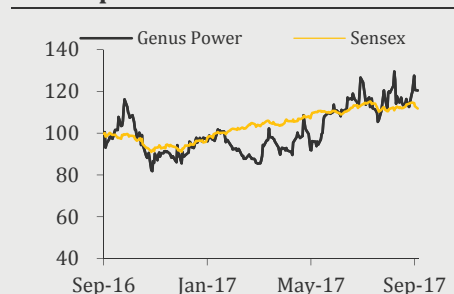
Led by the strong execution in both segments, the company is expected to witness an operating profit CAGR of 28.7% over FY17-19E. Finance costs would likely decline with a marginal decrease in gross debt and lower interest costs. However, higher tax rate and lower other income would curtail growth in PAT to 27.9% CAGR over the same period. We believe the stock would witness re-rating on the back of strong growth in domestic metering for Power T&D EPC players since the last year.

Company rating grid

	Low High				
	1	2	3	4	5
Earnings Growth					
Cash Flow					
B/S Strength					
Valuation appeal					
Risk					

Sensex:	31,600
52 Week h/l (Rs)	58.7 / 32.7
6m Avg t/o (Rs mn):	4.2
FV (Rs):	1
Div yield (%):	0.9
Bloomberg code:	GPIN IN
BSE code:	530343
NSE code:	GENUSPOWER

Stock performance



	1M	3M	1Y
Absolute return (%)	1.3	8.9	21

Shareholding pattern (%)

Promoter	50.5
FII+DII	7.9
Others	41.6

Figure 2: Robust earnings growth would lead to re-rating



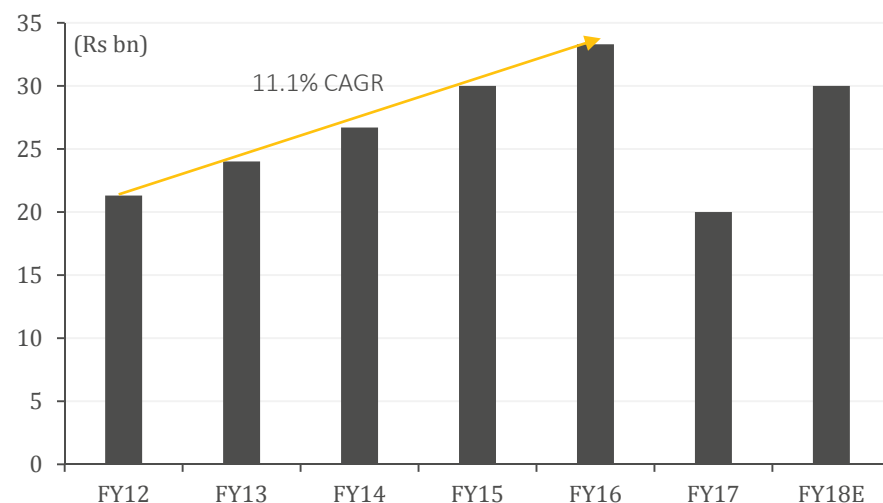
Source: Company, IIFL Research

INVESTMENT RATIONALE

Domestic electric metering to bounce back from FY18

Domestic metering market has been steadily growing at 10-15% yoy during this decade. However, in FY17, market for meters in India witnessed a sharp fall of 40% yoy to Rs.20bn. This was largely because of the disagreement between the State and Central government on the procurement policy of metering instruments. The issue was resolved by Q4 FY17 and the states are expected to purchase meter directly as per their requirement. Post a blip in meter ordering in FY17, this segment is expected to register strong growth over the next three years as the DISCOMS would execute to meet stiff targets set under UDAY scheme. We believe metering would be integral part of the systems and schemes to be implemented by the states to reduce Aggregate Technical and Commercial (AT&C) losses to the levels targeted under UDAY.

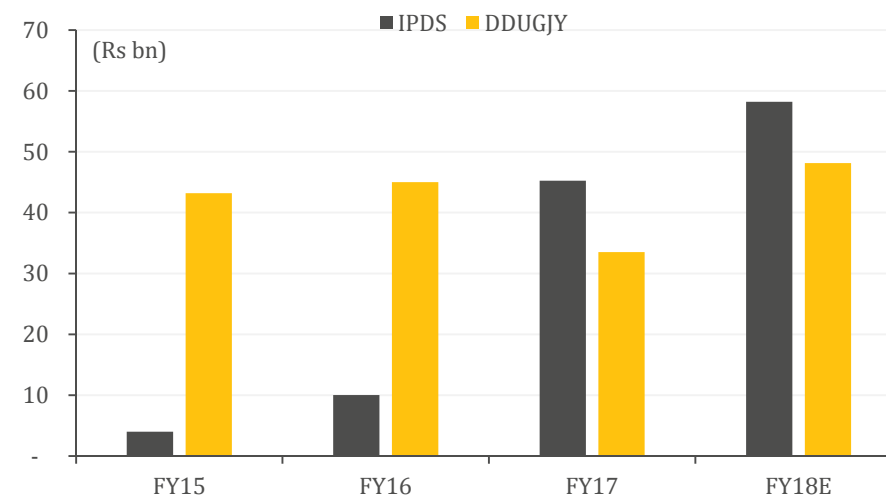
Figure 3: Electric metering market has been steadily growing at 11.1%, it is expected to rebound in FY18



Source: Industry, IIFL Research

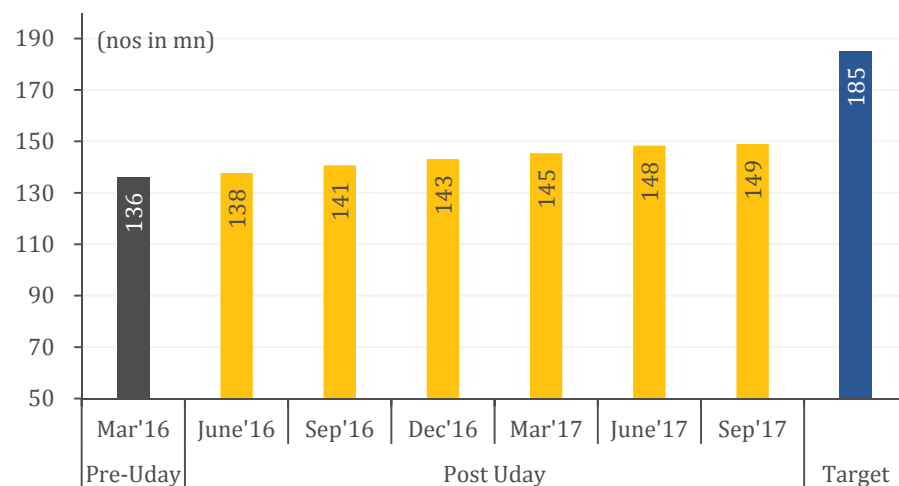
Initiatives like the Deen Dayal Upadhaya Gram Jyoti Yojna (DDUGJY), Integrated Power Development Scheme (IPDS) and Suabhagya scheme are expected to boost the meter market. Further, the UDAY scheme is likely to aid growth in the power sector, though at conservative estimates considering the acceptability of this scheme by Indian states. The distribution system in India has been operating in the past with inadequate metering. Majority of meters were either defective or inaccurate and, therefore, it was not possible to carry out energy auditing. The Government of India has taken initiative for 100% metering of feeders and for the distribution transformers under UDAY. All the states have achieved their target in feeder metering, however, still 50% of the target set under distribution transformer metering has not been achieved.

