

Power Grid

 BSE SENSEX
33,597

 S&P CNX
10,325

CMP: INR197 TP: INR287(+45%)
Buy


Power Grid Corporation of India

Stock Info

Bloomberg	PWGR IN
Equity Shares (m)	5,232
52-Week Range (INR)	226 / 189
1, 6, 12 Rel. Per (%)	0/-10/-11
M.Cap. (INR b)	1,014.9
M.Cap. (USD b)	15.3
Avg Val (INRm)	1285.0
Free float (%)	43.1

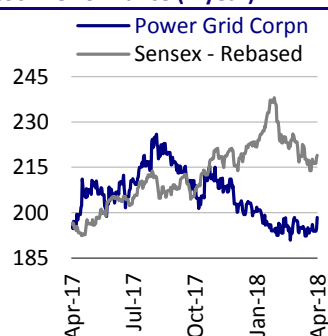
Financials Snapshot (INR b)

Y/E Mar	2018E	2019E	2020E
Net Sales	298.2	350.3	388.5
EBITDA	262.7	310.6	344.6
PAT	88.6	108.2	114.7
EPS (INR)	16.9	20.7	21.9
Gr. (%)	21.3	22.1	6.0
BV/Sh (INR)	108.5	124.8	141.7
RoE (%)	16.6	17.7	16.5
RoCE (%)	8.2	8.8	8.8
P/E (x)	11.4	9.4	8.9
P/BV (x)	1.8	1.6	1.4

Shareholding pattern (%)

As On	Dec-17	Sep-17	Dec-16
Promoter	56.9	57.9	57.9
DII	12.0	9.7	8.3
FII	24.4	25.7	26.8
Others	6.7	6.6	7.1

FII Includes depository receipts

Stock Performance (1-year)


Expect strong double-digit IRRs in TBCB projects

A strong business and attractive valuations keep us optimistic

Analysis suggests strong double-digit IRRs in TBCB projects

We analyzed the tariff-based competitive bidding (TBCB) projects from the annual reports of Power Grid's (PWGR) subsidiaries. In our view, PWGR will generate more than 14% equity IRR (debt/equity ratio of 80/20) on its TBCB projects. The equity IRR on the three projects that are fully commissioned is ~24-38%. PWGR enjoys a competitive edge due to its (a) low cost of borrowed funds, (b) dominant position with suppliers and (c) vast geographical spread, which should continue driving healthy returns.

International experience: Even developed countries need to keep investing

Transmission order inflows are expected to be low over the next few years, but the long-term growth potential is huge. Experience from China and the US suggests that the transmission infrastructure continues increasing in tandem with generation (demand) growth. Renewable generation capacities, flexibility and redundancy requirements also aid transmission investment, as seen in the US/UK over the past few years. India, with just one third of the world's per capita electricity consumption, has huge growth potential. Separation of carriage and content, as proposed in the draft Electricity Act, will provide another growth stream to PWGR, in our view.

Intra-state to aid growth; Consultancy and Telecom to grow strongly

Intra-state transmission opportunity is ~1.5-2x the size of inter-state transmission in India. However, states have been reluctant to offer intra-state projects on TBCB due to healthy regulated returns. Unlike their DISCOMs, state TRANSCOs are not cash starved. PWGR expects a pick-up in TBCB activity from states like Jharkhand, UP, Telangana and Tamil Nadu. Its JV proposal with UP is also in the final stages. Consultancy and Telecom businesses are expected to grow at a healthy 15-20% over the next few years. Success in the telecom towers business (pilot running successfully over the past year) will support growth in Telecom.

Strong business and attractive valuations; Re-iterate Buy

PWGR has ~INR1t of orders pending execution, providing strong visibility of EPS CAGR of ~12% over FY18-22. The earnings estimate factors in a 150bp cut in the regulated RoE (to 14%) in the next tariff regulations. However, with bond yield rising over the last few months, the extent of such cut could be lower, in our view. At CMP, the stock is trading attractively at 1.4x FY20E P/BV for an RoE of ~16% and a CoE of ~10-11%, not appreciating any future growth potential. If we were to assume no growth after FY20, which means PAT is available for dividend distribution, the stock is trading at an attractive dividend yield of ~11% for an assured return model and revenues backed by state-guarantees (g-sec yield is ~7 to 8%). We re-iterate our **Buy** rating with a DCF-based target price of INR287/share.

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Investors are advised to refer through important disclosures made at the last page of the Research Report.

 Motilal Oswal research is available on www.motilaloswal.com/Institutional-Equities, Bloomberg, Thomson Reuters, Factset and S&P Capital.

