ADANI TRANSMISSION

Towering prowess

India Equity Research | Power



We initiate coverage on Adani Transmission (ATL) with 'BUY' and NPV-based TP of INR154. Our conviction is underpinned by: 1) whopping INR3tn domestic transmission opportunity over FY18-22; 2) aggressively growing ATL capturing 20% of TBCB projects; 3) debt restructuring & additional leveraging boosting IRR of existing/M&A projects by 300-400bps; and 4) scale & synergy benefits as O&M costs are spread across projects. Hence, we estimate the company to clock 19% and 36% EBITDA and PAT CAGR, respectively, over FY17-19. We expect ATL to generate robust FCF, though we do anticipate high growth and M&A appetite. Cost overruns in new projects, aggressive bidding in TBCB projects, unfavourable regulatory changes and delay in true-up orders are risks.

INR3tn domestic transmission opportunity over FY18-22E

Over FY18-22, investments in the transmission segment are estimated to jump 1.5x compared to FY12-17 to a whopping ~INR3tn. Of these, ~INR0.9tn projects are expected to be awarded on tariff based competitive bidding (TBCB) basis. We estimate ATL to garner 20% share of these projects by virtue of its lead position in the domestic market.

Robust credit profile: Leveraging USP to enhance value

ATL has successfully restructured debt by issuing Masala bonds and USD/INR denominated offshore bonds worth INR45bn at a blended cost of ~9%. This has led to 100bps interest cost savings, ultimately boosting project IRRs by 150bps. Additionally, the company enhances debt proportion to 85% from 65-70% leveraging its strong credit profile, thereby releasing equity and boosting IRRs by another ~250bps.

Aggressive growth to drive economies of scale and synergy benefits

ATL's strategic bidding approach and capacity expansion (2x to 11,500cKm) are likely to improve project IRR by 40-50bps as O&M cost is spread across projects.

Outlook & valuations: Potent growth platform; initiate with 'BUY'

With existing assets generating INR10bn FCF p.a., ATL is positioned to satiate its growth and M&A appetite. Moreover, potential to fund its aggressive growth plan at lower cost lends an edge. In our NPV-based TP of INR154, we assign 25% to growth value. Our valuations could be in INR154-185 range if we assign a higher market share provided the company maintains same economies in expansion. Initiate coverage with 'BUY/SO'.

Financials				(INR mn)
Year to March	FY16	FY17	FY18E	FY19E
Revenues (INR mn)	21,970	28,795	46,146	37,792
EBITDA (INR mn)	19,266	19,831	36,591	27,957
Adjusted Profit (INR mn)	3,680	4,164	16,190	7,668
Adjusted Diluted EPS (INR)	3.3	3.8	14.7	7.0
Diluted P/E (x)	38.6	34.1	8.8	18.5
P/B(x)	5.3	4.8	3.0	2.6
ROAE (%)	13.8	14.8	42.9	15.6

EDELWEISS 4D RATINGS	
Absolute Rating	BUY
Rating Relative to Sector	Outperform
Risk Rating Relative to Sector	High
Sector Relative to Market	Underweight

MARKET DATA (R: NA .BO, E	B: ADANIT IN)
CMP	: INR 129
Target Price	: INR 154
52-week range (INR)	: 156/34
Share in issue (mn)	: 1,099.8
M cap (INR bn/USD mn)	: 151 / 2,346
Avg. Daily Vol.BSE/NSE('000)	: 1,556.3

SHARE HOLDING PATTERN (%)						
	Current	Q4FY17	Q3FY17			
Promoters *	74.9	74.9	75.0			
MF's, FI's & BK's	2.8	3.4	3.2			
FII's	18.4	17.1	17.0			
Others	3.9	4.6	4.8			
* Promoters pledged shares : 16.5 (% of share in issue)						

T INICE I EINI	TRICE I ERI ORIVIANCE (70)						
	Sensex	Stock	Stock Over Sensex				
1 month	3.4	23.1	19.7				
3 months	3.4	10.6	7.2				
12 months	12.5	228.4	215.9				



PRICE PERFORMANCE (%)

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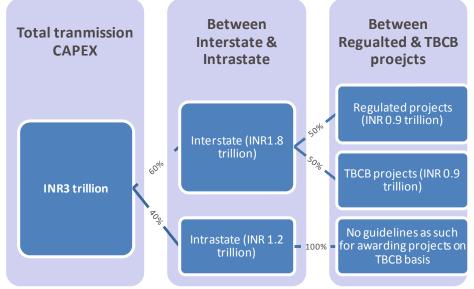
Strong structural story: India is expected to add ~ 1.75lac cKm of transmission capacity over the next 5 years which provides an ordering opportunity of INR3 tn a jump of 1.5x over the past 5 years

Investment Rationale

Domestic transmission opportunity pegged at INR3tn in FY18-22E

Though investments in the transmission sector have surged, they have significantly lagged those in the generation sector. However, with the government sharpening focus on alleviating congestion via several grid enhancement projects, transmission capacities are anticipated to clock robust growth. Over FY18-22, investments in the transmission segment are expected to jump 1.5x compared to FY12-17 to a whopping.investments in the transmission segment are expected to jump 1.5x compared to FY12-17 to a whopping.investments in the transmission segment are expected to jump 1.5x compared to FY12-17 to a whopping.investments in the transmission segment are expected to jump 1.5x compared to FY12-17 to a whopping.investments in the transmission capacities are anticipated to clock robust growth. Over FY18-22, investments in the transmission segment are expected to jump 1.5x compared to FY12-17 to a whopping.investments in the transmission segment are expected to jump 1.5x compared to FY12-17 to a whopping.investments in the transmission capacities are anticipated to clock robust growth. Over FY18-22, investments in the transmission segment are expected to jump 1.5x compared to FY12-17 to a whopping.investments investments growth gro

Fig. 1: Total ordering opportunity under TBCB pegged at ~INR0.9tn



Source: CEA, Edelweiss research

Private sector participation via TBCB: Gathering steam

Historically, the power transmission business was a monopoly as almost all projects were awarded either to PGCIL or state utilities on a regulated basis. This changed when the government opened the transmission sector from January 2011 via a tariff-based competitive bidding (TBCB) model led by Tariff Policy 2006. This opened the transmission sector for private players.

Over FY11-15, the pace of awarding projects was slow—mere INR180-190bn projects awarded. However, this has significantly gathered steam with ~INR260bn projects awarded during FY16-FY17. The government is expected to sustain focus on accelerating the award of transmission projects with a visible pipeline of ~INR70bn plus. Though awarding has slowed a bit in H1FY18 mainly due to implementation of reverse bidding mechanism as participants are watchful in initial bidding of projects, we expect the awarding to gather pace gradually. Moreover, apart from TBCB projects, ATL has also sharpened its focus on inorganic growth (acquired 5 transmission assets of ~3800cKm in last one year).

Chart 1: Projects awarded under TBCB have gathered pace; pipeline strong 200.00 160.00 (INR bn) 120.00 80.00 40.00 0.00 FY11 FY16 FY17 FY12 FY13 FY14 FY15 Projects awarded under TBCB

Source: CEA, Industry, Edelweiss research

Table 1: Projects in bidding stage

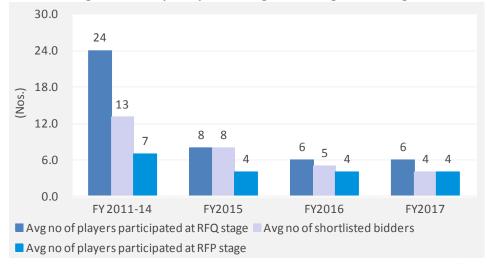
Name of the project	Cost (INR bn)	Status
New WR-NR 765 kV Inter-regional corridor	9.16	Bids to be submitted
Eastern Region Strengthening Scheme –XXI (ERSS-XXI)	13.2	Bids submitted
Additional 400kV feed to Goa & additional System for power evacuation from generation projects pooled at Raigarh (Tamnar)	8.63	Bids to be submitted
Establishment of transmission system for evacuation of power from Ghatampur (3x6660 MW) thermal power project in U.P. (Ghatampur)	25.7	RFP awaited
Connectivity and long term access to HPPCL 450 MW from Shongtong Karcham HEP.	3.18	Bids to be submitted
Transmission System for Phase-I generation projects in Arunachal Pradesh.	11.2	-
TOTAL	71.1	

Source: CEA, Industry, Edelweiss research

Aggressive competition waning; market maturing

Post FY11, competitive bidding for all inter-state transmission lines was made mandatory. This triggered intense competition with players rushing to gain a foothold in the sector. Competitive intensity in the sector was extremely high across projects awarded in FY12-14, reflected in the participation of several players across related spaces, but with limited experience in end-to-end project execution. Post FY14, the competitive intensity has been waning, reflected in the presence of only major credible players in the private sector with relevant experience. In fact, the average number of players participating in bids fell from 7 between FY11 and FY14 to 4 in FY17. This was an outcome of a few developers facing difficulties in commissioning projects on time, which led to escalation in project cost, in turn, leading to revenue loss. Hence, players have started bidding for projects rationally, keeping equity returns in mind.