Figure 4: Budgetary allocation under IPDDS and DDUGJY has increased 25% to Rs.106.4bn in FY18



Source: Ministry of Power, IIFL Research

Figure 5: Demand for meters would rise as still ~35mn households are yet to be electrified under UDAY



Source: Ministry of Power, IIFL Research

As per an industry report, there are 25mn unmetered connections and 54mn households without electricity out of the total electricity connections of 250mn. Further, 25-30mn new commercial and residential connections are expected to be connected by 2020. Currently ~27mn units of meters are under tender evaluation by various utilities and are expected to be awarded over the next six months. We believe the revived pace of metering orders after a gap of four consecutive quarters provides good revenue visibility for the next two years. As per industry players, the metering market is expected to jump to Rs.28-30bn in FY18 from Rs.20bn in FY17.

Smart meters: the way forward

Given the integration of renewable, rooftop solar, decentralized generation, smart cities and electric vehicles, Discoms are necessarily moving towards adopting smart grid technology. Smart meters would also be an efficient tool in monitoring and reducing power theft/pilferage in the distribution system. The government is promoting the installation of smart meters through various policy initiatives. The power tariff policy has mandated to install smart meters for all consumers with monthly consumption of +500 units by December 2017 and is also sourcing tenders through the EESL route. Under the UDAY scheme, only 1% of the overall target of 22.5mn smart meters has been installed so far.

Figure 6: Recent meter tenders released/yet to be released by Indian utilities in addition to the EESL tender

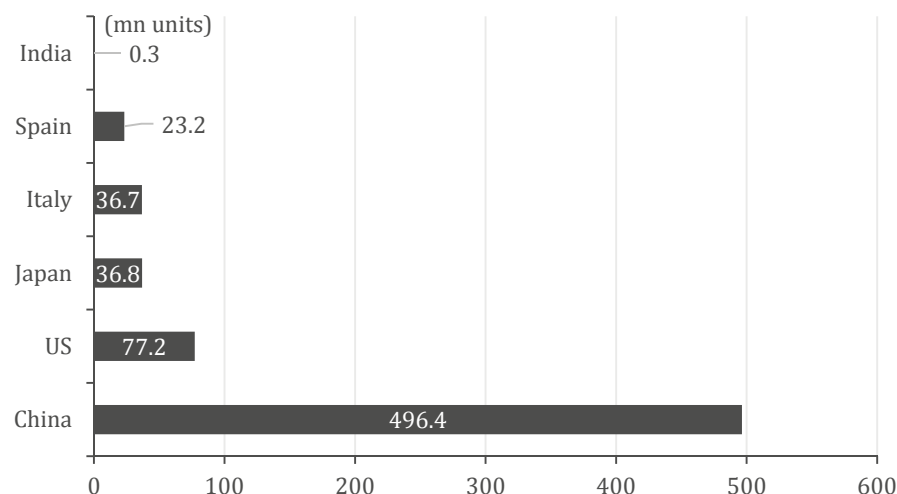
Utility	Meters
KESCO, Kanpur	539,000
Reliance, Mumbai	300,000
PVVNL, Varanasi	225,000
Tata Power, Delhi	200,000
MSEDCL, Amravati, Maharashtra	148,495
MSEDCL, Congress Nagar, Maharashtra	125,000
Jammu and Kashmir	70,000
CED, Chandigarh	29,443
UGVCL, Gujarat	22,000
Total	1,658,938

Source: Industry, IIFL Research

Currently, cost of smart meters is more than 4-5 times the cost of normal meters used by domestic utilities. The Ministry of Power is planning to subsidize advanced meters to reduce smart meters price such that consumers have access to real time data. It is also trying to reduce the costs through economies of scale through the EESL route. Energy Efficiency Services Ltd (EESL) has recently issued a large tender seeking supply of 5mn smart meters units on behalf of Haryana and Uttar Pradesh. The government is also working on a scheme whereby it will

procure smart meters for the state utilities and give it on lease to state DISCOMs. This would reduce the pressure on DISCOMs dwindling balance sheet and would also lead to faster rollout of smart meters.

Figure 7: Domestic installed smart meters are less than 1% of China



Source: Bloomberg, IIFL Research

Given its strong R&D, Genus has managed to garner 70% market share in the domestic smart meters market. The company deployed India's first smart village project at Shahpur and also implemented India's first End to End Smart Metering Solution at Kala Amb (HP). The company over the last one year has managed to bag few orders in the smart meters space, both in the domestic and export market. In the domestic market, the company has received various orders from Manipur for prepaid meters, for smart metering solution in Bharatpur and Kota in Rajasthan from CESC and from Uttar Gujarat Vij Company Ltd (UGVCL) in Naroda. Through the tie up with global firmware providers, the company has received orders from Singapore Power utility for smart metering solutions. These triggers would lead to strong demand for smart metering solutions over the next five years.

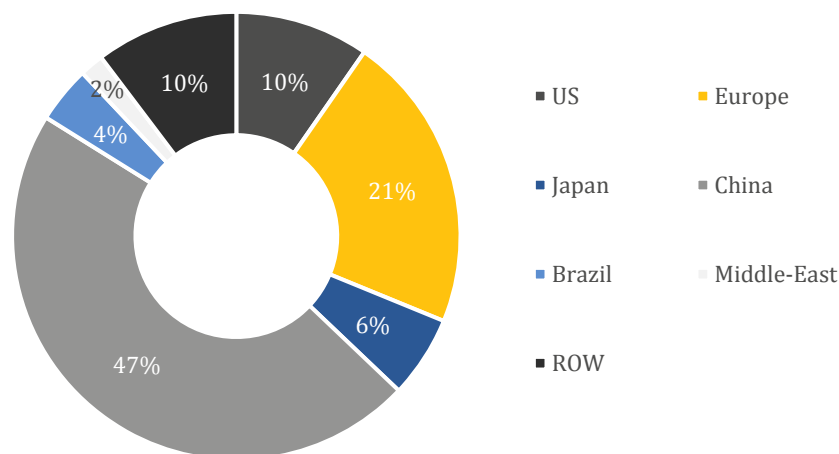
Export market: huge opportunity for Genus

Genus is largely a domestic player as entry barriers in export markets are quite high. However, with the strong R&D and diversified product portfolio, the company has increased focus on export markets over the last two-three years. The company has set up representative offices in the fastest-growing regions to gain stronghold in the export market and has secured the required certifications. With major developing nations moving towards smart grid, demand for smart meters, prepayment meters and net-metering solutions is set to rise. The management expects strong demand from Middle-East, Africa, Australia and ASEAN regions.