Analysis of TBCB projects

Expect strong double-digit IRR

- On analyzing TBCB projects from the annual reports of subsidiaries, we estimate that PWGR will earn a healthy equity IRR of more than 14% on its TBCB projects. It is generating an equity IRR of ~24-38% on the three projects that are fully commissioned. PWGR's returns on the TBCB projects are comparable to returns under the regulated model, but do not face any regulatory risk.
- The project cost estimates are based on the amount already spent, the capital commitment remaining (based on the numbers reported in the FY17 annual report) and the estimated additional capex needed. For the recently awarded projects, the cost is taken based on the cost estimated by the empowered committee on transmission. The Parli and Warora TBCB lines are facing some delays on account of the severe right of way issues in Maharashtra due to the change in the land competition rules by the state government.
- We continue maintaining that PWGR has a competitive edge in TBCB projects, given its (a) lower funding cost due to its strong balance sheet, (b) low equipment cost due to its dominant position with suppliers and (c) ability to leverage its vast geographical spread, which will continue driving healthy IRRs in the TBCB projects.

Exhibit 1: TBCB projects

	Proj. cost Est. INR m	Zero Date	Scheduled CoD	Actual CoD	Level. Tariff INR m	Revenue Yield %	IRR %
NM Transmission*	12,414	Mar-12	Feb-15		987	8	2
Vizag	13,236	Aug-13	Sep-16	Aug-16	2,311	17	26
Unchahar Transmission	726	Mar-14	Sep-16	Sep-16	168	23	38
Kala AMB	3,350	May-14	May-17	Jul-17	594	18	24
Jabalpur Transmission	12,648	Feb-15	Jun-18		2,110	17	24
Parli	17,791	Apr-15	Jan-18		2,567	14	13
Warora	24,422	Apr-15	Jan-18		2,901	12	
Southern Interconnector	29,520	Dec-15	Apr-19		3,590	12	12
Medinipur-Jeerat	32,460	Mar-17	Jul-20		4,987	15	23
Eastern Scheme –XXI (ERSS-XXI)	13,210	Jan-18	Mar-21		1,386	10	5
Total	159,777				21,601	14	15

*Partially commissioned

Source: MOSL, Company

Exhibit 2: TBCB project cost estimate from annual reports of subsidiaries

	Gross Block INR m	CWIP INR m	Adv. INR m	Capital Commit. INR m	Proj. cost as per FY17 AR INR m	Proj. cost Est. INR m
NM Transmission	8,055	2,868	21	879	11,823	12,414
Unchahar Transmission	726	0	0	0	726	726
Southern Interconnector	92	4,868	1	18,656	23,616	29,520
Jabalpur Transmission	0	2,280	380	8,837	11,498	12,648
Kala AMB	30	2,085	142	934	3,191	3,350
Parli	41	5,063	562	10,508	16,174	17,791
Warora	337	7,458	684	12,757	21,236	24,422
Vizag	13,119	117			13,236	13,236

Source: MOSL, Company

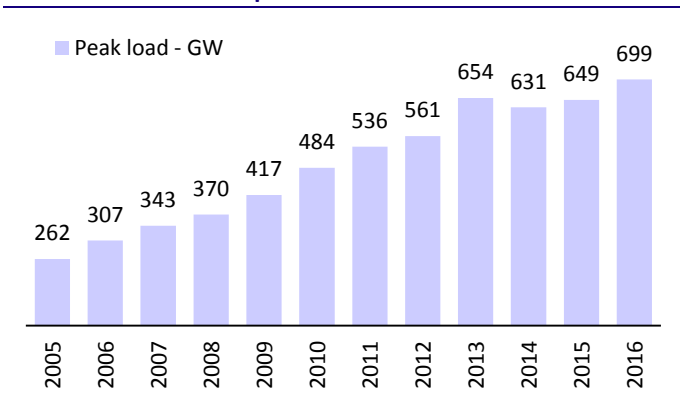
International experience

Even the developed countries need to keep investing

- The inflow of new transmission orders has slowed down. In our view, the situation is likely to remain the same, at least over the next few years, until demand catches up with the capacity being added. However, we see huge long-term growth potential.
- Transmission sector growth is linked to growth in electricity consumption, as well as the requirement for efficiency, redundancy and flexibility. With India’s per capita electricity at just one third of global average, the scope for an increase in the country’s electricity consumption is huge as incomes rise and last-mile connectivity improves. This, along with the need to connect new generation sources like wind/solar, will drive strong growth in India’s transmission sector over the long term, in our view.
- China’s transmission line length and transformation capacity has grown at a CAGR of ~9% and 13%, respectively, as electricity sales grew by ~9% at China’s State Grid Corporation (SGCC) over the last 11 years.
- The US’ transmission investment history suggests a similar pattern – growth was strong until 1960-70s as generation growth was strong. Over the last few years, even though generation growth has been slow, transmission investment has picked up, driven by demand from renewable capacity addition, reliability and replacement. A similar trend is observed in the UK.
- PWGR, with its competitive edge, is well placed to capture the long-term growth potential of transmission in India.