Chart 2: Average number of participants during various stages of bidding

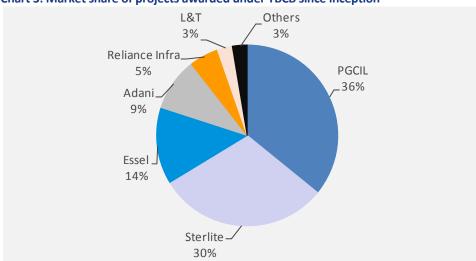


Source: CEA, Industry

Market share captured by 2 players under TBCB: As on June 2017, ~40 inter-state transmission projects worth around ~INR440bn have been awarded via the TBCB route, of which almost 31 have been won by private players and balance 9 by PGCIL. ATL's market share at 10% is due to its absence in bidding in first 3 years as it was more focused on regulated projects. Further, the company has been pursuing a strategy of owning transmission assets inorganically as well (acquired assets of GMR and Reliance Infra), which is not included in this market share. Going forward, while sanity in pricing is expected to prevail, we expect ATL to garner ~20% market share in TBCB projects awarded in the future.

ATL would have higher market share if we were to include it inorganic growth as well. We estimate 20-25% market share in TBCB projects going forward.

Chart 3: Market share of projects awarded under TBCB since inception



Source: Industry, Edelweiss research

At the end of FY17, While ATL had an installed base of $^{\sim}$ 5400cKm; Sterlite group's asset base was $^{\sim}$ 2700cKm. Over the next 2 years, ATL's asset base is expected to double to $^{\sim}$ 11,400cKm, Sterlite group's asset base is expected at $^{\sim}$ 7,000-7,500cKm.

Robust credit profile: Leveraging USP to enhance value

ATL enjoys a strong credit profile underpinned by stable and favourable regulatory environment. The company, over the past 2 years, has successfully restructured debt by issuing Masala bonds and USD/INR denominated offshore bonds worth INR45bn at a blended cost of ~9%, thus clocking savings of around 100bps plus. These savings are envisaged to boost the IRR by more than 150bps in case of TBCB projects. Moreover, in our view, ATL's aggressive growth plan could be funded at relatively lower cost, lending it an edge in TBCB projects.

ATL's modus operandi to enhance value of existing projects/ projects under M&A route:

1) Additional leveraging on existing/M&A projects as a platform premium: Typically, during the bidding process, the debt:equity is 70:30. Later, ATL, by virtue of its strong credit profile, enhances the debt to ~85%, thereby increasing not only equity IRR, but also the overall project IRR by at least 200bps. A case in point is GMR's assets. During acquisition, the debt:equity ratio of Aravali and Maru projects combined was 70:30 at an interest cost of 11.4%. Post acquisition, ATL, through its strong leveraging prowess, was able to release almost ~15% or INR400mn of equity via increasing debt to same amount. Further, the overall cost of interest fell by 160bps. As a result, overall project IRR improved by more than 250bps. We expect the company to follow the same strategy across all its projects.

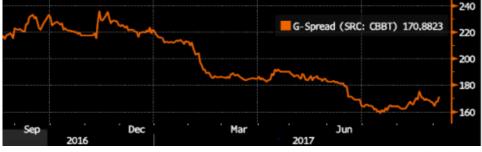
Table 2: Enhancing project IRR via debt restructuring and release of equity

	Mar-16	Mar-17	Jun-17
Equity (INR mn)	1,030	1,030	630
Debt (INR mn)	2,550	2,420	2,820
Project IRR (%)	13.5%	13.5%	16.2%

Source: Company, Edelweiss research

2) Interest cost savings via restructuring existing debt: ATL's strong credit profile is amply reflected in its recent issuance of Masala bonds and USD/INR denominated offshore bonds worth INR45bn at blended cost of ~9%, leading to savings of ~100bps plus from existing rate of debt. More importantly, having got listed at 260bps spread, ATL's bonds are now trading at a spread of 160bps, which are better priced than bonds of other companies like Bharti Airtel and are now almost equivalent to NTPC's bonds. This is primarily on account of: a) improved revenue visibility given tariffs are based on cost-plus mechanism and entail no volume risk; b) while higher leverage risk through aggressive growth persists, it is somewhat mitigated via ratings covenants for additional leverage within the ring-fenced Obligor Group; and c) sector risk is comparatively lower. This, we believe, reflects ATL's strong credit profile and in future the company is expected to replace all existing loans with low-cost bonds and repeat the same exercise for all assets.

Fig. 2 : ATL's US bond performance : Demonstrates robust credit profile



Source: Bloomberg

Competitive moat: It enhances the value of the project by debt restructuring and leveraging its platform premium to release equity thus improving overall IRR by 300-400bps Additionally, ATL has been assigned investment-grade long-term issuer credit ratings by 3 leading global agencies—Moody's, Standard & Poor's and Fitch. India Ratings has also assigned the company domestic-currency long-term rating of 'Ind AA+' with stable outlook. ATL intends to issue rated debt to refinance loans in its operating subsidiaries.

Table 3: Strong credit profile amply reflected in credit ratings assigned by credit rating agencies

	Standard & Poor	Fitch Ratings	Moody's
Ratings	BBB- / Stable	BBB- / Stable	Baa3/ Stable
	 Stable cash flows driven by a favorable regulatory environment, the company's power transmission business, and its good operating record. We have a favorable view of the central regulator 	ATL's credit profile benefits from a stable and favourable regulatory environment. Revenues all its existing transmission assets are based cost-plus tariff, which provides long-term cash	 ATL's regulated transmission business is underpinned by stable and predictable cash that are generated based on pre-determined regulated returns.
	CERC (Central Electricity Regulatory	certainty and stability.	The well-developed regulatory framework for
	, , ,	India's regulators – both at national and state	power transmission in India allows for recovery
	MERC (Maharashtra Electricity Regulatory	- have a long track record of delivering	costs and returns and has periodic resets, which
	Commission) that administer the tariff for the company's current portfolio of transmission assets.	predictable outcomes, including tariff formulas. Transmission companies do not face risks associated with transmission volumes because	further enhances the credit profile of ATL. Rating also reflects ATL's moderate financial leverage, combined with its active capex program
	 We believe ATL benefits from a predictable tariffsetting 	they are guaranteed revenue, which is determined	to expand its transmission network
Key strengths	mechanism, which results in stable cash flows.	by the regulator, as long as they hit certain availability benchmarks.	While ATL's record of operations is short, the company has outperformed regulatory
3	 Tariff recovery is linked to network availability and is independent of volumes, protecting ATL from volume risk. It allows the company to recover its 	ATL's financial profile benefits from the stable revenue from its operating transmission assets and will be supported by the successful	expectations, with a very high transmission line availability relative to regulatory norms. • Counterparty risk is partly mitigated by the pooling
	fixed costs and earn assured return on equity. ATL has adequate liquidity. We expect the company's sources of liquidity to exceed its uses by more than 1.2x over the next 12 months. ATL will continue to register stable operating performance without any significant adverse	commissioning of three committed greenfield transmission projects over the medium term. ATL's proposed bonds benefit from structural enhancements, which are achieved through various restrictions, such as limitations on incurrence on additional indebtedness, and	mechanism under which any under-recovery is socialized across all transmission licensees The rating outlook is stable, reflecting the predictable operating cash flows from existing transmission lines, and our expectation that financial performance will be in line with rating
	regulatory developments	features such as a defined cash waterfall. Fitch expects ATL to maintain an adequate financial profile for its ratings over the medium term, after factoring in some additional capex.	tolerance metrics.

Source: Company

There is higher incentive for ATL to maintain its credit profile and keep interest rate costs low, especially as its future projects are through bidding route for competitive tariffs. Hence, lower interest costs will imply better IRRs and greater ability to out-bid competition.

Aggressive growth in transmission network to drive economies of scale

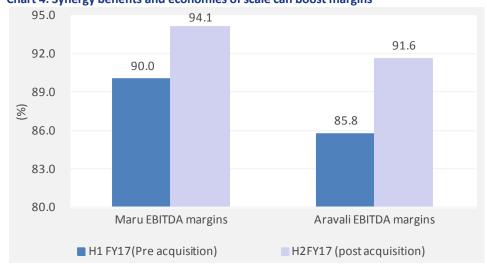
ATL, being an early entrant in the transmission space, enjoys first-mover advantage in combination with scale. With growth in its DNA, the company continues to scout for assets and is in the process of acquiring 3 assets of Reliance Infra of ~3,521cKm. Further ~2,369cKm (projects won under TBCB) are under construction and expected to be operational by FY19. These will double ATL's assets under operation to ~11,338cKm from current ~5,448cKm.

We envisage ATL's strategy of owning and operating 20,000cKm (current 5,400cKm, under construction/acquisition 5,890cKm) assets over FY17-21 to kick in synergy benefits and drive economies of scale as the total O&M cost is spread across projects. Typically, in a transmission project, O&M is normally ~5.0-5.5% of revenue (3.5-4.0% repairs & maintenance and 1.5-2.0% employee cost). ATL has done some **strategic bidding** by taking on projects which are either interlinked or in the vicinity, such as Chhattisgarh A, Chhattisgarh B and Sipat lines and bulk of its projects are in Maharashtra, Rajasthan, Gujarat, etc. With more projects won in the same and adjacent states, the company saves employee costs as the existing employee base can be utilised for all projects. Apart from this, site and O&M expenses also reduce. This potentially improves the IRR/RoE of ATL's projects by a substantial 30-40bps.

GMR's assets: A case in point

• ATL completed acquisition of GMR's energy assets by September 30, 2016. At the time of acquisition, GMR's Maru and Aravali assets were clocking 90.0% and 85.75% EBITDA margins, respectively. Post acquisition, their margins have improved by at least 5 percentage points. This was possible on account of ATL's existing employees managing these additional assets, leading to economies of scale, apart from other cost saving initiatives. The total annualised O&M cost savings are ~INR32mn, which on a project life cycle basis improves the IRR by ~0.5%—substantial, in our view. We expect the same savings/value enhancement in assets acquired from Reliance Infra.

