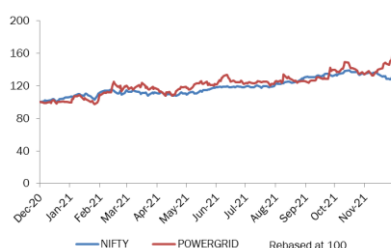


Transmitting Power.....Illuminating Nation

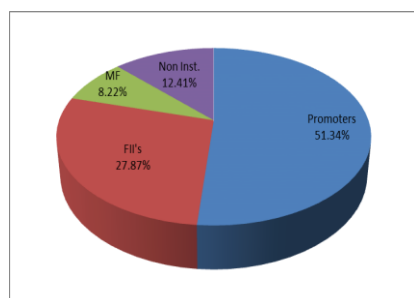
BUY

Sector	: Electric Utility
Target Price	: ₹ 242
Current Market Price	: ₹ 204
Market Cap	: ₹ 1,42,613 Crore
52-week High/Low	: ₹ 216/137
Daily Avg Vol (12M)	: 121, 26,413
Face Value	: ₹ 10
Beta	: 0.735
Pledged Shares	: NIL
Year End	: March
BSE Scrip Code	: 532898
NSE Scrip Code	: POWERGRID
Bloomberg Code	: PWGR IN
Reuters Code	: PGRD.NS
Nifty	: 17,368
BSE Sensex	: 58,283
Analyst	: Ruchika Dhanuka

Price Performance



Shareholding Pattern



Initiating Coverage

Investment Summary

- Power Grid Corporation of India (PGCIL) is the largest electric power transmission utility. It holds the leadership position in the Indian Power Transmission sector.
- The company has a high operational efficiency and strong execution track record. During FY 20-21, the PGCIL achieved system availability of 99.78%. The trippings per line decreased to 0.36, which is lowest in last five years.
- Strong power generation capacity additions in the country will augment the growth in the transmission lines. Power demand in India is estimated to grow 8-8.5% in FY22, according to ICRA.
- High capex outlay will lead to revenue traction. PGCIL has a capex target of ₹ 7,500 crores for FY22 of which ₹ 3,695 crores has already been incurred in the 1HFY22.
- PGCIL has been consistent in rewarding its shareholders by way of distributing dividends. There has been an increase in dividend payout since past five years.
- Diversification in Consultancy and Telecom businesses along with other related businesses like EV charging, Energy Management and Rooftop solar systems will further add on to the revenue growth of PGCIL going ahead.
- Universal access to electricity, growth in consumer income, urbanisation, housing, railways & metros, industrial activities are to fuel India's power demand. PGCIL is expected to garner a substantial portion of the business potential in the Indian power transmission sector. Our valuation at 10x FY24EPS generates a target price of ₹ 242 with 18% potential from levels now, signalling a BUY rating. At our Target price of ₹ 242, the stock trades at 2x FY24E P/BV.

Key Financial Metrics

₹ Crores	FY19A	FY20A	FY21A	FY22E	FY23E	FY24E
Total income	35,059	37,744	39,640	43,015	45,381	48,104
Growth		7.7%	5.0%	8.5%	9.0%	10.0%
EBIT	20,282	22,261	24,138	26,984	28,565	30,433
PAT	10,034	11,059	12,036	15,017	15,748	16,879
PAT margin	28.6%	29.3%	30.4%	34.9%	34.7%	35.1%
Diluted EPS (₹)*	14.38	15.85	17.26	21.53	22.58	24.20

Source: Company data; Khambatta Research, *Adjusted post Bonus issue

Power Grid Corporation of India Ltd**14 December 2021**

**PGCIL- A “Maharatna” CPSE,
with GOI shareholding of
51.34%**

Company Profile

Power Grid Corporation of India Limited (PGCIL), is a ‘Maharatna’ Public Sector Enterprise of Government of India (GOI) which was incorporated on 23rd October 1989. It is engaged in the core business of bulk Power Transmission through its Inter-State Transmission system. It is India’s 3rd largest CPSE (Central Public Sector Enterprise) in terms of Gross Block with GOI shareholding of 51.34%. The company currently has 22 subsidiaries and 10 joint ventures. PGCIL has diversified into Telecom and Consultancy business and is providing services to Domestic and International clients with Global footprints in 21 countries.