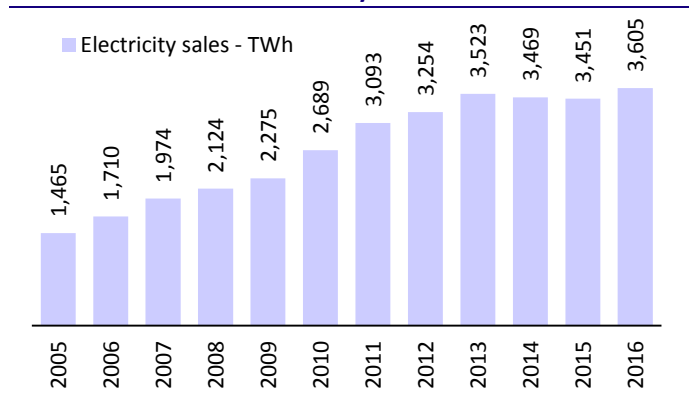
SGCC is among the two grid companies created after the electricity reforms in 2002 in China. It provides transmission and distribution services in 88% of the national territory.

Exhibit 3: SGCC area’s peak load



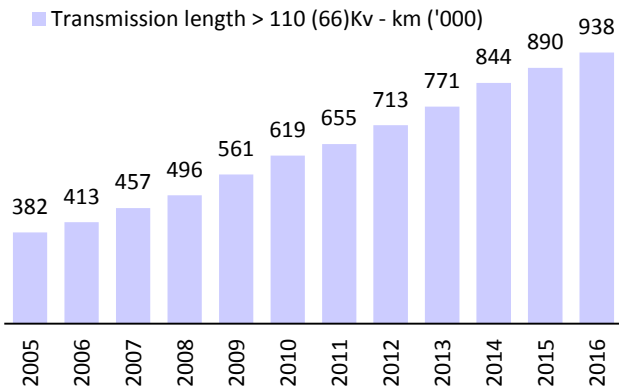
Source: MOSL, SGCC

Exhibit 4: SGCC area’s electricity sales



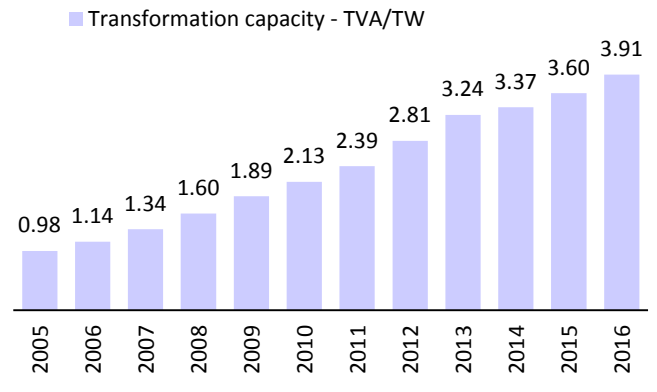
Source: MOSL, SGCC

Exhibit 5: SGCC area's transmission length



Source: MOSL, SGCC

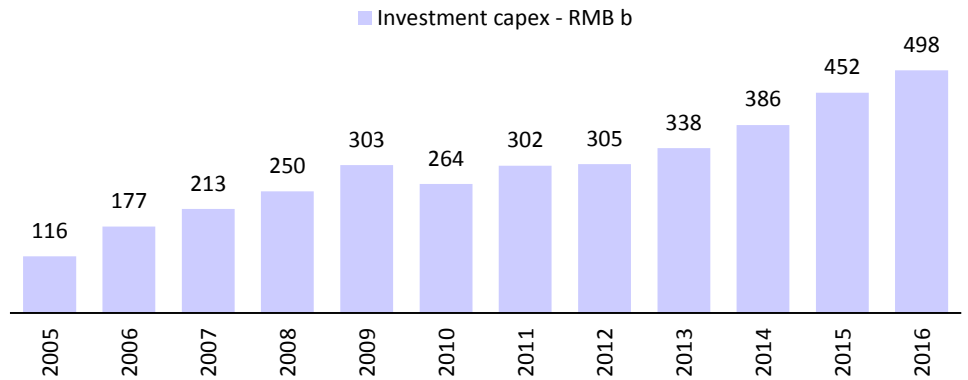
Exhibit 6: SGCC area's transformation capacity