Chart 4: Synergy benefits and economies of scale can boost margins



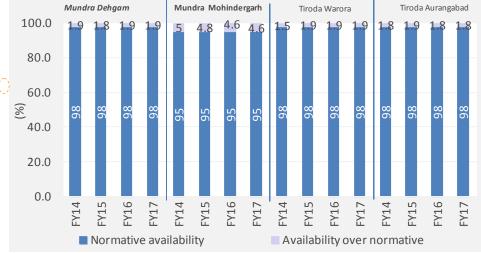
Source: Company, Edelweiss research

Aggressive growth in transmission capacities would kick in synergy benefits and drive economies of scale as the total O&M cost is spread across projects. This can enhance the IRR by 40-50bps which is quite substantial

High revenue visibility and robust FCF generation potential

Tariffs for India's grid transmission lines are based on availability rather than actual transmission load factor, which eliminates volume risk for ATL. Revenue certainty is high plus there is revenue incentive for higher-than-normal required availability. The company intends to focus on owning power transmission assets with long-term contracts, low operating risks and stable cash flows. Over FY17-19, it is expected to own & operate ~11,338cKm (FY17-5,448cKm) as it completes the acquisition of Reliance Infra's assets (3,521cKm) and 8 green field projects (2,369cKm). We forecast a transmission revenue (ex-true up: INR12bn) CAGR of ~18% and healthy 18% EBITDA CAGR (ex-true up+INR12bn) over FY17-19. EBITDA margin of ATL's transmission business has always been upwards of 90% and we estimate it to stay at ~94%.

Chart 5: Availability of operational assets



Source: Company, Edelweiss research With structural drivers in place for transmission assets and ATL being a growth oriented company, we expect it to continue to expand its asset base and sustain pole position in the private sector. Cash generation in initial 4 assets is robust enough (INR7-8bn), which could be utilised to fund greenfield capex. Hence, we estimate ATL to generate ~INR10bn plus cash per annum (post debt repayment) from FY18 from existing and under construction assets.

Table 4: Free cash flow calculations at ATL level (INR mn) FY18E FY19E Year to March FY16 **FY17** 7,668 Reported profit 3,680 4,164 16,190 Add: Non cash charges Depreciation 5,597 5,693 7,131 8,389 Interest (Net of Tax) 9,573 8,299 8,135 7,747 Less: Changes in W. C. (3,204)1,244 (1,089)Others (3,413)6,935 666 2,096 Operating cash flow 15,436 21,888 33,366 24,811 Less: Capex (7,339)(13,593)(22,989)(9,360)Free cash flow 8,096 8,295 10,377 15,451

Source: Company

ATL has excellent operating history with track record of receiving incentive payments for maintaining availability above regulatory requirements i.e. 98% for AC system and 95% for HVDC system

Valuations

ATL is amongst the largest private transmission players and second only to PGCIL in India. It currently has 6 operational assets (acquisition of GMR's assets completed) with existing EBITDA of INR20bn. With acquisition of Reliance Infra's assets and completion of 8 Greenfield projects, we envisage EBITDA/PAT CAGR of 19%/36% over FY17-19 and EBITDA/PAT of INR27.5bn/INR7.65bn by FY19. We expect the EBITDA to peak at ~INR30bn by FY20E from existing and under-construction projects. We believe, the company is in a strong position to deploy cash flows to pursue organic as well as inorganic growth with existing assets generating ~INR10bn free cash flow per annum, implying the company can ideally take projects worth INR35-40bn every year.

ATL is strictly a play on growth and we have valued it on: a) existing project value; and b) growth value.

A) Intrinsic value of existing projects: We arrive at INR115 per share

We have valued ATL's existing projects using DCF methodology with a WACC of 7.8%, thus arriving at an equity valuation of ~INR126bn or INR115 per share. We expect all the under-construction projects to become operational by FY19 along with complete acquisition of Reliance Infra's projects.

Assuming risk-free return of 6.5% (given current yield on government bonds), risk premium of 5% and Beta of 1.2x, our cost of equity stands at 12.5%. Post ATL's raising of USD denominated bonds, we have assumed the cost of debt at 8.5% with current debt-equity ratio of 80:20 and blended tax rate of 22%. Factoring these assumptions, our weighted average cost of capital stands at 7.8%. Discounting the FCF with WACC of 7.8%, we arrive at net present value of FCFF of all projects at INR212.6bn. Post deducting INR85.8bn net debt, we arrive at an equity value of INR126bn or INR115 per share.

Table 5: Key assumptions and NPV calculation of existing & under construction assets

WACC %)	7.80	Rf (%)	6.50
Cost of equity (%)	12.50	Beta (x)	1.2
Cost of debt (%)	8.50	Risk premiu	5.00
D/E	80.00		
Tax rate (%)	22.00		
NPV (INR mn)	212,602		
Less: Net Debt (INR mn)	85,816		
Equity value (INRmn)	126,786		
No of shares (mn)	1100		
Target price (Intrinsic)- INR	115		

Source: Edelweiss research

We assign NPV based TP of INR155 where in INR115 comes from intrinsic value of the existing projects and INR40 from growth platform assigning ~22% market share in future awarding of projects

Table 6: Free Ca	sh flow calculation	of individual p	orojects					(INR mn)
	FY18	FY19	FY20	FY26	FY37	FY43	FY49	FY54
T1	13,642	5,638	5,432	3,105	2,520	2,565	1,637	0
T2	886	759	730	433	427	399	293	0
T3	1,173	1,072	1,035	568	472	537	0	0
T4	15,384	9,178	8,878	7,118	4,155	4,719	4,820	0
T5	234	181	177	185	100	0	0	0
T6	432	306	298	306	181	0	0	0
T7	859	1,032	983	791	0	0	0	0
T8	549	634	601	428	0	0	0	0
T9	1,318	1,504	1,451	1,131	513	570	347	0
T10	(3,061)	14	1,426	1,202	885	635	612	291
T11	(2,070)	(1,197)	1,897	1,552	971	929	911	466
T12	(1,349)	(3,447)	(548)	800	512	386	378	377
T13	(1,034)	(363)	833	736	440	411	409	384
T14	(1,033)	(392)	204	184	167	140	135	53
T15	(1,356)	(550)	365	259	168	143	118	112
T16	(1,091)	(444)	279	216	109	57	(1,390)	80
T17	(992)	(403)	254	199	95	69	31	71
Total	22,493	13,522	24,292	19,597	11,948	11,790	8,470	1,869

Source: Edelweiss research

B) Assigning 25% of overall value to growth platform or INR39 per share

With growth in its DNA, ATL continues to scout for assets both organically and inorganically. Further, with a strong credit profile and robust cash flow generation, we believe it is imperative to value the company's strong growth platform as well.

So how does one assign value to growth? The most simple methodology is to assign terminal value growth. However, we have followed a top-down model in order to assign value to growth.

India is expected to add $^{\sim}$ 1.8-1.9lac cKm of transmission lines over the next 5 years. This implies capex of $^{\sim}$ INR3.0tn assuming INR15mn average capex per cKm for transmission line tower and substations. Of this capex, we expect inter-state and intra-state to be broadly in the 60:40 ratio. Within inter-state capex, we estimate $^{\sim}$ 50% projects to come under TBCB ordering (conservatively, we are not building any TBCB ordering in intra-state) and expect PGCIL to garner 50% market share; balance 50% is expected to be cornered by ATL, Sterlite and other players.

Table 7: Calculation of ATL's market share through top-down assumptions

Growth platform	
Total tranmission CAPEX (FY18-22)	INR3tn
Interstate (60%)	INR1.8tn
Intrastate(40%)	INR1.2tn
TBCB ordering under Inter state (@50%)	INRO.93tn
(assuming no TBCB in intrastate)	
Total market opportunity for ATL (INR mn)	930,000
ATL's market share	195,300
Debt -70%	136,710
Equity -30%	58,590

Source: Edelweiss research

We assign a market share of $^{\sim}20\%$ to ATL in total inter-state TBCB orders and estimate it to garner $^{\sim}INR195$ bn projects over the next 4-5 years. Though potential for inorganic growth exists, we have not factored in the same in our assumptions. We then work backwards in order to determine tariffs in these projects assuming: a) debt: equity of 70:30; b) cost of debt at 8.5% with 15 years' tenure; c) 16% RoE; and d) O&M at 2% of project cost .

Table 8: FCFFF of growth projects

(INR mn)

	FY21	FY22	FY23	FY29	FY35	FY41	FY47	FY54
Absolute Tariff	35,971	35,353	34,740	31,213	30,257	22,550	24,821	28,242
Less: O&M expenses	3,906	4,062	4,225	5,346	6,764	8,559	10,829	14,251
EBITDA	32,065	31,290	30,516	25,867	23,493	13,992	13,992	13,992
Depreciation	10,312	10,312	10,312	10,312	10,312	-	-	-
EBIT	21,753	20,978	20,204	15,556	13,181	13,992	13,992	13,992
Less: Interest	11,233	10,458	9,684	5,035	387	-	-	-
Less: Tax	2,344	2,344	2,344	2,344	4,617	4,617	4,617	4,617
PAT	8,177	8,177	8,177	8,177	8,177	9,374	9,374	9,374
FCFF	27,475	26,855	26,235	22,517	18,748	9,374	9,374	9,374

Source: Edelweiss research

We arrive at NPV of INR237bn discounting the FCF with WACC of 7.8%, as explained earlier. Post deducting the total capex of ~INR195bn on these new projects, we arrive at an equity valuation of INR42bn or INR39/share. This is ~25% of our total target price.