PGCIL being one of the Largest Transmission Utility in the World is playing a strategic role in the development of Indian Power Sector and has proved its capabilities time and again to execute the large transmission projects on schedule. POWERGRID owns and operates the inter-State transmission network of the country and transmission system availability is consistently maintained over 99%, at par with international utilities, by deploying best Operation and Maintenance practices. A strong and vibrant National Grid has already been established in the country and is being augmented continuously to facilitate growing power transmission requirement with reliability. The present Inter-Regional power transfer capacity of PGCIL stands at 95,790 MW (greater than 85% of India’s capacity).

Management Profile

Mr K. Sreekant, the Chairman & Managing Director of PGCIL since August 2019, is CMA and PGDM (Finance) from Management Development Institute, Gurgaon. He has over 34 years of experience in the power sector in the areas of long term financial planning, investment appraisals, formulation of capital budgets, resource mobilization from domestic and international markets, corporate accounts, commercial, regulatory affairs and enterprise resource planning systems.

Mr M. Taj Mukarrum, Director (Finance) of PGCIL since July 2020, is an M.B.A.-Finance from Osmania University, Hyderabad. He had started his career in 1984 as an Executive Trainee in NTPC Limited. He has gained experience in the core areas of Finance & Accounts such as Financial Concurrence, Risk Management, Treasury Management, Financial due diligence of Projects, Long term financial planning, Investment Appraisals, Capital Budgeting and Resource mobilization.

The Board of PGCIL consists of 11 members, including two Government appointees and four eminent Independent Directors.

**Board consists of 11
noteworthy Members**

Power Grid Corporation of India Ltd

14 December 2021

India -3rd largest producer and 2nd largest consumer of Electricity in the world

Industry Overview

Electricity is one of the most critical component of infrastructure for economic growth and welfare of the nations. For sustained economic growth of the country, development of suitable power infrastructure is essential. Despite being the second largest electricity consumer in the world, the per capita electricity consumption in India was 1,208 kWh (FY 2019-20) and is considerably low as compared to the world average of more than 3,200 kWh. Lower consumption base and a decent long term GDP growth forecast implies that power demand will grow over the foreseeable future.

For energy security and sustained long term growth, Government of India, through its various policy and reform initiatives is making continuous efforts for facilitating establishment of clean and green electricity generating capacities together with development of related transmission and distribution infrastructure.

Installed Generation Capacity (Sector wise) – as on 31.10.2021

Sector	MW	% of Total
Central Sector	98,297	25.20%
State Sector	1,04,373	26.70%
Private Sector	1,88,122	48.10%
Total	3,90,791	

Source: Central Electricity Authority (CEA)

Total Generation and growth over previous year

Year	Total Generation (Including Renewable Sources) (BU)	% of growth
2009-10	808.498	7.56
2010-11	850.387	5.59
2011-12	928.113	9.14
2012-13	969.506	4.46
2013-14	1,020.20	5.23
2014-15	1,110.39	8.84
2015-16	1,173.60	5.69
2016-17	1,241.69	5.8
2017-18	1,308.15	5.35
2018-19	1,376.10	5.19
2019-20	1,389.10	0.95
2020-21	1,381.83	-2.49
2021-22 *	886.362	11.27

Source: Central Electricity Authority(CEA), * Upto Oct 2021 (Provisional)

Power Grid Corporation of India Ltd

14 December 2021

India's power sector is one of the most diversified in the world. Sources of power generation range from conventional sources such as coal, lignite, natural gas, oil, hydro and nuclear power to viable non-conventional sources such as wind, solar, and agricultural and domestic waste. Electricity demand in the country has increased rapidly and is expected to rise further in the years to come. In order to meet the increasing demand for electricity in the country, massive addition to the installed generating capacity is required.

Peak power and energy deficits have considerably reduced over the years. The shortages in peak power and energy have reduced primarily due to addition in generation capacity, expansion of transmission systems and accomplishment of 'One Nation - One Grid - One Frequency' which has led to the creation of a vibrant electricity power market in India.