Source: MOSL, SGCC

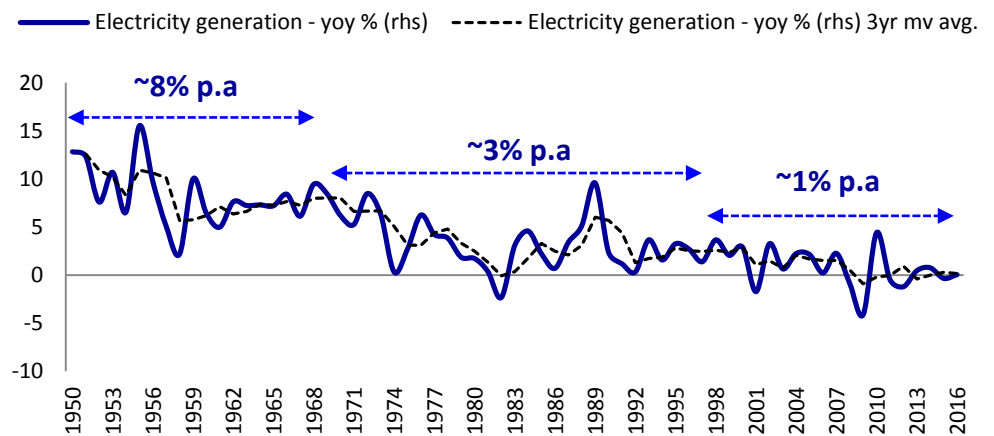
Grid annual investment capex has increased over the years

Exhibit 7: SGCC grid investment capex



Source: MOSL, Company

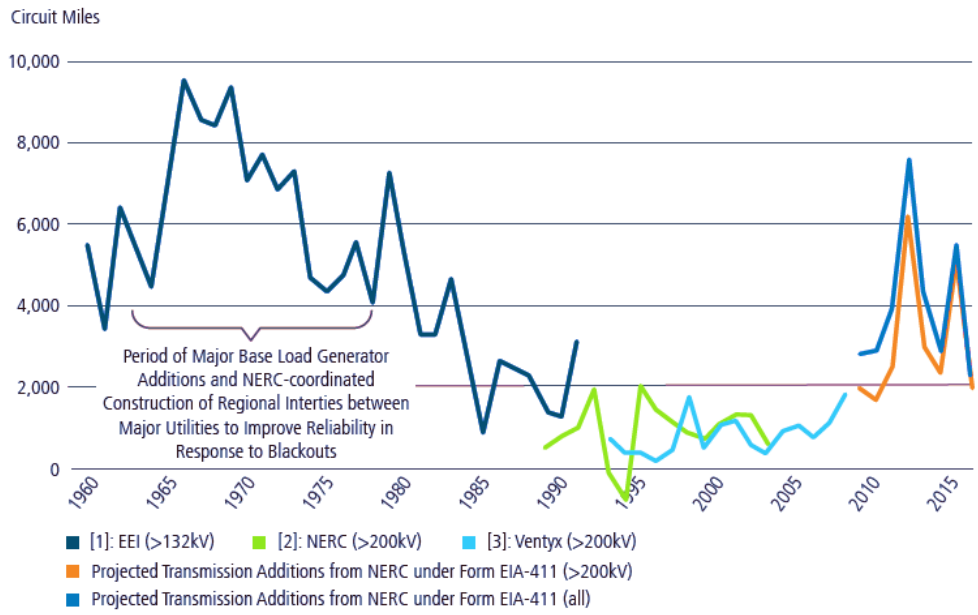
Exhibit 8: US electricity generation growth – %



Source: MOSL, Company

Exhibit 9: US transmission circuit miles

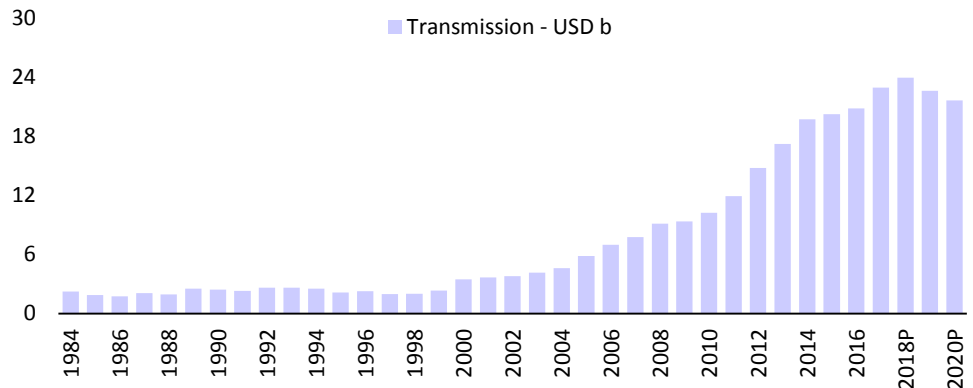
Investment in transmission has picked up again even without growth in generation