Table 9: NPV of growth platform	(INR mn)
NPV	237,555
Less: CAPEX	195,300
Net Equity addition	42,255
No of shares (mn)	1,100
Target price (INR)	39

Source: Edelweiss research

We arrive at total value (intrinsic value of existing projects + growth platform) of INR154 per share (19% upside), implying an exit EV/EBITDA of 8.3x and P/BV of 2.6x on FY19E.

Table 10: Valuation multiples of ATL vis-à-vis peers

Company Name	Ticker	Mkt Cap.	Ent. Val.	EV/EB	ITDA	P/	E	P/Bo	ook	Return	Ratios
Company Name	TICKET	(USD mn)	(USD mn)	FY18E	FY19E	FY18E	FY19E	FY18E	FY19E	ROE	ROA
Next Era Energy Inc	NEE US EQUITY	69,409	104,241	11.3	10.7	22.0	20.4	2.6	2.5	16.7	4.6
Duke Energy Corp	DUK US EQUITY	60,176	112,891	11.7	11.0	18.7	17.8	1.4	1.4	5.8	1.8
Sothern Company	SO US EQUITY	49,844	100,639	11.4	11.1	17.0	16.5	1.9	1.8	2.7	0.6
The National Grid PLC	NGG US EQUITY	44,323	67,869	9.7	9.5	14.6	13.8	2.0	1.9	46.0	12.5
Adani Transmission	ADANIT IN EQUITY	2,424	3,682	6.5	8.3	8.8	18.5	3.0	2.6	14.8	3.4
Power Grid	PWGR IN EQUITY	17,389	34,255	8.4	7.7	12.6	10.8	2.1	2.1	16.3	3.9

Source: Bloomberg, Edelweiss research

We agree that Power Grid is cheaper than ATL by at least \sim 10% on both P/BV and EV/EBITDA perspective. But at the same time, we argue that ATL is just 7-8% of PGCIL assets base but the growth is substantially higher in ATL (36% PAT CAGR over next 2 years vs 17% in case of PGCIL) with almost similar return profile in both the companies at \sim 16-17% ROE's. Hence, a project of INR10-15bn may not interest Power Grid but it can add 8-10% to ATL's asset base. While ATL is a play on aggressive growth, PGCIL is a play on stable growth.

Financial Outlook

Commercialisation of new lines to boost transmission revenue

ATL is expected to post consolidated revenue CAGR of ~15% over FY17-19. However, transmission revenue is expected to post higher CAGR of 18% on account of addition of ~2,000cKm of transmission lines over FY18 and FY19. We do not expect any significant growth in the trading business. Importantly, we estimate ATL has under-recovery on interest cost and capital cost of ~INR12bn in the Mundra HVDC project (INR9bn on account of interest cost) and MEGPTCL project (INR3bn on account of cost over runs) until FY17. We expect both the orders related to under-recovery to be passed in H2FY18 and hence expect revenue boost of ~INR12bn in FY18. This is also expected to boost the book value of ATL significantly.

50 30.0 40 24.0 26 30 18.0 (INR bn) 30 % 30 12.0 21 12 21 10 6.0 0 0.0 FY16 FY17 FY18E FY19E Trading Rev True up Rev Tranmission Rev Transmission rev growth (RHS)

Chart 6: Revenue mix and transmission revenue growth

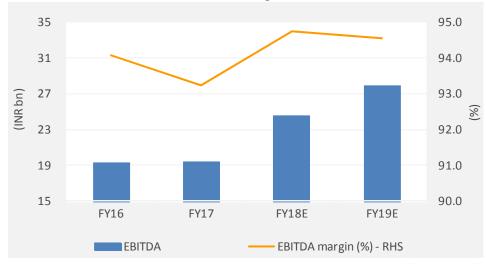
Source: Edelweiss research

Synergy benefits to boost transmission EBITDA margin

We estimate EBITDA margin of ATL's transmission business to remain healthy at ~94%, a ~100bps jump from FY17 level. With 2x growth in transmission assets over the next 2 years, we expect increase in synergy benefits to kick in and drive economies of scale as the total O&M cost is spread across projects. Overall, EBITDA margins are expected to remain at 75% as trading business hardly fetches any margin. For FY18, EBITDA is expected to spike on account of INR12bn true-up order.

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Chart 7: Transmission EBITDA and EBITDA margins movement

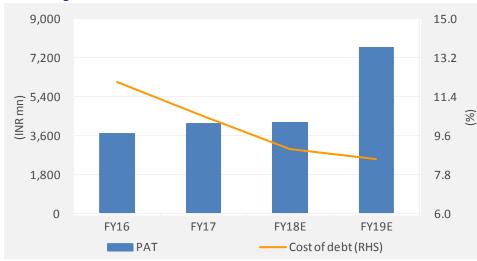


Source: Edelweiss research

Robust profit CAGR of 36% over FY17-19E

With 18% transmission revenue CAGR, 100bps EBITDA margin expansion and financial reengineering (cost of debt expected to fall by 10.0% in FY17 to 8.5% in FY19), we expect ATL to post robust EPS CAGR of 36% over FY17-19E. We expect PAT margin to jump from current 14.5% to 21.1% (660bps improvement) by FY19E. FY19 PAT is estimated to spike on account of INR12bn true-up order.

Chart 8: Higher revenues and lower cost of debt will drive PAT



Source: Edelweiss research

To generate positive FCF; ROE's to remain stable at ~15% levels

ATL's FCF has been stable over the past 2 years at an average ~INR8bn. However, owing to healthy revenue growth, margin expansion and reduction in cost of debt, we estimate the company to generate higher cash flow—~INR10-15bn per annum over the next 2 years and cumulative cash flow of ~INR25bn over FY17-19. We expect the ROE's to remain stable at ~15% levels (ex-true up) over the next 2 years.

Chart 9: Healthy FCF to continue



Source: Edelweiss research

Key Risks

Delay in receiving true-up orders

We have assumed INR12bn profit in FY18 on account of petition filed by the company in 2 cases: a) INR9bn on account of interest cost pass through in CERC projects; and b) INR3bn due to cost overruns in the MEGPTCL project. Delay in CERC order could impact FY18 profitability and cash flows.

Revision of tariff for regulated assets post 2019

CERC's tariffs are valid till March 2019 and MERC's tariffs till March 2020, after which they are due for revision. Change in the tariff formula may impact ATL's revenue and CF estimates.

Projects under construction may be subject to cost/time overruns

ATL has currently ~2,369cKm projects under construction and development. Construction disruptions or delays could impede ATL's ability to achieve benchmarked performance and adversely affect its financial and operational estimates and consequently its business prospects.

Failure to identify risks in potential acquisition targets

Though ATL takes adequate precautions to identify various risks involved in acquisition of assets, there could be a possibility of failure to identify material problems during due diligence, the risk of over-paying for assets or not making acquisitions on an accretive basis.

Inability to achieve prescribed availability

Power transmission projects being acquired are under an availability-based tariff regime. If availability for a particular line falls below 95% in case of HVDC and 98% in case of AC, ATL is liable to pay a penalty, which reduces the Annual Transmission Charge the company receives for the period. It may be unable to operate and maintain its power transmission projects to achieve the prescribed availability due to a number of factors.

Inability to offset increase in costs

The tariff structure under TSAs is largely fixed for the entire term of the TSA. Operation and maintenance costs of portfolio assets may increase due to factors beyond ATL's control.

Intra-group transactions

Historically, the funding of losses of Adani Power has been done by various group entities. In future, if ATL through his strong cash flow generation enters into some intra-group transactions, market will perceive this negatively. However, the existing Obligor Group makes it difficult to enter into intra-group transactions and is a distant possibility.

Non-transmission revenues could start contributing from FY19

ATL's transmission projects portfolio could provide potential for non-transmission revenues from optical ground wire leasing (1 ,000km of line) and tower leasing. These could potentially contribute 2 -5% to PAT, thereby increasing IRR by 10-40bps. We have not factored the same in our earnings estimates.

Company Description

ATL is the largest transmission company operating in India's private sector. It was incorporated on December 9, 2013, at Ahmedabad as a public limited company and is the power transmission vertical of the Adani Group, one of the largest infrastructure groups in India. ATL establishes commissions, operates and maintains electric power transmission systems. As on March 2017, it owns, operates and maintains around 11,338ckm of transmission lines including under construction and under acquisition projects.

5,447 ckms

1,927 ckms

3,521 ckms

Under Construction

Operating - Under Acquisition

Operating

Chart 10: Break up of ~11,338cKm assets (under construction 2,369cKm)

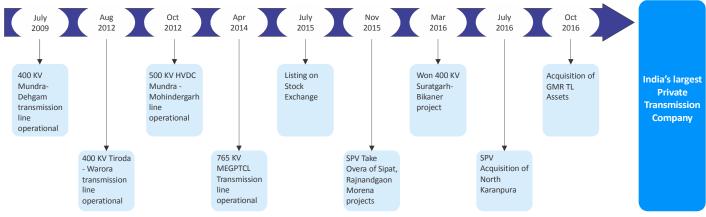
Source: Company, Edelweiss research

Evolution

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The transmission business was initially started by Adani Enterprises (AEL)—Adani Group company. It undertook the business directly and through one of its then subsidiaries Adani Power. Pursuant to the Scheme of Arrangement, all businesses, undertakings, activities, properties and liabilities pertaining and related to AEL's transmission business have been transferred to and vest in ATL. Starting 2009, ATL has added assets in a phased manner to become the largest private transmission company in India.