The power supply position in the country during 2009-10 to 2021-22 :

Year	Energy				Peak			
	Requirement	Availability	Surplus(+)/ Deficts(-)		Peak Demand	Peak Met	Surplus(+)/ Deficts(-)	
	(MU)	(MU)	(MU)	(%)	(MW)	(MW)	(MW)	(%)
2009-10	8,30,594	7,46,644	-83,950	-10.1	1,19,166	1,04,009	-15,157	-12.7
2010-11	8,61,591	7,88,355	-73,236	-8.5	1,22,287	1,10,256	-12,031	-9.8
2011-12	9,37,199	8,57,886	-79,313	-8.5	1,30,006	1,16,191	-13,815	-10.6
2012-13	9,95,557	9,08,652	-86,905	-8.7	1,35,453	1,23,294	-12,159	-9
2013-14	10,02,257	9,59,829	-42,428	-4.2	1,35,918	1,29,815	-6,103	-4.5
2014-15	10,68,923	10,30,785	-38,138	-3.6	1,48,166	1,41,160	-7,006	-4.7
2015-16	11,14,408	10,90,850	-23,558	-2.1	1,53,366	1,48,463	-4,903	-3.2
2016-17	11,42,929	11,35,334	-7,595	-0.7	1,59,542	1,56,934	-2,608	-1.6
2017-18	12,13,326	12,04,697	-8,629	-0.7	1,64,066	1,60,752	-3,314	-2
2018-19	12,74,595	12,67,526	-7,070	-0.6	1,77,022	1,75,528	-1,494	-0.8
2019-20	12,91,010	12,84,444	-6,566	-0.5	1,83,804	1,82,533	-1,271	-0.7
2020-21	12,75,534	12,70,663	-4,871	-0.4	1,90,198	1,89,395	-802	-0.4
2021-22*	8,21,705	8,17,816	-3,889	-0.5	2,03,014	2,00,539	-2,475	-1.2

Source : CEA, * Upto Oct 2021 (Provisional)

Power Grid Corporation of India Ltd

14 December 2021

As of August 2020, the total transmission line length stood at 728,582 ckm (220 kv and above) and the AC substation capacity stood at 956,003MVA. While the line length grew at a CAGR of 6.5%, AC Substation capacity has grown at about 11.3% between 2011-12 to 2019-20. Interregional (IR) transmission capacity has also grown significantly over the years and stood at 102,050 MW as of March 2020. Significantly, 27,000 MW of IR transfer capacity has been added during the past three years. As a result, IR power transfer increased from 138BU's in 2016-17 to over 197 BU's in 2019-20. The plan is to add another 16,000 MW by 2022 and take the IR transfer capacity to 118,050 MW.

In the recent years, the transmission segment has witnessed a significant increase in private participation, with the share of private players in the total line length increasing from 3.3% in 2011-12 to 7.4% in 2019-20, and that of substation capacity increasing from 0.5% to 4%. However, PGCIL continues to dominate the Country's transmission sector with 170,724 ckm of transmission lines and 95,790 of IR capacity.

Power Transmission sector growth

	FY 15-16	FY 19-20	FY 20-21	Growth (1 year)	Growth (FY16-21 CAGR)
Transmission Lines (ckm)	3,41,551	4,25,071	4,41,821	3.94%	5.28%
Transformation Capacity (MVA)	6,58,949	9,67,893	10,25,468	5.95%	9.25%
Inter-Regional Power Transfer Capacity (MW)	58,050	1,02,020	1,05,050	2.94%	12.59%
Inter-Regional Power Transfer (BU)	117.03	197.21	214.77	8.90%	12.91%

Source: Central Electricity Authority (CEA), Power system Operation Corporation Limited (POSOCO)

India's T&D losses – over 20% of Power Generation

India's transmission and distribution (T&D) losses in the power sector are substantial and are very high compared to peer nations, flagged the Economic Survey for 2020-21. The T&D losses represent electricity that is generated but does not reach intended customers. India's T&D losses have been over 20% of generation, which is more than twice the world average. The ideal level of T&D losses ranges between 6-8%. According to the Central Electricity Authority's report of October, 2020 the T&D losses had declined to 20.66 per cent in 2018-19, from 21.04 per cent in 2017-18, and 21.42 per cent in 2016-17. T&D losses have been declining since 2001-02 but are still extensive as compared to the T&D losses of the peer countries.