Source: www.energy.gov

US transmission investment has increased sharply, driven by demand to connect new renewable energy sources, reliability and replacement

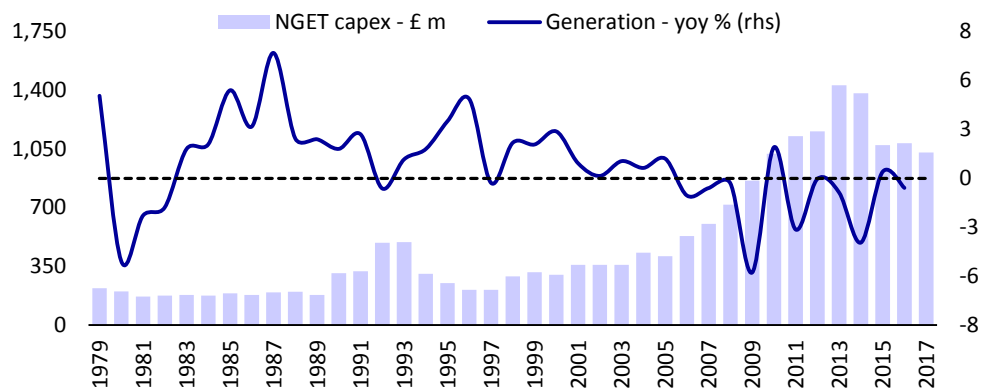
Exhibit 10: US transmission construction expenditure



Source: MOSL, EEI

UK transmission investment has also picked up, despite generation growth being slow, driven by renewable energy and inter-connection with Europe

Exhibit 11: UK transmission capex



Source: MOSL, EEI

Many opportunities in intra-state transmission

Consultancy and Telecom to grow by 15-20%

Intra-state projects to aid growth

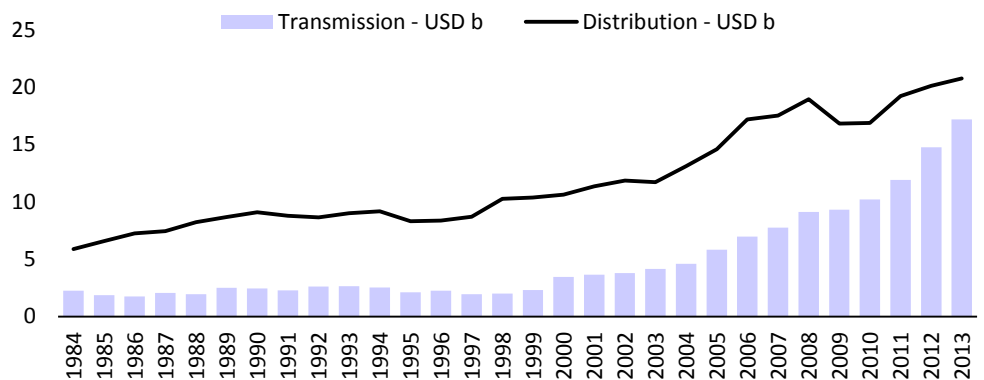
- PWGR expects a pick-up in TBCB activity in the intra-state projects from Jharkhand, Telangana and Tamil Nadu. The JV route is also being explored – UP is in the final stages, while Bihar is operating well. It has also offered consulting business to states that wish to own their projects.
- While the size of the intra-state transmission business is huge (expected to be ~INR1.6t v/s inter-state of ~INR1t over FY18-22), we believe TBCB opportunity will be available mainly from states that are cash starved and want to aggressively push for power availability. Our interactions with the state government officials in the past have suggested that the states would prefer to execute projects on their own (through state TRANSCO) given the regulated returns. Unlike their DISCOMs, state TRANSCO are not cash starved and generate good profits.