Fig. 3: ATL—The evolution

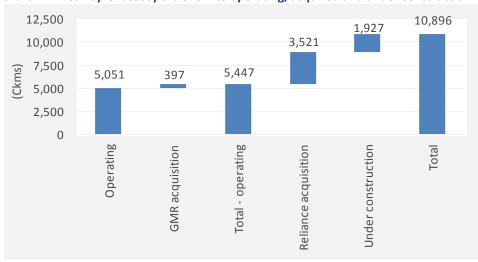


Source: Company

Portfolio of assets

As on March 2017, ATL has 6 operating assets—5,448cKm with 3 assets under acquisition (3,521cKm) and additional 8 assets under construction (2,369cKm).

Chart 11: Break up of asset portfolio into operating, acquired and under construction



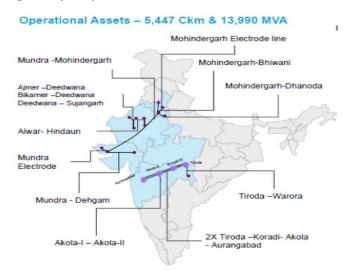
Source: Company

Table 11: Portfolio of assets of ATL

Project	ckms	Project	ckms	Project	ckms	Project	ckm
Mundra-Mohindergarh	2,528	MTSCL	300	WRTM	2,089	STL	346
Mundra-Dehgam	868	ATSCL	97	WRTG	974	RRWTL	612
Tiroda-Warora	438	Total	397	PKTCL	458	CWRTL	428
Tiroda- Aurangabad	1,217			Total	3,521	ATRL	280
Total	5,051					NKTL	261
						Total	1,927

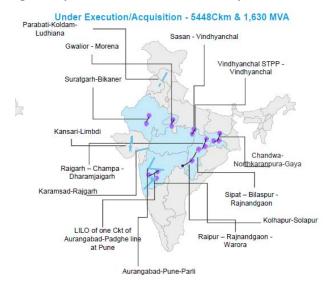
ATL has projects located in Gujarat, Rajasthan, Haryana, Maharashtra, Chhattisgarh, Madhya Pradesh, Jharkhand, Bihar, Punjab, Himachal Pradesh and Karnataka (depicted in maps below):

Fig. 4: Map of operational assets



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Fig. 5: Map of assets under execution/acquisition



Source: Company

Edelweiss Securities Limit

Brief introduction of portfolio assets

Operating assets

ATL's 4 transmission assets operate via 2 special purpose vehicles—Adani Transmission India (ATIL) and Maharashtra Eastern Grid Power Transmission Company (MEGPTCL). While ATIL operates Mundra-Dehgam, Mundra-Mohindergarh and Tiroda-Warora transmission lines, MEGPTC operates the Tiroda-Aurangabad transmission line. A synopsis of the operating assets is given below:

Table 12: Brief details of operating assets

	Mundra – Dehgam	Mundra – Mohindergarh	Tiroda – Warora	Tiroda – Aurangabad
Regulator	CERC	CERC	MERC	MERC
Company	ATIL	ATIL	ATIL	MEGPTCL
License Period	25 years + 10 years	25 years + 10 years	25 years + 10 years	25 years + 10 years
COD	Jul-09	Oct-12	Aug-12	Feb-2014; Apr-2014; Mar-2015 ⁽¹⁾
ckm	868	2,528	438	1,217
Voltage (KV)	400	500 kV HVDC	400	765 & 400
Remaining Life	~22 years	~22 years	~18 years	~20 years
Revenue'16	INR 879 m	INR 5,214 m	INR 1,516 m	INR 12,844 m
EBITDA'16,%	85%	93%	92%	91%
Cost (INR mn)	5,730	38,360	6,840	57300
Type of system (ISTS/In STS)	ISTS	ISTS	In STS	In STS

Source: Company

(1) Set 1 and 2A commissioned on February 23, 2014; Set 2B commissioned on April 8, 2014; Set 3 commissioned on March 31, 2015

Tiroda-Aurangabad Transmission System

This transmission system is developed by MEGPTCL. It includes 1,217ckm of transmission network of 2 single circuits of 765KV lines, one double circuit 400KV line from Tiroda to Aurangabad along with associated substations/bays for evacuation of power from projects in North-East Maharashtra. MEGPTCL received transmission licence from MERC in September 2010. The line is part of the Intra-State Transmission System (InSTS), which makes it available for use by the entire transmission network of Maharashtra.

Tiroda-Warora Transmission Line

Adani Power Maharashtra (APML), a subsidiary of APL, has developed 438cKm transmission line. The line was granted transmission licence on July 6, 2009, by MERC as part of the intrastate transmission network (InSTS). The transmission line has been drawn from APML's Tiroda power plant in district Gondia, Maharashtra, to the Warora sub-station of MSETCL. The transmission line is operational since August 2012.

Mundra-Dehgam Transmission Line

The Mundra-Dehgam transmission line is a double circuit 400KV 868cKm transmission line implemented by APL. The project has been operational since July 2009. It has received interstate transmission licence (ISTS) from CERC in July 2013. Therefore, it is part of the national grid being an ISTS.

Mundra-Mohindargarh Transmission line

The Mundra-Mohindargarh transmission line is \pm ,500KV HVDC transmission line (about 2,528cKm) from Mundra (Gujarat) to Mohindargarh (Haryana) with capacity to evacuate 2,500MW power. It has received inter-state transmission licence (ISTS) from CERC in July 2013. Therefore, it is part of the national grid being an ISTS.

Table 13: Acquired assets—GMR's transmission portfolio

Primary Details	Maru	Aravali	Comments
License Award date	8/14/2012	8/14/2012	Term 25 plus 10
COD Date	12/16/2013	7/17/2014	Term 25 plus 10
Regulator	SERC	SERC	State – Rajasthan
Tariff (Rs in Cr) (FY17)	38	24	
Technical Details			
Length of Line	300 kms	97 kms	Contractor L&T
Line	– S/C 400 KV Line; 29 KM 220 KV	– S/C 400 KV Lines	
	DC Line	– 2X315 MVA, 400/220 KV	
	– 2X315 MVAR., 400/220 KV	transformer at Alwar	
	GSS	– 1X50 MVAR , 400 KV Bus	
	– 1X50 MVAR , 400 /200 KV GSS	type shunt reactor	
	– 1X100 MVA , 400 /200 KV GSS		
Transaction Related Details			
Transfer of shares	74% (July 2016)	49% (July 2016)	Tranche 1
	26% (Dec 2018)	25% (Dec 2016)	Tranche 2
Financial Details		26% (July 2019)	Tranche 3
Revenue'16 (INR m)	450.4	247.5	
EBITDA '16 (INR m)	416.1	190.4	
Debt Outstanding'16 (INR m)	1,710.60	1,297.90	

Source: Company

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Edelweiss Securities Limited

Table 14: Acquired assets—Reliance's transmission portfolio

Particulars	WRSS - Maharashtra	WRSS - Gujarat	PKTCL
Primary Details			
License Award date	12/30/2008	12/30/2008	9/15/2008
COD Date	Jan'2014	Dec'2015	Nov'2015
Regulator	CERC	CERC	CERC
Tariff (Rs in Cr) (FY18)	127	68	170
Technical Details			
Length of Line (ckm)	2,089 kms	974 kms	458 Kms
Lines	– 400 kV D/C Pune – Aurangabad	– 400 kV D/C Limbdi –	– 400 kV S/C Banala -
	– 400 kV D/C Solapur – Kolhapur	VadaviS/C 400 KV Lines	Parbati II
	– 400 kV D/C Solapur – Parli	– 400 kV D/C Vadavi-	– 400 kV S/C Parbati II
	– 400 kV D/C Parli – Pune	Kansari	– 400 kV S/C Banala -
	– LILO of Sholapur - Karad 400	– 400 kV D/C Rajgarh -	Koldam Ckt I
	kV D/C T/L at Solapur	Karamsad	– 400 kV S/C Banala -
	– LILO of 400 KV Lonikhand -		Koldam Ckt II
	Kalwa Ckt I		– 400 kV D/C Koldam -
	– LILO of 400 KV Lonikhand -		Ludhiana
	Kalwa Ckt II		
Transaction Related Details			
Transfer of shares	100%	100%	74%
Financial Details			
Revenue'16 (INR m)	1,415.30	455.6	1,495.30
EBITDA '16 (INR m)	1,352.60	453.6	1,455.80
Debt Outstanding'16 (INR m)	5,607.50	2,173.10	5,953.70

Source: Company

Table 15: Details of Under construction assets

Project	Sipat	Rajnandgaon	Morena	Suratgarh-Bikaner	North Karanpura
SPVs	Sipat Transmn. Ltd.	Raipur – Rajnandgaon – Warora Transmission Ltd	Chhattisgarh – WR Transmn.	Adani Transm. Rajasthan Ltd	North Karanpura Transco Limited
States	Chhattisgarh	Chhattisgarh/ Maharashtra	MP, Maharashtra & Chhattisgarh	Rajasthan	Jharkhand, Bihar
CTU/STU	CTU	CTU	CTU	STU	CTU
Project Status	LoA Awarded	LoA Awarded	LoA Awarded	LoA Awarded	LoA Awarded
Length (Ckt Kms)	346	612	428	280	261
Levelized Tariff (INR mn)	79	178	132	21	55

Note: Additionally, the company has recently won 3 assets in Rajasthan with total assets of \sim 525cKm