High Generation capacities to aid expansion in Transmission network

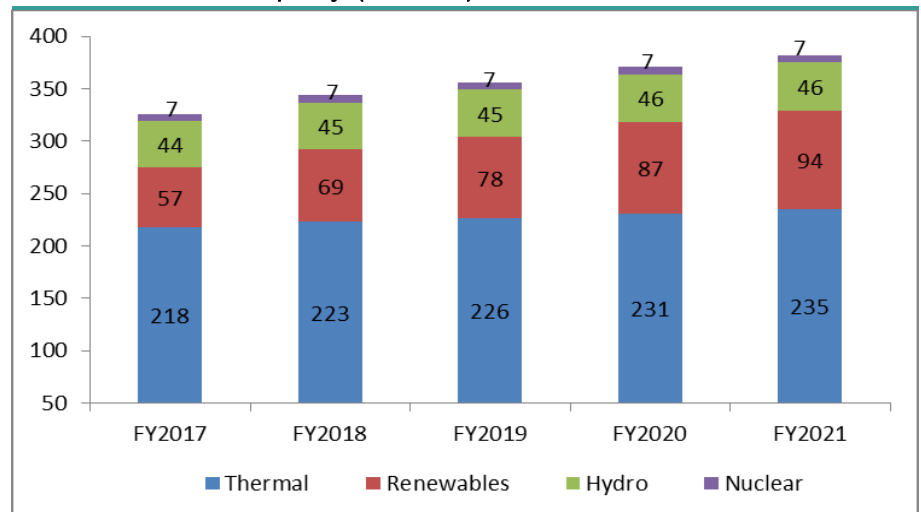
Investment Thesis

Strong power generation capacity additions to augment the growth in the transmission lines

Growth in Transmission business is mainly determined by the investments in the new power generation capacities. Therefore growth in power generation capacities will form a basis for the growth in PGCIL’s revenue. Despite the Indian Power sector having the Third largest electricity generation capacity in the world there is a power deficit in the country. Therefore the focus of Ministry of Power is on investing more in the power generation to meet the demand supply gap. Power demand in India is estimated to grow 8-8.5% in FY22, according to ICRA, which will lead to the growth in the installed power generation capacities.

During the last 5 years, there has been consistent growth in the installed generation and transmission infrastructure in the country driven by additions in both thermal and Renewable Energy (RE) generation.

Installed Generation Capacity ('000 MW)



Source: Central Electricity Authority (CEA)

Universal access to electricity, growth in consumer income, urbanisation, housing, railways & metros, industrial activities are to fuel India’s power demand year on year. India’s low per capita consumption of electricity compared to global average presents significant potential for sustainable growth in power demand in the country. Strong and reliable transmission system is as critical as higher installed capacity of power generation. Therefore strong generation capacity addition ensures robust transmission capex and growth in transmission lines.

**Strong Transmission grid
ensures uninterrupted supply
of power**



Source: U.S. Energy Information Administration

Regional disparity in demand/supply of power to ensure longer & strong transmission network

The Indian power system has historically been divided into five regions for the planning and operation of electricity generation, transmission and distribution, namely the Northern, Southern, Eastern, Western and North-Eastern Regions. One of the causes of concern for the transmission business is effective exploitation of generating resources which are unevenly distributed in the country. The power generation plant needs to be located at a place close to the availability of the basic fuel used for generation.