Separation of carriage and content to open-up huge opportunities

- The separation of carriage and content, as proposed in the draft Electricity Act, can provide additional growth opportunity in its core area of laying lines.
- In the current structure, distribution business comprises of both lines and supply of power. PWGR cannot participate in the power supply business.
- Laying of distribution lines is a larger business opportunity. In the US, the size of the distribution business has been ~2-3x the size of transmission business (based on the data available from 1984).

Distribution expenditure has outpaced transmission by ~2-3x annually

Exhibit 12: US transmission and distribution construction expenditure



Source: MOSL, EEI

Consultancy and Telecom to grow by 15-20%

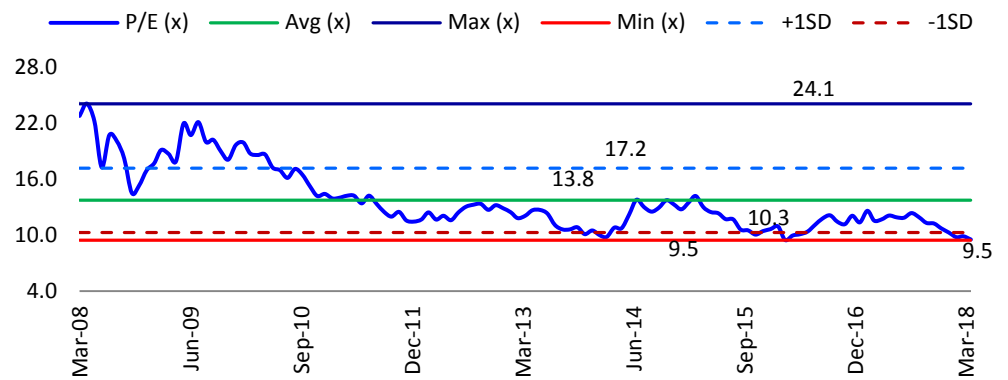
- Consultancy business is expected to grow by 15-20% over the next few years, driven by businesses with state TRANSCOs, railway orders and overseas opportunities. The business, however, could be lumpy. Revenue/PBT CAGR of the Consulting business over the last five years was 15%/19%.
- Telecom fiber business is expected to grow by ~15% over the next few years as India's bandwidth requirement grows and PWGR takes advantage of its positioning as an alternative supplier. Revenue/PBT CAGR of the Telecom business over the last five years was 24%/31%.
- PWGR is also pursuing opportunities in the Telecom Tower business, with the pilot project running successfully over the last year. PWGR has more than 150k towers, of which majority are in the rural areas. Success in the Tower business can boost growth of the Telecom business, in our view.
- Consultancy and Telecom represent ~5-6% of the company's consolidated PAT. Stronger growth in these businesses will aid RoE, given the limited capital requirement.

Valuations are attractive

Expect strong-double digit RoE

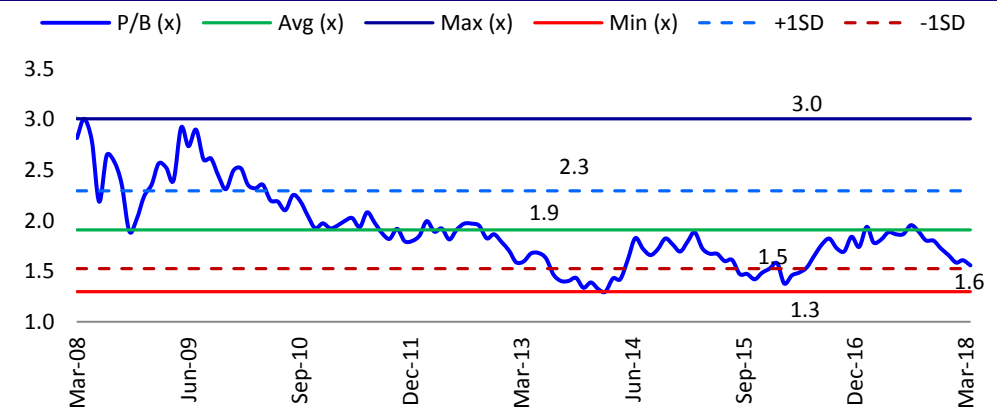
PWGR has ~INR1t of orders pending execution, which provides strong visibility of EPS CAGR of ~12% over FY18-22. The earnings estimate factors in a 150bp cut in the regulated RoE (to 14%) in the next tariff regulations. However, with bond yields rising over the last few months, the extent of such cut could be lower, in our view. At CMP, the stock is trading attractively at 1.4x FY20E P/BV for an RoE of ~16% and a CoE of ~10-11%, not appreciating any future growth potential. If we were to assume no growth after FY20, which means PAT is available for dividend distribution, the stock is trading at an attractive dividend yield of ~11% for an assured return model and revenues backed by state guarantees (g-sec yield is 7-8%). We value PWGR on a DCF basis. Under our DCF-based valuation approach, for the next phase from FY23-32, we consider an RoE of 14% and growth of just ~6% (i.e. 45% re-investment). In the terminal phase, we further cut RoE to 12% and growth to just 3% (~22% re-investment). The target price is INR287/share. Re-iterate **Buy**.