Fig. 6: ATL—holding structure

36

56

1

23

13

Ckm

Bays

Adani Transmission Limited 100% 100% 100% 74% (1 100% 100% 100% 100% 100% 74% WRSS M, G MEGPTCL PKTCL Dehgam North Raipur -Maru & WRSS M Sipat -Chhattisgarh -Suratgarh -Karanpura PKTCL Rajnandgaon Aravali WRSS G WR Sikar Rajnandgaon Transmission - Warora lines System Operating Assets Acquisition 397 ckt km under process 5,051 ckt km 3,834 1,217 346 612 428 280 261 397 3,063 458 Cap (MVA) 6,630 6,000 630 1,000 1,360

Note: ATIL -Adani Transmission (India) Limited; MEGPTCL -Maharashtra Eastern Grid Power Transmission Co. Ltd.; STL -Sipat Transmission Limited; RRWLT -Raipur Rajnandgaon Warora Transmission Limited; CWRTL -Chhattisgarh WR Transmission Limited; ATRL -Adani Transmission (Rajasthan) Limited; NKTL -North Karanpura Transco Limited; ATSCL -Aravali Transmission Service Company Limited; MTSCL -Maru Transmission Service Company Limited, WRSS M -Western Region System Strengthening Scheme Maharashtra, WRSS G -Western Region System Strengthening Scheme Gujarat, PKTCL — ParbatiKoldam Transmission Company Limited, (1) 74% stake to be acquired in Maru and Aravalilines with an option to acquire 100% in a manner consistent with Transmission Service Agreement and applicable consents

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Power

Table 16: Management Overview

Name	Designation	Qualification	Profile/Role
Laxminarayan Mishra	Whole time Director	B.Tech. (Mech) and MBA from IIT, Delhi	30 years of experience in the power sector, especially in the power transmission business. He worked with Bharat Electronics Limited, Timex Watches; PGCIL, Parbati Koldam Transmission Co. Limited and Reliance Power Transmission Limited prior to joining Adani group in 2015.
Kaushal Shah	Chief Financial Officer	Chartered accountant	26 years of experience in finance and accounts. He joined Adani Group as Manager- Finance & Accounts in 2004. His major assignments in Adani Group include FCCB, IPP, QIP and the demerger of Adani Entities
Rajnish Pandey	General Manager (Transmission)	B.E. (Mechanical)	18 years of experience in construction of transmission lines at various levels, including HVDC lines. He has worked with KEC and Jyoti Structures and Reliance Infrastructure Limited prior to joining Adani Group in March 2009.
Rajesh Kumar Singh	General Manager (Transmission)	B.E. (Mechanical)	19 years of experience in project management of overhead transmission line projects, contract management, cash flow control and customer interface. Prior to joining our Company, he worked with EMC Limited, Kolkata.
Ajay Krishna	General Manager (Transmission)	MBA in Finance and Marketing	18 years of experience in construction of transmission lines of various voltage levels in various parts of India
Atul Singh Raghav	General Manager (Transmission)	B.E. (Electrical)	23 years of experience in construction of transmission lines of various voltage levels in various parts of India
Vivek Singla	Heading the Business Development & Regulatory functions	Bachelor of Engineering degree in Electronics from Delhi University and a Management degree in Finance from FMS, Delhi University	He has worked in various capacities in Tata Power Group, including the Chief Executive Officer of "Tata Power Jamshedpur Distribution Ltd.", Head of the Power Management & Corporate Commercial in Tata Power Distribution Limited (TPDDL - erstwhile NDPL, a Tata Power and Delhi Government Joint Venture)

Industry Overview

Significant leg up in domestic transmission sector

The government's focus on providing electricity to rural areas has led to the T&D system being extended to remote villages. While the total length of transmission lines in India has jumped from 358,580cKm in FY07 to 554,774cKm in FY016 (CAGR of 5.5% plus), there has been strong growth in the transmission system (10% CAGR) at higher voltage levels and sub-station capacities (17% CAGR) over the same period. This is a result of increase in demand for transmission networks to carry bulk power over longer distances and simultaneously optimise the right of way, minimise losses and improve grid reliability.

Chart 12: Robust spurt in high voltage transmission network

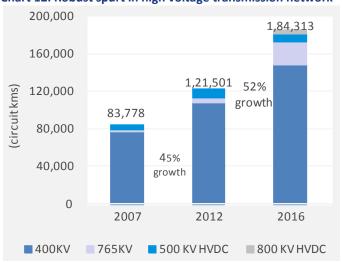


Chart 13: 3x jump in substation capacity (>220KVA)



Source: CEA, Edelweiss research

Table 17: Mix of India's installed transmission capacity

	Central	% share	State	% share	JV/Pvt	% share	Total
Transmission lines (ckms)							
765kV	26,893	81	1,512	5	4,881	15	33,286
400kV	94,105	57	52,094	32	18,389	11	164,588
220kV	11,014	7	152,660	93	983	1	164,657
+/- 500kV HVDC Lines	5,948	63	1,504	16	1,980	21	9,432
± 800 kV HVDC lines	6,124	100	-	-	-	-	6,124
Substations (MVA)							
765kV	142,500	81	17,500	10	16,000	9	176,000
400kV	121,115	47	130,242	50	7,750	3	259,107
220kV	9,046	3	310,135	97	1,567	0	320,748
+/- 500kV HVDC converter	9,500	70	1,500	11	2,500	19	13,500
+/- 800kV HVDC converter	7,500	100	-	-	-	-	7,500

Source: CEA

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Investments in the sector are expected to be driven by the need for robust and reliable interand intra-state transmission systems to support uninterrupted generation and a strong push for renewable energy sector & rural electrification. The transmission segment's share in total power sector investments is estimated to catapult to 33% over FY17-21 from 20% over FY12-16.

Chart 14: Generation dominated past 5 years' investments

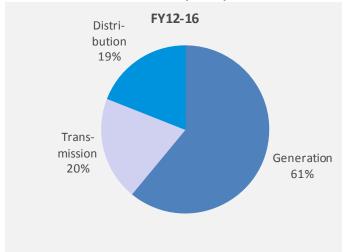
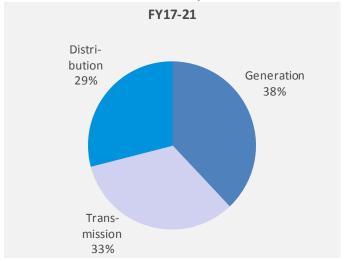


Chart 15: T&D to dominate next 5 years' investments



Source: Crisil research

Power transmission: Key growth drivers

The Indian National Grid has evolved over 60 years and has recently achieved 'one nation one grid' status. Although the inter-regional transmission capacity is still low, grid unification has helped bridge the gap between load and demand centres in India. Going forward, key growth drivers for power transmission are:

1) Widening gap between inter-regional power demand-supply to drive transmission capacity additions: According to the latest draft National Thermal Policy (December 2016), total power generation capacity in India will rise to ~435GW by March 2022 from 310GW in March 2017. However, the upcoming generation capacity is predicted to not be evenly spread across the country. Most upcoming renewable capacities are expected to be concentrated in western and southern regions, while thermal capacities are expected to be concentrated close to coal mines in the East. As a result, there will be inter-regional import/export demands, which will have to be catered through inter-regional transmission corridors. Despite healthy inter-regional transmission additions on account of seasonal differences and time of day demand differences, large inter-regional transmission capacities will be required to prevent grid fluctuations.

The Ministry of Power (Perspective Transmission Plan 2014-34) pegs deficits in North and South at 18,500-22,200MW and 11,500MW-15,900MW, respectively, depending on the season. The West region's surplus is estimated at 11,500-15,900MW in the summer peak, winter peak and winter-off peak conditions, while during the monsoon peak, the surplus is expected to drop to about 2,000MW.

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To cater to the above import/export requirement, a number of inter-regional transmission corridors have been planned and some of these high-capacity transmission corridors are in various stages of implementation. According to CEA's estimates, the interregional transmission capacity requirement is likely to jump to ~91GW by FY21 from ~60GW in FY16.

100,000 80,000 22320 60,000 (ckms) 7920 40,000 19920 12920 20,000 0 FY16 FY22 ■ East-North North East- North ■ East-West West-North East-North East East-South ■ West-South

Chart 16: Inter-regional transmission capacity to catapult 50% over FY17-21E

Source: CEA

- 2) Strong government support to drive transmission investments: The government has supported the transmission segment via several initiatives: a) increased concession period of a transmission asset; b) relaxed norms to speed up project construction; and c) implemented Uday scheme to boost power demand, which in turn will eventually result in rise in transmission requirements.
- 3) Need of developing Green Energy Corridors: Over the next 4-5 years, generation is primarily expected from renewable capacities, which will mostly be concentrated in select belts and far-flung areas. The government has already implemented measures to develop transmission capacities to support renewable capacity additions in India. Such initiatives include setting up of solar pooling stations and integrating solar & wind projects into the National Grid under Green Energy Corridors.
- 4) Conventional power generation capacity additions to necessitate concomitant transmission capacity: As of March 2017, ~88GW power generation projects are under construction, of which, ~50GW projects are expected to be commissioned over FY17-21. This, coupled with an estimated increase of ~7.5% in power demand, is expected to necessitate augmenting of transmission capacities.

Factors encouraging investments in power transmission

Operational power transmission projects have minimal risks: During the project
construction phase, transmission assets face execution risks including right of way, forest
& environment clearances, increase in raw material prices, etc. However, post
commissioning, with implementation of the Point of Connection (PoC) mechanism, there
are limited off take and price risks. Thus, operational transmission projects entail annuity
like cash flows and steady project returns.