In addition to proximity to demand and power plant economics, the installed capacity in each grid region partially reflects where resources are located. The Eastern Region has the largest coal reserves in the country. Although its capacity mix is dominated by coal, this region is relatively small and accounted for only 14% of India's total coal-fired capacity as of 2018. Hydroelectric is the second-largest source of generating capacity in India, and most of the capacity (44% of the country's hydropower capacity) is located in the hydro-rich Northern Region. The Western Region has the largest electricity demand, and it maintains the largest share of coal-fired generating capacity (37% of the country's capacity) and natural gas-fired generating capacity (44% of the country's capacity) and has access to more than half of India's liquefied natural gas import capacity. The Northern Region has the second highest coal-fired generating capacity (26% of the country's capacity); however, the region has the second-lowest proven coal and lignite reserves. The majority of wind and solar power plants are located in the Southern Region and Western Region, where wind resources are highest. Solar capacity is more concentrated in the Southern Region, which holds more than 50% of the country's total installed solar capacity.

One of the overriding tasks of transmission business is to move electricity from the high generation regions to the high-consumption regions as it is much more economical to transmit power to the place of demand rather than transporting the fuel itself. In order to ensure the reliable supply of power and efficient utilization of generating capacity, a strong interconnected transmission grid is required, which interconnects various generating stations. This ensures an uninterrupted supply of power to a load center, even if there is a failure at the local generating station or a maintenance shutdown.

Leadership position in Indian power transmission sector

PGCIL is India's principal power transmission company, operating primarily in inter-State transmission sector and is one of the largest transmission companies in the world. The company's robust & large power transmission network includes 1330 number of Transmission lines of about 1,70,724 ckm. It has 262 substations with capacity of 4, 54,350 MVA. PGCIL operates more than 85% of India's total Interregional capacity. Looking at the substantial growth opportunities in the Indian power transmission sector PGCIL is geared up to garner a substantial portion of the business potential

Power Grid Corporation of India Ltd

14 December 2021

in the sector. Power Grid being the leader in the Indian power transmission sector, will be the biggest beneficiary in the future as there are huge growth opportunities to shore up the transmission network to cater to the growth in the power generation capacities.

High Operational efficiency and strong execution track record

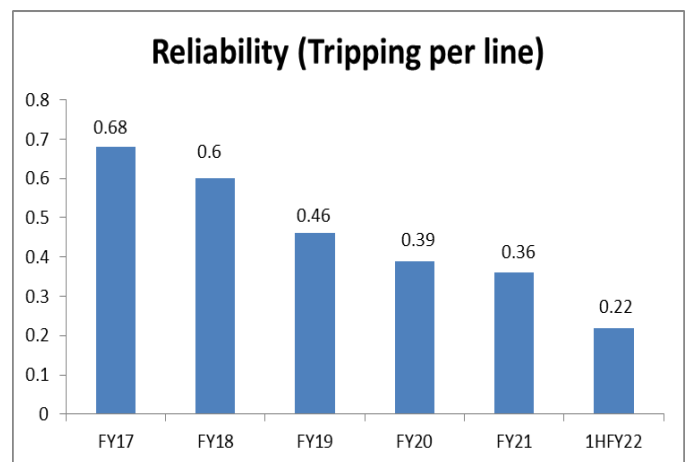
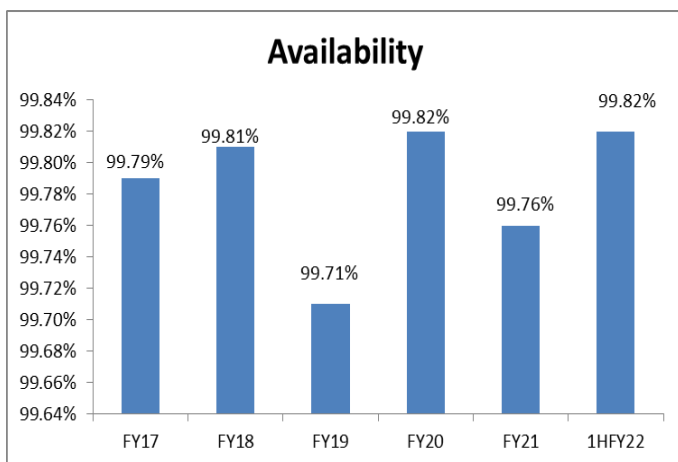
Power grid has maintained an average availability of over 99% for transmission system since past 5 years and there has been no major grid disturbance, meaning an interruption affecting an entire region or an inter-regional transmission system. In order to ensure high rates of availability for transmission systems, it monitors and maintains infrastructure using modern techniques and technologies. The operation and maintenance activities of PGCIL are ISO certified. Periodic reviews are conducted at substations and line offices to evaluate the implementation of systems and procedures and enhance the efficiency of operations. During the 1HFY22, the company achieved system availability of 99.82% and trippings per line decreased to 0.22, which is the lowest in the past 5 years.