Exhibit 13: PWGR one-year forward P/E



Source: MOSL, Company

Exhibit 14: PWGR one-year forward P/BV



Source: MOSL, Company

Financials and Valuations

Income Statement						(INR Million)		
Y/E Mar	2013	2014	2015	2016	2017	2018E	2019E	2020E
Net Sales	131,639	156,754	176,585	213,523	257,039	298,181	350,292	388,544
Change (%)	26.1	19.1	12.7	20.9	20.4	16.0	17.5	10.9
EBITDA	112,139	132,639	151,262	186,056	226,572	262,703	310,640	344,599
EBITDA Margin (%)	85.2	84.6	85.7	87.1	88.1	88.1	88.7	88.7
Depreciation	34,278	40,794	51,733	63,022	77,223	79,866	93,532	108,717
EBIT	77,861	91,845	99,529	123,034	149,350	182,837	217,109	235,882
Interest	25,994	32,537	40,812	50,860	62,036	78,802	88,526	99,122
Other Income	5,632	4,707	5,745	4,284	5,838	8,473	8,650	8,640
Extraordinary items	316	-425	-421	-9	0	0	0	0
PBT	57,814	63,590	64,041	76,450	93,153	112,509	137,232	145,400
Tax	14,688	18,114	13,579	16,304	20,063	23,865	29,043	30,734
Tax Rate (%)	25.4	28.5	21.2	21.3	21.5	21.2	21.2	21.1
Min. Int. & Assoc. Share	0	0	0	0	0	0	0	0
Reported PAT	43,126	45,476	50,463	60,146	73,090	88,643	108,189	114,666
Adjusted PAT	42,810	45,901	50,883	60,155	73,090	88,643	108,189	114,666
Change (%)	29.2	7.2	10.9	18.2	21.5	21.3	22.1	6.0

Balance Sheet						(INR Million)		
Y/E Mar	2013	2014	2015	2016	2017	2018E	2019E	2020E
Share Capital	46,297	52,316	52,316	52,316	52,316	52,316	52,316	52,316
Reserves	217,734	294,664	332,071	387,383	446,339	515,537	600,518	688,839
Net Worth	264,031	346,979	384,387	439,699	498,655	567,853	652,834	741,155
Debt	692,334	842,196	962,434	1,085,449	1,189,879	1,287,939	1,382,084	1,458,341
Deferred Tax	57,415	70,195	73,030	82,169	74,184	74,184	74,184	74,184
Total Capital Employed	1,013,780	1,259,370	1,419,852	1,607,318	1,762,718	1,929,975	2,109,101	2,273,680
Gross Fixed Assets	823,160	982,247	1,204,801	1,214,908	1,519,616	1,824,401	2,138,485	2,448,334
Less: Acc Depreciation	197,475	239,730	292,891	63,965	142,837	222,703	316,234	424,951
Net Fixed Assets	625,685	742,517	911,911	1,150,942	1,376,779	1,601,699	1,822,250	2,023,383
Capital WIP	194,716	323,911	404,760	354,021	296,750	244,779	181,664	132,262
Investments	5,864	4,234	2,196	9,185	11,650	11,650	11,650	11,650
Current Assets	307,576	344,235	288,776	278,769	271,272	245,120	271,467	288,972
Inventory	163,467	183,914	139,241	109,163	94,963	91,444	95,824	100,995
Debtors	14,914	16,183	22,070	27,395	31,319	30,814	34,323	40,376
Cash & Bank	26,789	49,744	29,886	22,434	33,536	19,709	22,948	21,469
Loans & Adv, Others	102,407	94,395	97,580	119,778	111,453	103,153	118,372	126,133
Curr Liabs & Provns	120,061	155,527	187,791	185,600	193,732	173,272	177,930	182,587
Curr. Liabilities	120,061	155,527	187,791	185,600	193,732	173,272	177,930	182,587
Provisions	0	0	0	0	0	0	0	0
Net Current Assets	187,516	188,708	100,985	93,170	77,539	71,848	93,538	106,385
Total Assets	1,013,780	1,259,370	1,419,852	1,607,318	1,762,718	1,929,975	2,109,101	2,273,680