Fig. 7: Credit risk through a transmission project's life cycle Post commissioning phase High Remaining concession period of ~18-20 years Conventional debt tenor of 10-Credit risk 1. Row risk **Before POC** 2. MoEF clearance risk 3. Funding risk 1. Reduced counter party risk - CTU act as revenue aggregator 4. Construction risk 2. Revenue recovery irrespective of asset utilisation - limits of off take 3. Payment security - Revolving LC, late payment surcharge of 1.25%/month 4. Low probability of default - Limitations of discoms to pass through penal charges paid to transcos After POC Low 35 Concession period for Build Own Operate and Maintain (BOOM) transmission assets (Time in years)

Source: Crisil research, Indigrid DRHP

- Availability-based regime: According to TSA, the transmission line developer is liable to
 get an incentive amount (if availability is more than 96% for HVDC and more than 98% for
 HVAC) in the ratio of the transmission charge paid or actually payable at the end of the
 contract year. Also, in case of low availability, the transmission licensee is liable to pay a
 penalty under TSA, which will be apportioned in favour of customers. Maintaining
 availability in excess of the targeted availability gives the relevant asset the right to claim
 incentives at pre-determined rates, ensuring an adequate upside to maintaining
 availability.
- Counter-party risk diversified: Given pan-India aggregation of revenue among all TSPs and not asset specific billing, the counter-party risk is diversified. As the load growth increases, the pool of beneficiaries as well as transmission providers is likely to rise, resulting in further diversification. Considering that no single counter-party is over 15% of the pool, weighted average credit quality of the pool is significantly better than individual constituents. If a particular beneficiary delays or defaults, the delay or shortfall is prorated amongst all licensees. Thus, delays or defaults by a particular beneficiary will have limited impact, which will be proportionate to its share in overall ISTS.
- Collection risk offset owing to presence of CTU: According to CERC (sharing of interstate transmission charges and losses) regulations, 2010, PGCIL has been assigned the responsibility of carrying out activities including raising of transmission charge bills on

behalf of all ISTS licensees, collecting the amount and disbursing the same to ISTS licensees. The CTU functions as a single point of contact between transmission licensees and users. Thus, a private transmission licensee no longer needs to collect transmission charges from multiple discoms for each transmission project. The transmission revenue payable to the licensee is disbursed by CTU on monthly basis. Moreover, CTU's collection track record is fairly good and the receivable collection cycle has improved considerably over the past few years. PGCIL does not have any history of payment default to TSP under the PoC mechanism.

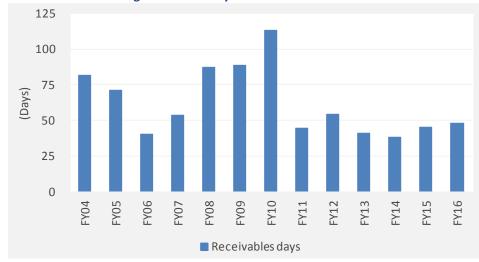


Chart 17: PGCIL's average receivable days at around 45

Source: PGCIL

Payment security: The TSA includes an arrangement for payment security, which reduces under-recovery of revenue. Payment security is available in terms of a revolving letter of credit of required amount that can be utilised to meet the revenue requirement in case of a shortfall.

Relatively low probability of default: Beneficiaries are less likely to default on transmission charges as there is limited alternative infrastructure to supply/off take power. In fact, transmission licensees have the right to restrict long-/medium-term access to transmission network. As per CERC's order, dated September 2, 2015, on regulation of power supply, PGCIL in consultation with Power System Operation Corporation (POSOCO) can deny STOA/MTOA/LTA to the defaulting utility, which can be treated as a transmission constraint and POSOCO may issue a schedule to the defaulting beneficiary in case of transmission constraint.

Transmission: Tariff structure and system availability

The electricity transmission tariff is collected and paid in the form of transmission charges by CTU. The tariff rates comprise a fixed non-escalable charge, a variable escalable charge and incentives for actual availability beyond the target availability of 95%/98% for the Initial Portfolio Assets.

Non-escalable charges and escalable charges: Non-escalable charges are fixed, detailed in the TSA and tariff order and paid as part of transmission charges. These charges are billed on monthly basis by CTU. Escalable charges are variable, which are only fixed in the TSA and tariff

order for first year of scheduled operations and vary in subsequent years according to CERC's escalation index, which is determined by the commission semi-annually from a formula linked to the inflation rate in India. Any change in inflation rate will directly impact escalable charges paid and revenue from operations.

Availability determined incentive payments and penalties: The availability-based tariff regime incentivises transmission system operators to provide the highest possible system reliability. System reliability is measured as availability, which is defined as time in hours during a given period for which the transmission system is capable of transmitting electricity at its rated voltage, expressed as a percentage of total hours in the period. CERC Tariff Regulations provide specific guidance on the calculation of availability and take into account elements in the transmission system (including transmission lines, transformers and substations) as well as the reason for any outages, with force majeure outages being excluded from the calculation. Maintaining availability of 95%/98% entitles the IPA to receive incentive revenue with maximum incentive revenue earned for maintaining availability of 95/98%. ATL receives incentive payments under TSAs of the Initial Portfolio Assets if availability exceeds 95%/98%. If annual average availability rate falls below 95%/98%, the developer/operator could attract penalties under the TSA, subject to force majeure. In the event of failure to maintain the target availability of 95%/98% for 6 consecutive months, the LTTC may exercise its right of termination under the TSA. Historically, the Initial Portfolio Assets have maintained annual average system availability above 95%/98%, and, accordingly, have earned incentives and have never been subject to penalties. In FY16 and FY15, incentive payments of INR115.41mn and INR10.35mn, were earned representing 3.26% and 1.73% of revenues from operations, respectively.

Surcharge: In accordance with the Sharing of Charges and Losses Regulations, a transmission licensee is entitled to recover its tariff from ISTS charges collected by CTU. If there is any failure or delay on part of long-term transmission customers (LTTCs) to make the requisite payments to CTU, which affects the CTU's capability to make corresponding payments to the company as a transmission licensee, the developer/operator is entitled to a delayed payment charge from LTTCs at the rate of 15% per year, under CERC regulations.

Transmission projects: Favourable risk-return

Transmission projects have a better risk-return profile and are one of the most favoured investment opportunities. A few reasons in favour of transmission projects are:

- Returns from various infrastructure projects like roads, ports and power generation depend mostly on the operational performance of assets, which in turn is dependent on factors on which developers have limited control.
- 2) While in case of transmission projects (particularly inter-state transmission projects) the revenue counter party is a pool of distribution and generation companies, reducing the counter-party risk based on account of diversification.
- 3) In case of an inter-state transmission asset, the revenue stream is consistent based on the unitary charge determined at the time of bidding for the entire concession period of 35 years. These charges are independent of the total power transmitted via transmission lines and hence factors such as volume and traffic do not fluctuate revenue.
- 4) Moreover, inter-state transmission assets have limited O&M costs compared to other infrastructure assets. Typically, transmission projects incur relatively low O&M cost of 7-

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8% of revenue to ensure normative availability. In comparison, road projects incur 35-40% as 0&M costs.

5) In addition, transmission lines could also be used for providing telecom services, thereby diversifying the revenue profile.

Fig. 8: Comparison of other infrastructure assets with transmission assets

	Inter State Power Transmission	Power Generation	Roads	Ports
Certainty of Cash Flows	Driven by long-term agreements	Offtake and cost of fuel key risk	Traffic risk in BOT projects	End-user industry risk
Counter Party Risk	Exposure limited to systemic risk	Direct exposure to debt-laden SEBs	Cost over-runs, limited O&M impact toll collection	Exposure to multiple end- users
Operational Risk	Limited O&M requirements	Substantial periodic maintenance needs	High O&M required	Limited O&M requirements
Future Growth Potential	Severe deficit in power transmission capacity	High potential given power deficit situation	High growth potential	Good potential, limited by feasible locations
Competitive Environment	Few credible private players	High competitive given multiple players	Highly competitive given multiple private players	Few private players
Summary				

Source: Indigrid DHRP

Financial Statements - Consolidated

Year	FY16	FY17	FY18E	FY19E
Macro				
GDP(Y-o-Y %)	7.9	6.6	6.8	7.4
Inflation (Avg)	4.9	4.5	4.0	4.5
Reporate (exit rate)	6.75	6.25	5.75	5.75
USD/INR (Avg)	65.5	67.1	65.0	66.0
Company				
Capacity (ckms)	5,509	5,448	8,969	11,338
Utilisation levels (%)	98	98	98	98
Average cost of debt (%)	12.1	10.1	9.0	8.5
Blended tax rate (%)	8.2	8.2	21.9	23.1
Revenue mix - % of total revenue				
Transmission revenue (%)	70	72	56	78
Trading revenue	30	28	18	22
True up revenue	0	0	26	0

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Income statement				(INR mn)
Year to March	FY16	FY17	FY18E	FY19E
Income from operations	21,970	28,795	46,146	37,792
Operating expenses	912	951	918	1,089
Employee expenses	307	459	444	526
Other expenses	1,485	7,554	8,193	8,220
Total operating expenses	2,705	8,964	9,555	9,835
EBITDA	19,266	19,831	36,591	27,957
Depreciation and amortisation	5,597	5,693	7,131	8,389
EBIT	13,669	14,138	29,460	19,568
Less: Interest Expense	9,573	9,040	8,859	9,918
Add: Other income	704	221	408	547
Add: Exceptional items	0	0	0	0
Profit before tax	4,800	5,319	21,009	10,197
Less: Provision for Tax	1,120	1,155	4,507	2,223
Less: Minority Interest	0	0	312	306
Add: Share of profit from assoc.	0	0	0	0
Reported Profit	3,680	4,164	16,190	7,668
Less: Excep. Items (Net of Tax)	0	0	0	0
Adjusted Profit	3,680	4,164	16,190	7,668
No. of Shares outstanding (mn)	1,100	1,100	1,100	1,100
Adjusted Basic EPS	3	4	15	7
No. of Dil. SO (mn)	1,100	1,100	1,100	1,100
Adjusted Diluted EPS	3	4	15	7
Adjusted Cash EPS	8	9	21	15
Dividend per share (DPS)	0	0	0	0
Dividend Payout Ratio (%)	0	0	0	0