Benefiting from this high operational efficiency, Power Grid has been able to record a strong execution track record. PGCIL has been acknowledged as the Fastest Growing Electric Utility in Asia Pacific for 7th Successive year and Globally positioned as the 4th Fastest Growing Electric Utility. As at September 30, 2021, it owned and operated 1,70,724 circuit kilometers of electrical transmission lines and 262 electrical substations. As on May, 2021 PGCIL had Inter – Regional (IR) capacity of 90,090 MW, constituting to nearly 85% of the total India’s IR capacity.

PGCIL- The Fastest Growing Electric Utility in Asia Pacific

System Availability

Tripping per line



Source: Company data, Khambatta Research

Power Grid Corporation of India Ltd

14 December 2021

High capex outlay by PGCIL to result in revenue traction

The revenues of Power Grid are impacted by the capital expenditure incurred by the company over the years. Historically, power grid has always met its capital expenditure target emanating from strong operational efficiency and also due to critical nature of transmission lines project as any delay in them will result in power generation not getting evacuated. PGCIL has a capex target of ₹ 7,500 crores for FY22 of which ₹ 3,695 crores has already been incurred in the 1HFY22. The current work in hand for PGCIL stands at ₹ 27,500 crores comprising of ongoing projects (₹ 10,300 crores), New Projects (₹ 3,400 crores) and TBCB projects (₹ 13,800 crores). The growth in capex incurred has a positive impact on the bottom-line of the company. The investment made in building the transmission infrastructure translates into income for the company in the form of transmission charges as decided by the CERC regulations which is the major source of revenue for Power Grid.

Transmission segment- The major Revenue driver

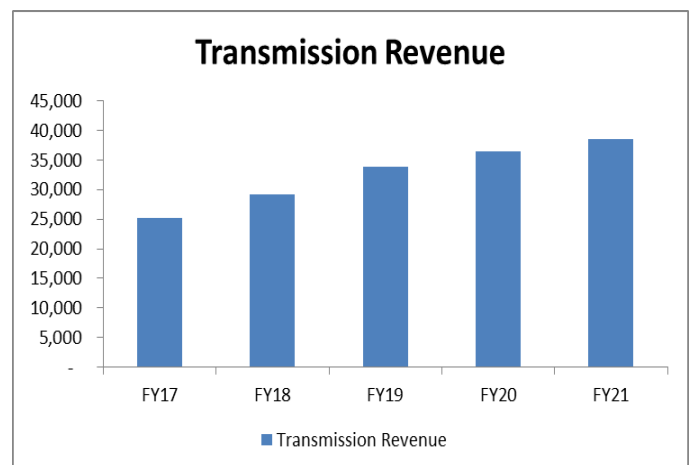
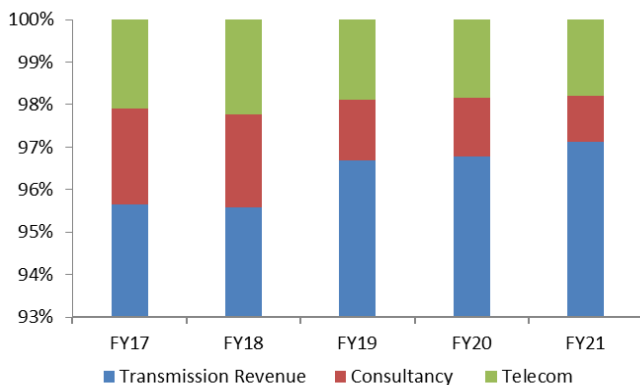
Your Company, India’s principal power transmission company, is operating primarily in inter-State transmission sector and is one of the largest transmission companies in the world. PGCIL is a leader in the sector. Looking to the substantial growth opportunities in the Indian power transmission sector, Power Grid is geared up to garner a substantial portion of the business potential in the sector. During the past five years, more than 95% of the total Revenues of PGCIL is derived from the Transmission segment. The management has highlighted business opportunity of ₹26,500 crores worth of interstate transmission projects through bidding.