The company has also achieved export breakthroughs with the recent collaboration with a global software provider Silver Spring Network (SSN). The company is executing an order to install IoT based smart meters for CESC at Bharatpur and Kota, Rajasthan, in agreement with SSN. Under the agreement, Genus will integrate Silver Spring's standards-based IPv6 network interface cards (NICs) into its single-phase and three-phase smart electric meters. Silver Spring's advanced technology is being integrated into Genus smart meters to enable secure and reliable wireless networking connectivity between home and business customers and the back-offices of utilities. The communications and computing modules will help form a highly resilient mesh network for utilities, providing access to demand, consumption, time-of-use and interval data, alarms, and power-quality data from Genus smart meters.

This tie up has enabled the company to bag a smart meter order worth Rs.250mn from an electric utility in Singapore. This breakthrough would enable it to bid in many other regions. The Singapore market itself is expected to be huge and the company expects repeat orders from this region. This would also allow it to bid for projects in Malaysia, which is estimated to be ~8mn smart meters.

Figure 8: 2020 global smart meter installation target stands at 930mn



Source: Industry, IIFL Research

The company has also entered into an agreement with Global Utilities Management Co, (GUMCO), Nigeria to assist them as a technical partner in the establishment of a Meter Assembling & Testing unit. The unit will cater to Nigerian market and also cater to developing West African markets on case to case basis. The company also received an order worth Rs.200mn from a local DISCOM.

On the back of the above two agreements and the company's focus on expanding its reach, the company plans to increase export revenues from Rs.120mn in FY17 to Rs1,000-1,250mn over the next two years. Though gestation period is longer in an export order, margins are better compared to domestic market.

ECC business execution to pick up

Leveraging its experience in energy metering space, Genus provides customized and complete solution of Engineering, Construction and Contracts (ECC) for power T&D sector. Under the turnkey ECC solutions, Genus offers one stop total solution of Metering, Engineering & Construction from 'concept to commissioning' with distinctive specialization in smart metering solution & advance metering infrastructure. In this division the company provides solutions for switchyard/sub-station up to 400kV, transmission lines up to 400kV, Rural Electrification and distribution lines.

Contribution from this segment has been weak over the last two years on account of cost escalation and increase in execution cycle. Weak execution coupled with high fixed costs led to the company reporting operating loss in FY17. The management has mentioned that this division is expected to turnaround in FY18 on the back of strong order book and faster execution. Genus remains focused on selective participation in ECC projects business that could contribute to higher profitability of the company. The company believes, with utilities moving towards smart grid and government's focus on rural electrification and feeder separation, Genus is exploring better business opportunities going forward.

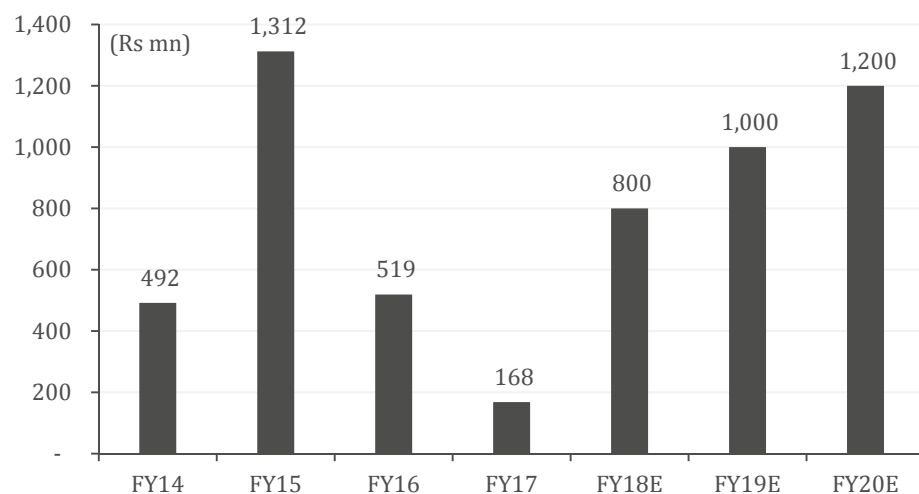
Figure 9: ECC orders under execution

Sr No	Orders under execution
1	220 KV transmission line and substation in Jharkhand
2	132 KV D/C transmission line and substation in Jharkhand
3	230/110 KV AIS substation in Tamil Nadu
4	Rural electrification work in Uttarakhand under R-APDRP
5	Rural electrification work (including feeder segregation) in Western UP under DDUGJY scheme

Source: Company, IIFL Research

ECC order book at the end of Q1 FY18 stood at Rs.2.76bn, with two large orders from Jharkhand accounting for majority of the orderbook. Current projects under execution are 220 KV transmission line and substation in Jharkhand, 132 KV D/C transmission line and substation in Jharkhand, 230/110 KV AIS substation in Tamil Nadu, Rural electrification work in Uttarakhand under R-APDRP and Rural electrification work (including feeder segregation) in Western UP under DDUGJY scheme. The current orderbook is expected to be executed over the next 18 months. The management says it would simultaneously execute only 2-3 large orders due to manpower restrictions. We expect revenues from this division to be Rs.800mn in FY18 and Rs.1,000mn in FY19, lower than the management guidance of +Rs.1,000mn. We are consciously conservative given that this division has underperformed over the last two years despite a good orderbook.

Figure 10: ECC business revenues to surge from H2 FY18 as execution picks up on two large orders