Common size metrics- as % of net revenues

Year to March	FY16	FY17	FY18E	FY19E
Operating expenses	12.3	31.1	20.7	26.0
Depreciation and amortization	25.5	19.8	15.5	22.2
Interest expenditure	43.6	31.4	19.2	26.2
EBITDA margins	87.7	68.9	79.3	74.0
Net profit margins	16.7	14.5	35.8	21.1

Growth metrics (%)

Year to March	FY16	FY17	FY18E	FY19E
Revenues		31.1	60.3	(18.1)
EBITDA		2.9	84.5	(23.6)
PBT		10.8	295.0	(51.5)
Adjusted Profit		13.2	288.8	(52.6)
EPS		13.2	288.8	(52.6)

Edelweiss Securities Limit

Adani Transmission

Balance Sheet				(INR mn)
As on 31st March	FY16	FY17	FY18E	FY19E
Share capital	10,998	10,998	10,998	10,998
Reserves & Surplus	15,720	18,467	36,460	43,877
Shareholders' funds	26,718	29,465	47,458	54,875
Long term borrowings	50,938	80,435	1,09,453	1,11,491
Short term borrowings	28,454	9,313	9,313	9,313
Total Borrowings	79,392	89,748	1,18,765	1,20,804
Long Term Liabilities & Prov.	89	2,513	1,847	1,847
Sources of funds	1,06,199	1,21,726	1,68,071	1,77,526
Gross Block	1,06,201	1,09,821	1,29,560	1,63,317
Net Block	1,00,604	98,532	1,11,140	1,36,508
Capital work in progress	2,582	13,426	30,178	5,780
Total Fixed Assets	1,03,186	1,11,959	1,41,318	1,42,288
Long term loans and advances	953	2,119	997	275
Other non current assets	296	263	263	263
Cash and cash equivalents	1,514	3,932	23,284	31,403
Inventories	218	387	387	387
Sundry Debtors	1,824	1,896	3,305	4,092
Loans & Advances	9,234	0	0	0
Other Current Assets	233	7,556	3,212	3,514
Total Current Assets (ex cash)	11,508	9,838	6,903	7,992
Trade payable	81	272	200	200
Ot. Cur. Liab. & Short Term Prov.	11,177	6,113	4,495	4,495
Total Current Liab. & Prov.	11,258	6,385	4,694	4,694
Net Current Assets (ex cash)	250	3,454	2,209	3,298
Uses of funds	1,06,199	1,21,726	1,68,071	1,77,526
Book Value per share (INR)	24.3	26.8	43.2	49.9

Free cash flow				
Year to March	FY16	FY17	FY18E	FY19E
Reported profit	3,680	4,164	16,190	7,668
Add: Non cash charges				
Depreciation	5,597	5,693	7,131	8,389
Interest (Net of Tax)	9,573	8,299	8,135	7,747
Less: Changes in W. C.		-3,204	1,244	-1,089
Others	-3,413	6,935	666	2,096
Operating cash flow	15,436	21,888	33,366	24,811
Less: Capex	-7,339	-13,593	-22,989	-9,360
Free cash flow	8,096	8,295	10,377	15,451

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Profitability & liquidity ratios				
Year to March	FY16	FY17	FY18E	FY19E
ROAE (%)	13.8	14.8	42.9	15.6
Pre-tax ROCE (%)		12.7	20.9	11.8
Inventory Days	33.1	13.0	15.5	15.2
Debtors Days	30.3	23.6	20.6	35.7
Payble Days	10.9	7.2	9.0	7.4
Cash Conversion Cycle	52.5	29.4	27.1	43.5
Current Ratio	1.2	2.2	6.4	8.4
Gross Debt/EBITDA	4.1	4.5	3.2	4.3
Gross Debt/Equity	3.0	3.0	2.5	2.2
Interest Coverage Ratio	1.4	1.6	3.3	2.0
Adjusted debt/Equity	3.0	3.0	2.5	2.2

Operating ratios				
Year to March	FY16	FY17	FY18E	FY19E
Total Asset Turnover	0.2	0.3	0.3	0.2
Fixed Asset Turnover		0.3	0.4	0.3
Equity Turnover		1.0	1.2	0.7

Valuation parameters				
Year to March	FY16	FY17	FY18E	FY19E
Adjusted Diluted EPS (INR)	3.3	3.8	14.7	7.0
Y-o-Y growth (%)	0.0	13.2	288.8	(52.6)
Adjusted Cash EPS (INR)	8.4	9.0	21.2	14.6
Diluted Price to Earnings Ratio (P/	38.6	34.1	8.8	18.5
Price to Book Ratio (P/B) (x)	5.3	4.8	3.0	2.6
Enterprise Value / Sales (x)	10.0	7.9	5.1	6.1
Enterprise Value / EBITDA (x)	11.4	11.5	6.5	8.3
Dividend Yield (%)	0.0	0.0	0.0	0.0

Peer comparison

Common Nome	Mkt Cap.	Ent. Val.	EV/EBI	TDA	P/E		ROE	
Company Name	(USD mn)	(USD mn)	FY18E	FY19E	FY18E	FY19E	FY18E	FY19E
Adani Transmission	2,424	3,682	6.5	8.3	8.8	18.5	42.9	15.6
Power Grid	17,389	34,255	8.4	7.7	12.6	10.8	17.4	18.1

Source: Edelweiss research

Additional data

Directors data

Gautam S Adani	Chairman	Laxmi Narayana Mishra	Whole Time Director
Rajesh S Adani	Director	K Jairaj	Director
Kaushal G Shah	Chief Financial Officer	Ravindra H Dholakia	Director
Jaladhi Shukla	Company Secretary & Compliance Officer	Meera Shankar	Director

Holding – Top 10

	Perc. Holding		Perc. Holding
Elara India Opportunities Fund	4.26	Cresta Fund Ltd	3.83
Afro Asia Ind Ltd	2.75	Worldwide Emerge Mkt Hldg	2.75
Life Insurance Corp Of India	2.55	Dimensional Fund Advisors Lp	0.55
Blackrock	0.30	Blackrock	0.31
Wisdomtree Investments Inc	0.12	Sydinvest International	0.13

*as per last available data

Bulk Deals

Data	Acquired / Seller	B/S	Qty Traded	Price	
No Data Available					

*in last one year

Insider Trades

Reporting Date	Acquirer / Seller	B/S	Quantity Traded
7-Apr-17	Parsa Kente Rail Infra LLP	Buy	99491719
7-Apr-17	Worldwide Emerging Market Holding Ltd.	Buy	30249700
7-Apr-17	Universal Trade and Investments Ltd.	Buy	30249700
7-Apr-17	Afro Asia Trade and Investments Ltd.	Buy	30249700
7-Apr-17	Vinod Shantilal Adani	Sell	90749100
3-Apr-17	PARSA KENTE RAIL INFRA PRIVATE LIMITED	Buy	99491719
3-Apr-17	Adani Properties Pvt. Ltd.	Sell	99491719
5-Apr-17	Afro Asia Trade and Investments Ltd.	Buy	30249700
5-Apr-17	Parsa Kente Rail Infra LLP	Buy	99491719
5-Apr-17	Universal Trade and Investments Ltd.	Buy	30249700
5-Apr-17	Worldwide Emerging Market Holding Ltd.	Buy	30249700
5-Apr-17	Vinod Shantilal Adani	Sell	90749100
6-Apr-17	Parsa Kente Rail Infra LLP	Buy	99491719
6-Apr-17	Afro Asia Trade and Investments Ltd.	Buy	30249700
6-Apr-17	Worldwide Emerging Market Holding Ltd.	Buy	30249700
6-Apr-17	Universal Trade and Investments Ltd.	Buy	30249700
6-Apr-17	Vinod Shantilal Adani	Sell	90749100
7-Apr-17	Parsa Kente Rail Infra LLP	Buy	99491719
7-Apr-17	Worldwide Emerging Market Holding Ltd.	Buy	30249700
7-Apr-17	Universal Trade and Investments Ltd.	Buy	30249700
7-Apr-17	Afro Asia Trade and Investments Ltd.	Buy	30249700
7-Apr-17	Vinod Shantilal Adani	Sell	90749100

*in last one year

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Coverage group(s) of stocks by primary analyst(s): Power

Adani Power, CESC, JSW Energy, NTPC, PTC India, Power Grid Corp of India, Tata Power Co

Recent Research Date Company Title Price (INR) Recos 14-Aug-17 CESC Stable quarter; ample triggers Buy in store; Visit Note 12-Aug-17 JSW Revenue miss; unrelated Hold 64 diversification a risk?; Energy Result Update No sign of relief yet; 11-Aug-17 Adani 27 Hold Result Update Power

Distribution of Ratings / Market Cap					
Edelweiss Research Coverage Universe					
		Buy	Hold	Reduce	Total
Rating Distribution* * 1stocks under rev		161	67	11	240
	> 50bn Between 10bn and 50 bn				< 10bn
Market Cap (INR)	156		62		11

Rating Interpretation Rating Expected to Buy appreciate more than 15% over a 12-month period Hold appreciate up to 15% over a 12-month period Reduce depreciate more than 5% over a 12-month period



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