The Below table illustrates the segmental revenue break-up of PGCIL and the contribution of Transmission segment to total revenue:

Transmission Segment contributes more than 95% of the total revenues

Segment Revenue Break-up

Transmission Revenue (₹Crore)



Source: Company data, Khambatta Research

PGCIL has been discharging statutory functions of India’s Central Transmission Utility (CTU) since 1998. Govt has notified ‘Central Transmission Utility of India Limited’ (CTUIL), a Government Company and wholly owned

Power Grid Corporation of India Ltd

14 December 2021

Subsidiary of PGCIL, as ‘Central Transmission Utility’ (CTU) with effect from April 1, 2021 to undertake and discharge all functions of CTU pursuant to the provisions of the Electricity Act, 2003. PGCIL shall continue to be a deemed Transmission Licensee under the Act and discharge functions incidental and connected therewith. The CTU functions are not commercial oriented and therefore are not expected to have material impact on the business operations of the Company.

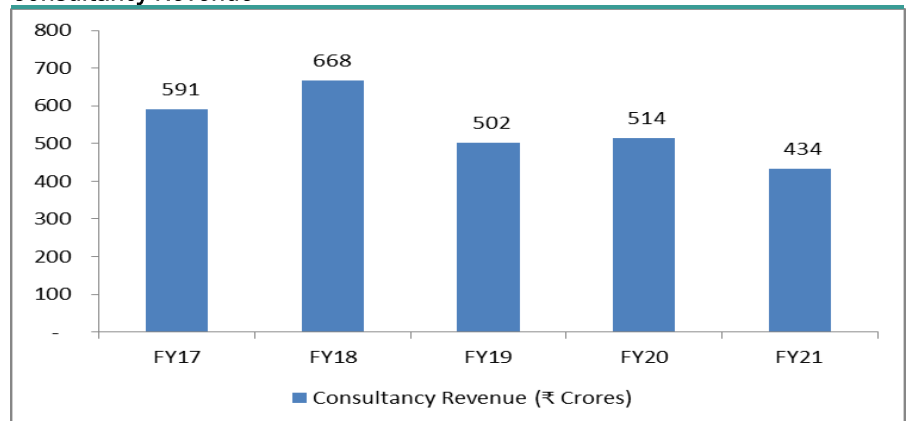
Diversification in Consultancy and Telecom Segment to add value

Consultancy

Based on the rich experience earned through implementation of huge Transmission networks in India and abroad and by adopting latest technology in multifarious topology and environment, PGCIL has emerged as a renowned Consultant in Power Sector globally. It has been a pioneer in providing one stop consultancy services since 1995 to more than 150 clients. PGCIL has footprints in 21 countries worldwide with a strong foothold in South Asia, Central Asia and Africa. It provides Consultancy services in all areas of Transmission System which inter-alia includes Power System Planning, Design, Engineering, Tendering & Procurement Services, Techno-economic Feasibility Studies, Environment Impact Assessment and preparation of Resettlement Action Plan, Project Management, Construction Supervision, Operation & Maintenance, development of Telecommunication network, Load Despatch & Communication, Distribution/Rural Electrification/ Sub-transmission, Grid Management, Smart Grid & Energy Efficiency, Capacity Building etc.

A Pioneer in providing one stop consultancy services to more than 150 clients across the Globe.

Consultancy Revenue



Source: Company Data, Khambatta Research

Telecommunication:

POWERGRID with its brand name ‘POWERTEL’ in Telecom business is the only Telecom Service Provider in the Country having PAN India overhead Optic fiber network using Optical Ground Wire on power transmission lines. Power Grid forayed into the telecom business with a view to bridge the digital divide in the country and to ensure that benefits of information revolution reaches the entire length and breadth of the country. PGCIL currently owns

Power Grid Corporation of India Ltd**14 December 2021**

**PGCIL- owns and operates
~72,126 km of Telecom
Network**

and operates ~72,126 km of Telecom network. It has points of presence in 458 locations & Points of Interconnections in 780 locations. It has intra city network in 256 cities across India. PGCIL's Telecom network availability is > 99.5%.