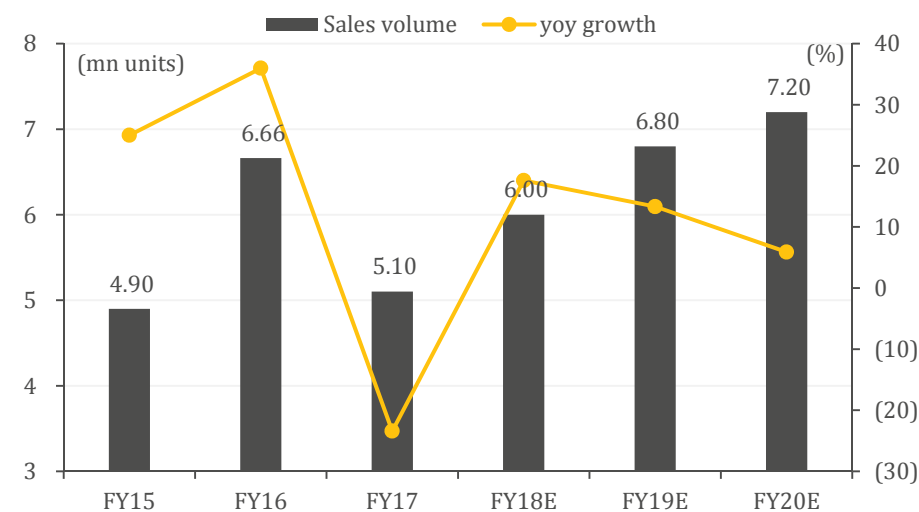


Source: Company, IIFL Research

Revenue growth to pickup from H2 FY18

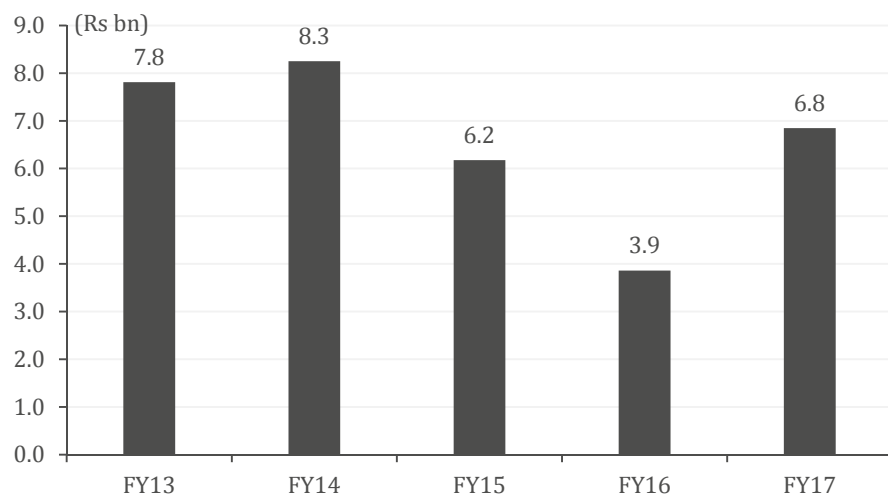
Genus reported 25.1% yoy decline in net revenues as the metering market contracted 40% yoy in FY17 and execution in ECC segment declined due to lack of clearance at customer's end. We expect the metering market to rebound in FY18 and Genus would continue to account for a more than 25% of the market share in FY18. We expect ordering momentum to remain strong in FY19 too as most of the utilities would convert unmetered connections and demand would also be high from the monitoring required to plug leakages. In addition to the strong demand, overall market growth would be led by higher share of smart meters. Ordering for smart meters is expected to surge as state governments abide by the target set under UDAY and Centre continues to support implementation of smart metering solutions in major cities and towns. We expect metering business to witness revenue CAGR of 18.7% over the period FY17-19E.

Figure 11: Meter volumes to recover over the next two years



Source: Company, IIFL Research

Figure 12: Orderbook has been rising since H2 FY17 as clarity emerged on meter ordering between State and Centre



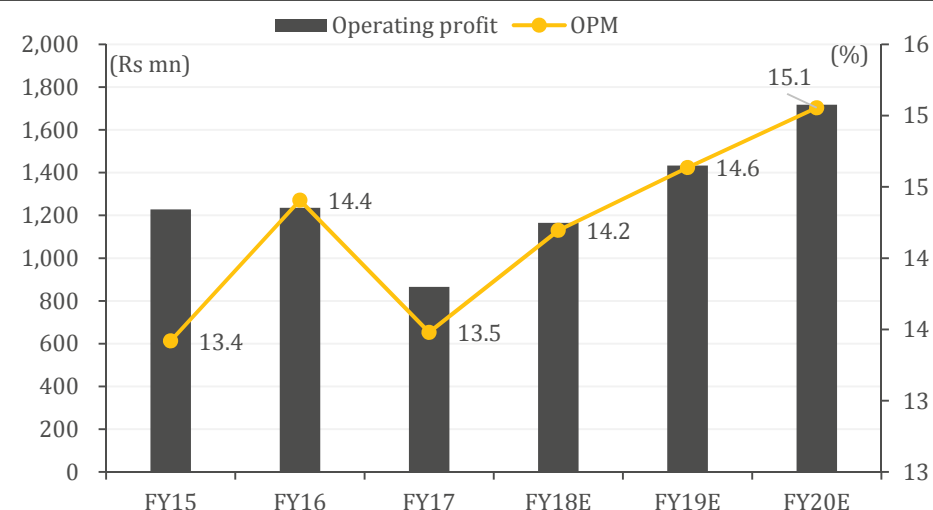
Source: Company, IIFL Research

Topline growth would be further boosted by pickup in execution in ECC segment. Segment orderbook at the end of Q1 FY18 stood at Rs.2.7bn and is expected to be completed over the next 18-24 months. We are conservative in our estimates for ECC segment for FY18 and FY19. We expect this division segment to grow from Rs.168mn to Rs.800mn in FY18 and Rs.1,000mn in FY19, quite lower than the management guidance of Rs.2,500mn over the next two years. Consolidated revenues are expected to increase at 27.8% yoy in FY18 and 19.3% yoy in FY19. Delay in execution on account of GST can lead to some revenues getting pushed to FY19.

Pickup in ECC execution and increase in share of smart meters to lead margin expansion

Genus managed to register OPM of 14.4% in FY16 as the company managed to divest its loss making power backup division and strong growth in the metering segment. However, ECC division registered an operating loss in FY17 on account of lower execution and fixed costs associated with this segment. In addition, decline in meter sales and higher R&D costs led to overall margins shrinking 90bps yoy in FY17 to 13.5%. We believe, given strong growth likely in metering segment and ECC business execution picking up, margins are expected to improve 40bps yoy in FY18. They would improve further in FY19 as share of smart meters would increase and ECC contribution improves. We expect margins to jump to 14.6% in FY19 from 13.5% in FY17. Led by strong revenue growth and expansion in operating margins, operating profit is expected to increase by 34.6% yoy in FY18 to Rs.1.2bn and 23% yoy in FY19 to Rs.1.4bn.

Figure 13: OPM to expand 110bps over FY17-19 on the back of strong revenue growth and ECC business turning around



Source: Company, IIFL Research

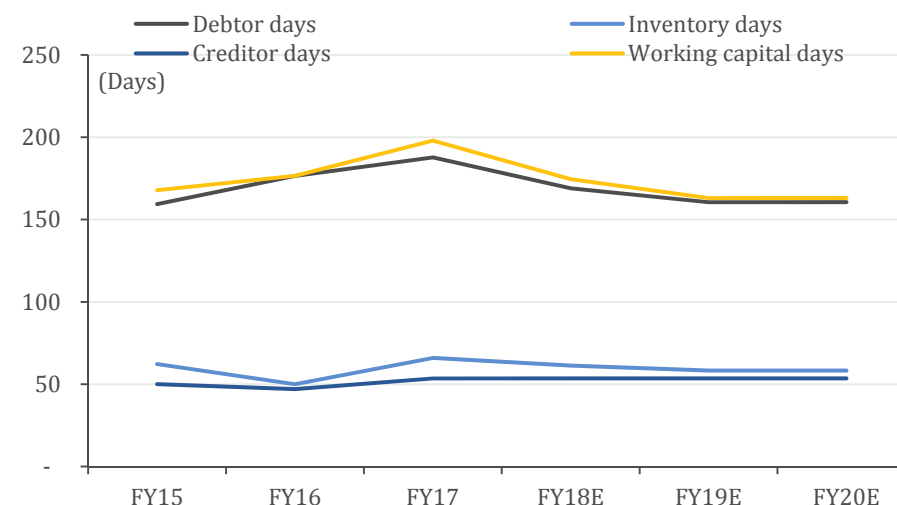
Debt to decline marginally

Domestic metering industry has been capital intensive as receivable days are high and companies have to continuously invest into technology upgradation to reduce pilferage. Receivable days have been high as state DISCOMs account for major portion of their sales. Under-utilization of capacities have also led to subdued cashflows. Even with the above constraints, Genus has managed to keep debt levels under check. If we take the value of investments and cash, the company would be debt free at the end of FY17. Genus has Rs.2.6bn of cash and cash equivalent as on FY17. Of this, the company has Rs.568mn in cash and Rs.1,592mn in debt funds. The rest is invested in unlisted group companies.