Financials and Valuations

Ratios

Y/E Mar	2013	2014	2015	2016	2017	2018E	2019E	2020E
Basic (INR)								
EPS	9.2	8.8	9.7	11.2	14.0	16.9	20.7	21.9
Cash EPS	16.7	16.6	19.6	23.0	28.7	32.2	38.6	42.7
Book Value	57.0	66.3	73.5	84.0	95.3	108.5	124.8	141.7
DPS	2.8	2.6	2.0	2.1	2.5	3.1	3.7	4.2
Payout (incl. Div. Tax.)	35.0	35.1	25.2	0.0	21.0	22.5	22.1	24.1
Valuation(x)								
P/E				17.4	13.9	11.4	9.4	8.9
Cash P/E				8.4	6.8	6.0	5.0	4.5
Price / Book Value				2.3	2.0	1.8	1.6	1.4
EV/EBITDA				11.4	9.6	8.7	7.6	7.1
Dividend Yield (%)				1.1	1.3	1.6	1.9	2.2
Profitability Ratios (%)								
RoE	17.1	14.2	13.9	14.2	15.6	16.6	17.7	16.5
RoCE	6.8	6.1	6.2	6.5	7.3	8.2	8.8	8.8
RoIC	8.3	7.9	8.4	8.6	8.9	9.4	9.7	9.3
Turnover Ratios (%)								
Asset Turnover (x)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Debtors (No. of Days)	41	38	46	48	44	38	36	38
Inventory (No. of Days)	167	165	108	94	70	61	58	57
Current Liabilities (Days)	122	139	145	160	142	115	108	103
Leverage Ratios (%)								
Net Debt/Equity (x)	2.5	2.3	2.4	2.4	2.3	2.2	2.1	1.9

Cash Flow Statement

(INR Million)

Y/E Mar	2013	2014	2015	2016	2017	2018E	2019E	2020E
Adjusted EBITDA	112,139	132,639	151,262	186,056	226,572	262,703	310,640	344,599
Non cash opr. exp (inc)	6,186	4,430	5,325	2,221	7,055	8,473	8,650	8,640
(Inc)/Dec in Wkg. Cap.	14,227	10,137	61,903	-19,310	4,495	-8,136	-18,450	-14,327
Tax Paid	-11,356	-12,302	-11,519	-14,156	-18,714	-23,865	-29,043	-30,734
Other operating activities	-4,299	-2,921	-4,243	-4,730	-3,264	-8,473	-8,650	-8,640
CF from Op. Activity	116,897	131,983	202,728	150,082	216,144	230,702	263,147	299,538
(Inc)/Dec in FA & CWIP	-226,145	-250,288	-294,508	-216,795	-239,244	-252,815	-250,968	-260,448
Free cash flows	-109,249	-118,305	-91,780	-66,713	-23,100	-22,113	12,179	39,090
(Pur)/Sale of Invt	5,305	4,139	7,934	1,030	495	8,473	8,650	8,640
Others	0	0	0	0	0	0	0	0
CF from Inv. Activity	-220,840	-246,149	-286,574	-215,765	-238,749	-244,342	-242,318	-251,808
Inc/(Dec) in Net Worth	0	52,966	0	0	0	0	0	0
Inc / (Dec) in Debt	138,868	127,244	115,070	117,171	112,506	98,060	94,145	76,257
Interest Paid	-22,970	-28,374	-37,816	-47,584	-57,000	-78,802	-88,526	-99,122
Divd Paid (incl Tax) & Others	-16,279	-14,715	-13,266	-13,379	-15,921	-19,445	-23,209	-26,345
CF from Fin. Activity	99,619	137,121	63,988	56,208	39,586	-187	-17,590	-49,210
Inc/(Dec) in Cash	-4,325	22,955	-19,858	-9,475	16,980	-13,827	3,239	-1,479
Add: Opening Balance	31,113	26,789	49,744	31,909	16,556	33,536	19,709	22,948
Closing Balance	26,789	49,744	29,886	22,434	33,536	19,709	22,948	21,469

NOTES

Explanation of Investment Rating	Expected return (over 12-month)
BUY	>=15%
SELL	< -10%
NEUTRAL	> -10% to 15%
UNDER REVIEW	Rating may undergo a change
NOT RATED	We have forward looking estimates for the stock but we refrain from assigning recommendation

*In case the recommendation given by the Research Analyst becomes inconsistent with the investment rating legend, the Research Analyst shall within 28 days of the inconsistency, take appropriate measures to make the recommendation consistent with the investment rating legend.

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