Gross debt has further reduced in Q1 FY18 as receivable days have come down. Genus has managed to reduce its gross debt by Rs.1.4bn over the last two years as it sold its treasury shares and lower working capital requirement. The company still has 27.5mn shares of treasury shares left post the selloff in FY15.

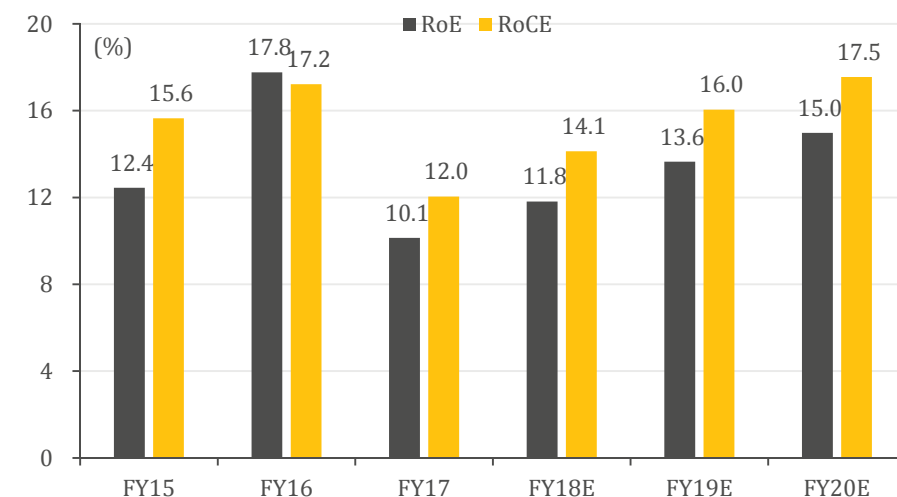
We believe debt levels would decrease only marginally as working capital requirement rises with the sharp jump in revenue. The management believes working capital days would reduce as the improvement in market conditions would lead to faster payments from DISCOMs. Return ratios for the company has been weak in FY17 as a major portion of capital employed is into working capital and investments and profitability was lower.

Figure 14: Working capital cycle to improve as debtor days are expected to reduce with improving market conditions



Source: Company, IIFL Research

Figure 15: Working capital cycle to improve as debtor days are expected to reduce with improving market conditions



Source: Company, IIFL Research

High earnings growth coupled with strong growth in metering market would lead to re-rating

Led by the strong execution in both the segments, the company is expected to witness an operating profit CAGR of 28.7% over FY17-19E. Finance costs are expected to decline with a marginal decrease in gross debt and lower interest costs. However, higher tax rate and lower other income would curtail the growth in PAT to 27.9% CAGR over the same period. Other income in FY18 would be lower compared to FY17, as FY17 other income included forex gains of Rs.40mn. The company would stay under MAT over the next 5-7 years. We believe valuations are attractive at 11.2x FY19E P/E with an earnings CAGR of 27.9% over FY17-19. The stock would witness re-rating on the back of strong growth in the domestic metering market which has been witnessed in power T&D EPC players over the last one year. **We value the stock at 16x FY19 P/E and Initiate Coverage on the company with a BUY rating and a target price of Rs.74.**

Figure 16: Re-rating to continue as metering market is expected to witness robust growth over the next three years



Source: Company, IIFL Research

Figure 17: Peer Comparison

Y/e 31 Mar (Rs m)	Mcap (Rs cr)	Revenue CAGR FY17-19E	OPM (%)		EPS (Rs)		P/E (x)		RoE (%)	
			FY18E	FY19E	FY18E	FY19E	FY18E	FY19E	FY18E	FY19E
Genus Power	1,326	23.5	14.2	14.6	3.6	4.6	14.4	11.2	11.8	13.6
HPL Electric	1,010	14.6	12.2	12.1	5.7	7.2	27.4	21.7	4.8	5.7
Skipper	2,235	16.9	14	14.1	12.5	15.3	17.4	14.8	23.5	23.9
KEC International	8,076	14.7	9.5	9.6	14.3	17.4	21.9	17.9	21	21.2
Kalpataru Power Transmission	5,509	16.5	10.9	10.9	17	14.3	15.6	13.1	12.1	12.9
GE T&D India Ltd.	10,600	16	8.3	8.9	7.9	10.2	52.4	40.3	18.2	20.7

Source: Bloomberg, IIFL Research

COMPANY BACKGROUND

Genus Power Infrastructure Ltd, a Kailash group company is one of the largest player in the domestic electric metering market. The company has 27% domestic market share and installation base of 42mn units across globe at the end of FY17. The company has been leading the way in advance metering infrastructure and has a 70% market share in the smart meters market. The Company is having a profound brand image in designing, manufacturing and execution of Static Energy Meters and Metering Installations Projects for transmission & distribution network.

The company manufactures various ranges of high-end programmable multi-functional intelligent Single Phase & Three Phase Electronic Meters with in-built advanced security and anti-tamper features such as AMR (Automatic Meter Reader) enabled Meters, Audit Meters, etc. They are also having the facilities to provide Automatic Metering Solutions using PLCC, RF, GSM and GPRS Technologies.

Leveraging its experience in energy metering space, Genus provides customized and complete solution of Engineering, Construction and Contracts (ECC) for power T&D sector. The ECC business undertakes turnkey power projects, such as sub-station erection up to 420 kilovolts (kV), laying up of transmission and distribution lines, rural electrification, switchyards and network refurbishment. The Company provides a range of services for projects, which include construction, setting up transmission towers, execution of civil work, laying of cables/conductor and installation of transformers.

With manufacturing facilities spread over Jaipur and Haridwar, Genus Power is a leading manufacturer of power electronics in India. It has 25,000sq meters of integrated manufacturing facility and has an annual production capacity of +10mn meters. The company's R&D Centre is recognised by Ministry of Science and Technology, the Government of

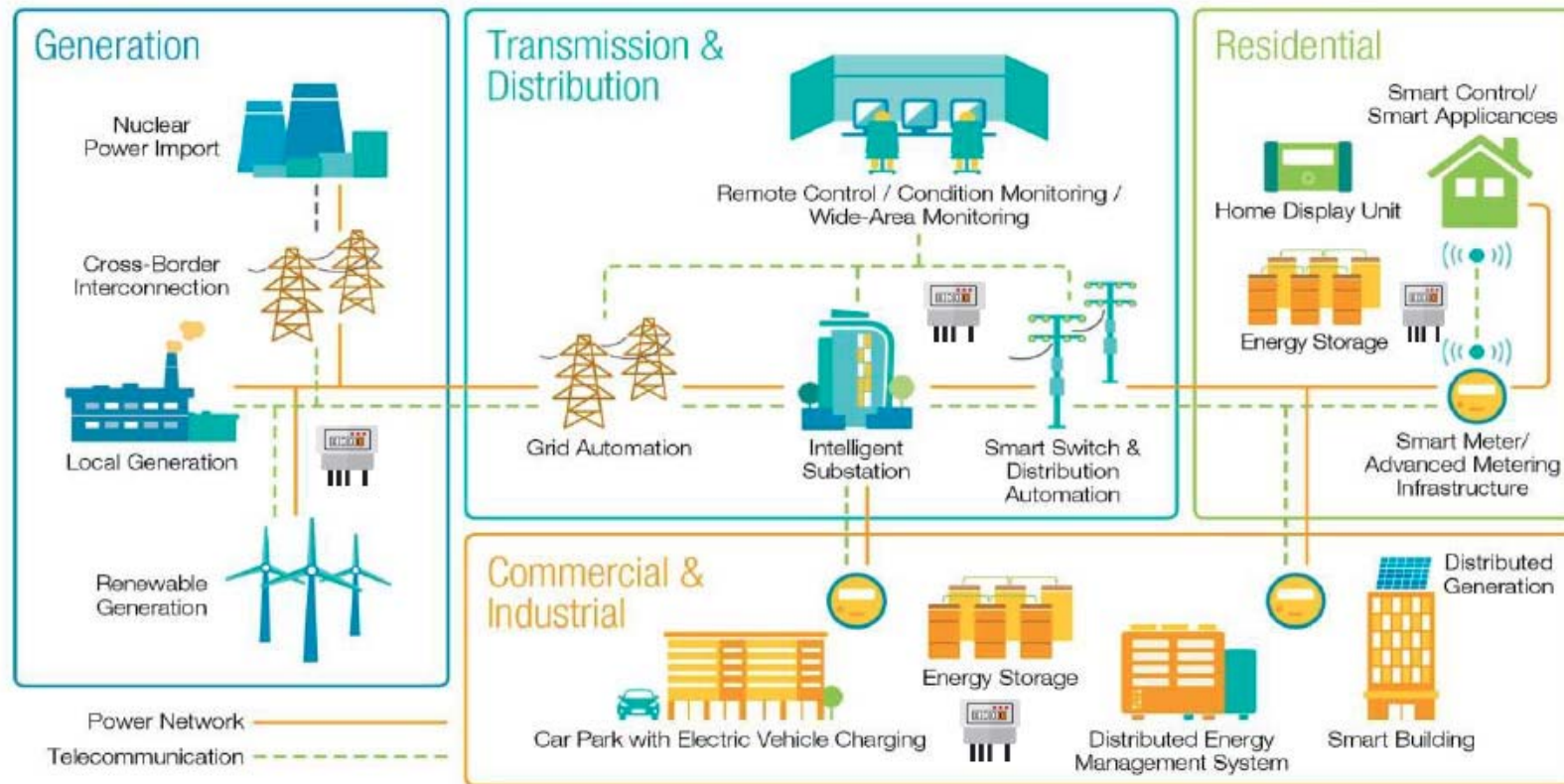
India and accredited by National Accreditation Body for Testing Labs. It is empanelled with +40 utilities across the country.

Figure 18: Product portfolio

Category	Solutions
Residential & commercial market	Meters with communication capability
	Single/three phase smart meters
	Net meters
	Smart Street Light Management System
Industrial	Group Metering
	LT/HT CT meter with integrated communication
	Meters with Automatic power factor controller
	ABT Meter
Prepayment solution	Smart high end meters
	Single phase prepayment meter
	Three phase prepayment meter
	Dual prepayment solution
	Prepaid vending software
Distribution transformer	DIN Rail prepayment meter
	Online 'Pre-paid' Metering solutions
	Thread through metering solution for distribution transformer
Open Access/Grid	Smart DT meter with integrated communication
Calibration Equipment	Grid & Sub-station meter (ABT complaint)
	Single phase portable reference meter
	Three phase portable reference meter

Source: Company, IIFL Research

Figure 19: Meter requirement from Generation to consumption



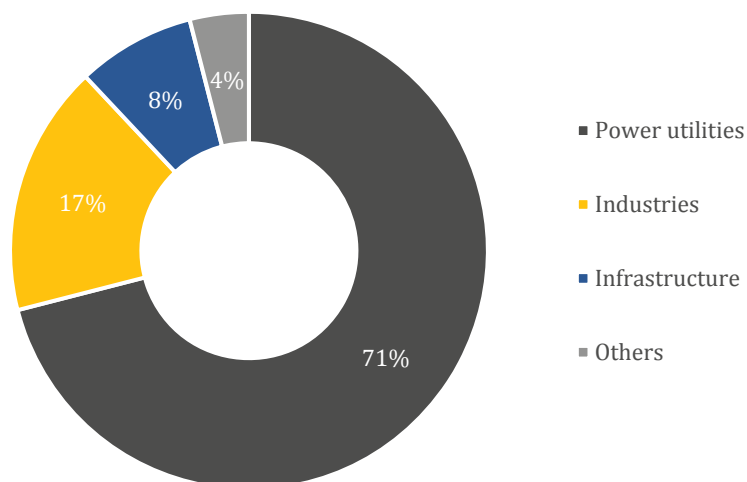
Source: Company, IIFL Research

INDUSTRY

Domestic metering market

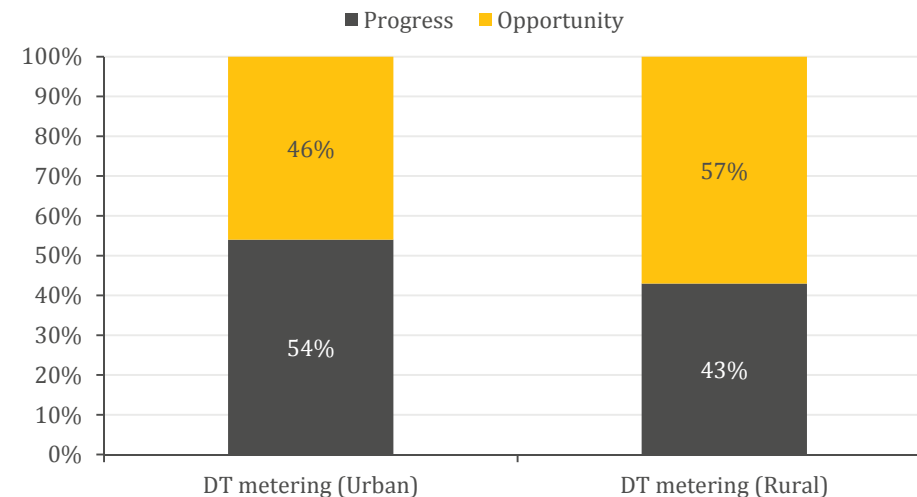
The market for meters in India has been steadily growing at 10-15% annually and is largely covered (80%) by the organised market. Demand for electronic meters dominates the market for meters and will continue to do so, considering the replacement market for electrochemical and old meters and increasing power distribution. Major consumer segments for meters in India are (a) public and private power utilities for residential and grid metering; (b) conventional and non-conventional captive power plants; and (c) industries and commercial establishments. Public and private power utilities are mostly consumers of tariff meters, captive power plants consume panel meters, and industries and commercial establishments consume panel and smart meters, based on need.

Figure 20: Utilities account for a major share of metering market



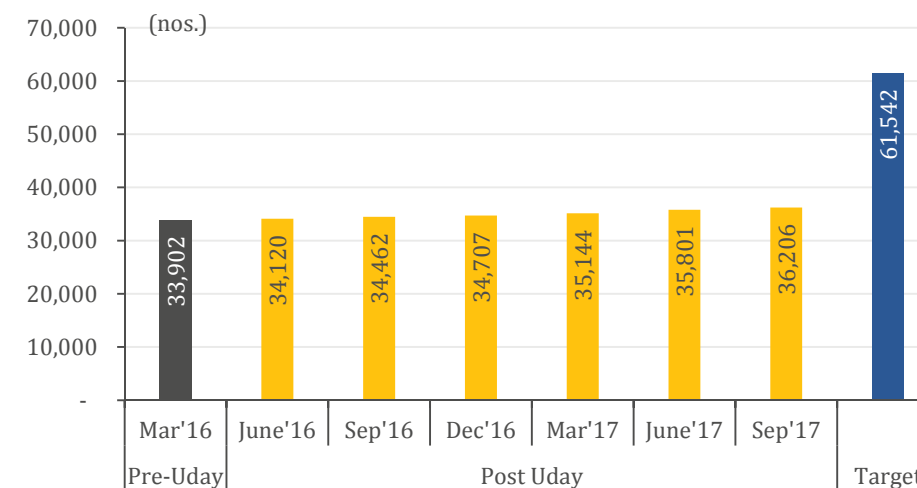
Source: Industry, IIFL Research

Figure 21: Still ~half of the targets set under UDAY are not met in distribution transformer metering



Source: Ministry of Power, IIFL Research

Figure 22: Feeder segregation has been slower than expected



Source: Ministry of Power, IIFL Research

Government schemes to improve availability of power and strengthen DISCOMs

Integrated Power Development Scheme (IPDS): The objectives of scheme are:

- Strengthening of sub-transmission and distribution networks in the urban areas
- Metering of distribution transformers / feeders / consumers in the urban area
- IT enablement of distribution sector and strengthening of distribution network

Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY): The objectives of scheme are:

- Separation of agriculture and non-agriculture feeders
- Strengthening of sub-transmission and distribution networks in the rural areas;
- Metering of distribution transformers / feeders / consumers in the rural area.
- Rural Electrification

Saubhagya Scheme: At a total outlay of Rs.163bn, the scheme would supply electricity to all households by December 2018, providing free connections to the poor and at very low cost to others. This scheme complements the government's aggressive village electrification programme, the DDUGJY launched in July 2015, under which 78% of 18,000 villages have been electrified.

National Electricity Fund (NEF): To promote investment in the distribution sector, GoI has set up National Electricity Fund (Interest Subsidy Scheme) in March 2012 to provide interest subsidy on loans disbursed to the Distribution Companies (DISCOMS) – both in public and

private sector, to improve the distribution network for areas not covered by RGGVY and R-APDRP project areas.

Smart meters an integral part of smart grid

Given the integration of renewable, rooftop solar, decentralized generation, smart cities and electric vehicles, Discoms are necessarily moving towards adopting smart grid technology. Smart meters would also be an efficient tool in monitoring and reducing power theft/pilferage in the distribution system. In the distribution system, putting in place a smart system/solution for accurate measurement of energy consumption is the first step towards reducing losses. EEM makes it possible to identify weak links in the distribution system to strengthen and enhance them and thereby minimize technical and commercial losses. This technology would not only reduce theft and pilferage, but also help the DISCOMs in data collection for better load planning and management. As a result, DISCOMs across the world are now adopting smart meters.

Advanced Metering Infrastructure (AMI) would be an integral part in the creation of smart grids. AMI enables two way communications with smart meters installed at the consumer end for information, monitor and control. AMI also facilitates load management and outage handling, remote meter reading, remote connect and disconnect, self-diagnosis of consumption pattern, load profile, automated and timely billing and a prepayment option. As AMI enables real time energy accounting, it tremendously helps in reduction of power theft and increase in billing efficiency.

UP: A classic case study

Uttar Pradesh is the largest and most populous state of the country. Though it's per capita consumption of electricity has increased from 450 kWh in FY12 to 524 kWh in FY16, it remains well below the national average of ~1,075 kWh. Post the new Government in the State, DISCOMs are currently supplying power for 18 hours to rural areas, 20 hours in tehsil towns and Bundelkhand and 24 hours in district headquarters, cities and industries. The State plans to supply 24-hour power across all areas and 10 hours to agricultural consumers (whose feeder segregation is underway) by October 2018. In addition, the State has agreed to reduce AT&C loss to 19.36% by FY19 and 14.86% by end FY20, from 34.22% in FY15.

To achieve the target of providing 24x7 power to all and lower AT&C losses by 2019, the government believes it's important to achieve 100% metering. The state has targeted to convert all unmetered household connections to metered connections by 2019. In FY17, ~40% (i.e., 6.8mn) of the total 17mn registered domestic households are still unmetered. Further, another 8.4mn connections are required to be formalized and metered. The work for converting these connections to metered connections by October 2018 is underway and needs to be carried out on a war footing, being imperative for the turnaround of DISCOMs.

Figure 23: ~40% of the connection in UP are unmetered and are expected to be converted over the next two years

DISCOMs	Total domestic consumers	Metered consumers	Unmetered consumers
MVVNL	4.02	2.9	1.12
DCCNL	3.43	2.36	1.07
PVVNNL	4.4	2.58	1.82
PuVNNL	4.61	1.79	2.82
KESCO	0.54	0.54	0
NPCL	0.06	0.06	0
Total	17.06	10.24	6.83

Source: Industry, IIFL Research

To reduce theft/pilferage and achieve the targets set above, the Government has formed a task force to conduct extensive energy audit on all the 14,000 feeders in the state and has also engaged an external agency, RECPTCL as consultant. As part of the exercise, meters would be installed on all the feeders as well as transformers, which would calculate both input and output of energy and monitor losses. Every feeder will have a junior engineer (JE) in charge. The exercise would entail a 'flowering approach', wherein each JE in charge would ensure that all consumers attached to his feeder are metered. In the process, he will ensure every household attached to his feeder is metered and that every unmetered connection is regularized and metered. The JE has been made accountable to ensure that not a single consumer on his feeder remains unmetered or draws power illegally.

Figure 24: AT&C losses to be reduced significantly over the next three years

	FY17	FY18	FY19	FY20
MVVNL	27.8	23.2	19.45	14.89
DCCNL	30.3	24.83	20.44	15.35
PVVNNL	22.99	20.63	17.53	14.01
PuVNNL	34.19	26.92	20.65	15.49
KESCO	29.44	24.11	19.37	14.45
NPCL	9.49	9.21	8.92	8.92
State Discoms	28.27	23.65	19.36	14.86

Source: Industry, IIFL Research

As a result, we believe the demand for meters would be quite high in UP over the next two years. The government has taken its first step towards the said objective by working on a pilot project with EESL to procure ~5mn units of smart meters. EESL would make the entire upfront investment as well as maintain the entire infrastructure for the next ten years, putting less burden on the financial weak DISCOMs. It will recover its investment from the savings accruing to DISCOMs in subsequent

years

Financials

Figure 25: Balance sheet

Y/e 31 Mar (Rs m)	FY16	FY17	FY18E	FY19E	FY20E
Equity capital	229	230	230	230	230
Reserves	5,912	6,466	7,137	7,996	9,056
Net worth	6,141	6,695	7,366	8,226	9,285
Other LT Liabilities	37	68	87	104	121
LT provision.	148	125	125	125	125
Borrowing	2,327	2,206	2,106	2,006	1,906
Deferred tax liab (net)	(419)	(459)	(459)	(459)	(459)
Total liabilities	8,235	8,635	9,225	10,002	10,978
Fixed assets	1,404	1,635	1,785	1,885	1,985
Investments	1,013	2,043	2,043	2,043	2,043
Other Non-current Asset	1,084	937	1,197	1,428	1,664
Net working capital	4,112	3,453	3,894	4,344	5,066
Inventories	1,176	1,160	1,379	1,563	1,821
Sundry debtors	4,146	3,305	3,800	4,308	5,019
Other current assets	189	302	386	460	536
ST. Loans & advances	60	57	73	87	101
Sundry creditors	(1,105)	(942)	(1,204)	(1,436)	(1,674)
Other current liabilities	(317)	(398)	(508)	(607)	(707)
Provision	(37)	(31)	(31)	(31)	(31)
Cash	622	568	306	302	220
Total assets	8,235	8,635	9,225	10,002	10,978

Figure 26: Income statement

Y/e 31 Mar (Rs m)	FY16	FY17	FY18E	FY19E	FY20E
Revenue	8,577	6,424	8,208	9,794	11,411
Operating profit	1,236	866	1,165	1,433	1,718
Depreciation	(140)	(153)	(161)	(169)	(178)
Interest expense	(289)	(249)	(224)	(213)	(202)
Other income	264	303	258	278	301
Exceptional items	51	3	-	-	-
Profit before tax	1,123	770	1,038	1,330	1,639
Taxes	(205)	(125)	(208)	(266)	(328)
Minorities	1	5	-	-	-
Reported PAT	919	651	830	1,064	1,311
Adj profit	867	648	830	1,064	1,311

Figure 27: Cash flow statement

Y/e 31 Mar (Rs m)	FY16	FY17	FY18E	FY19E	FY20E
Profit before tax	1,071	767	1,038	1,330	1,639
Depreciation	140	153	161	169	178
Tax paid	(205)	(125)	(208)	(266)	(328)
Working capital Δ	68	660	(442)	(449)	(722)
Operating cashflow	1,075	1,455	550	784	767
Capital expenditure	(235)	(385)	(311)	(269)	(278)
Change in other non curr assets	37	147	(260)	(231)	(236)
Free cash flow	877	1,218	(22)	283	253
Equity raised	1,101	28	-	(0)	-
Investments	(549)	(1,030)	-	-	-
Debt financing/disposal	(1,280)	(121)	(100)	(100)	(100)
Dividends paid	(77)	(124)	(159)	(204)	(252)
Other items	61	(24)	19	17	17
Net Δ in cash	132	(54)	(262)	(4)	(81)

Figure 28: Ratio analysis

Y/e 31 Mar	FY16	FY17	FY18E	FY19E	FY20E
Growth matrix (%)					
Revenue growth	(6.3)	(25.1)	27.8	19.3	16.5
Op profit growth	0.6	(29.9)	34.6	23.0	19.8
EBIT growth	14.2	(25.3)	24.2	22.3	19.3
Net profit growth	58.6	(31.4)	34.8	28.1	23.2
Profitability ratios (%)					
OPM	14.4	13.5	14.2	14.6	15.1
EBIT margin	15.9	15.8	15.4	15.8	16.1
Net profit margin	10.7	10.1	10.1	10.9	11.5
RoCE	17.2	12.0	14.1	16.0	17.5
RoNW	17.8	10.1	11.8	13.6	15.0
RoA	9.7	6.6	7.9	9.2	10.3
Per share ratios (Rs)					
EPS	4.0	2.8	3.6	4.6	5.7
Dividend per share	0.3	0.1	0.6	0.7	0.9
Cash EPS	4.6	3.5	4.3	5.4	6.5
Book value per share	26.8	29.2	32.1	35.8	40.4
Valuation ratios (x)					
P/E	13.0	18.4	14.4	11.2	9.1
P/B	1.9	1.8	1.6	1.5	1.3
EV/EBIDTA	11.0	15.7	11.8	9.5	7.9
Payout (%)					
Dividend payout	8.4	19.1	19.2	19.2	19.2
Tax payout	18.2	16.2	20.0	20.0	20.0
Liquidity ratios					
Debtor days	176.5	187.8	169.0	160.5	160.5
Inventory days	50.0	65.9	61.3	58.3	58.3
Creditor days	47.0	53.5	53.5	53.5	53.5
Leverage ratios (x)					
Interest coverage	4.7	4.1	5.6	7.3	9.1
Net debt / equity	0.3	0.2	0.2	0.2	0.2
Net debt / op. profit	1.4	1.9	1.5	1.2	1.0

Figure 29: Du-Pont analysis

Y/e 31 Mar (Rs m)	FY16	FY17	FY18E	FY19E	FY20E
Tax burden (x)	0.8	0.8	0.8	0.8	0.8
Interest burden (x)	0.8	0.8	0.8	0.9	0.9
EBIT margin (x)	0.2	0.2	0.2	0.2	0.2
Asset turnover (x)	0.9	0.7	0.8	0.9	0.9
Financial leverage (x)	1.8	1.5	1.5	1.5	1.5
RoE (%)	17.8	10.1	11.8	13.6	15.0