Primarily to meet the critical communication requirements for safe and reliable grid operations, the Company has set up a pan India fiber optic-based communication network. The spare capacity of the telecom infrastructure so available is being utilized for providing commercial telecom services to various customers inter alia including telecom service providers, IT companies, Government departments, PSUs, State Governments, Defence establishments etc.

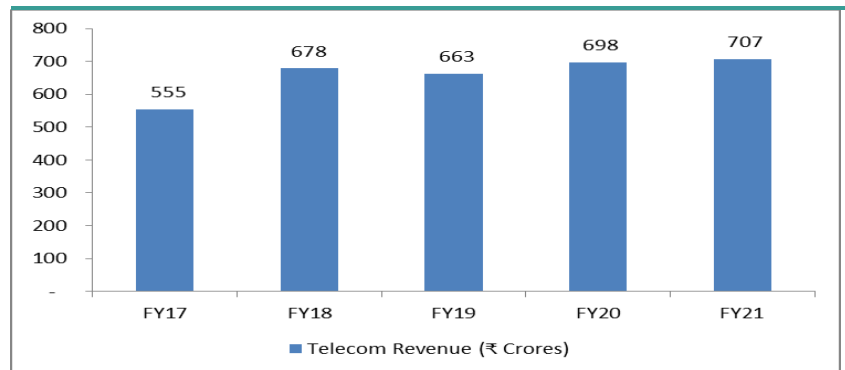
Telecommunication is one of the critical infrastructures for economic growth and has been recognized as a powerful tool of development and poverty reduction through empowerment of masses, reflecting its growing reach, better network adoption of tools and solutions that enhance digitization of systems, process and interaction across sectors. The digital products and services offered by telecom service providers and OTT players and falling retail tariffs have led to consistent increase in consumption of data over the past years. During the prevailing Covid-19 pandemic, the telecom segment has been the beneficiary as the switch over to work from home and social distancing has opened up new vistas for data consumption, especially in the areas of education, meetings, conferences, seminars, healthcare etc., thereby accelerating India's digital transformation.

The latest technological advancements in the telecom sector such as 5G, Internet of Things (IoT), Machine to Machine (M2M) interface, etc. will accelerate the need for telecom networks and technologies which are likely to provide growth opportunities for service providers like PGCIL for expanding not only the availability of telecom services but also telecom-based services. Further, increased thrust of the government on digitalization of the economy, enhanced data localization accelerated by prevailing geo-political environment are expected to increase the demand for other telecom services as well. To harness the emerging opportunities in the sector, the Company has undertaken formation of a wholly owned telecom subsidiary company. Approval from Gol & CERC has been received for formation of wholly owned subsidiary Company for Telecom business.

PGCIL is exploring new business opportunities within the telecom segment viz. setting up of Data Centres, International Long Distance (ILD) Bandwidth Business to directly serve neighboring countries with reliable connectivity.

PGCIL has applied to the Department of Telecommunication (DoT) for grant of ILD service authorization in its existing Unified License. Company is geared up to tap these opportunities and has been continuously augmenting its all-India telecom network by enhancing new bandwidth capacity in existing routes, adding new routes and new locations.

Telecom Revenue



Source: Company Data, Khambatta Research

Related Businesses - EV charging, Energy Management and Rooftop Solar Systems

The Company is promoting e-mobility by adopting Electric Vehicles (EV) for its own use and by installing fast EV charging stations across the country. In FY21, the Company set up eleven more EV fast-charging stations, with a total of 16 public EV charging stations at Delhi, Gurugram, Hyderabad, Ahmedabad, Bengaluru, Kochi & Kozhikode. Work on additional 24 public EV charging stations is in progress in Delhi, Bengaluru, Mysuru and Shillong. PGCIL is developing 11 EV charging stations in Shillong under Faster Adoption and Manufacturing of (Hybrid &) Electric Vehicles (FAME) India scheme phase-II. Discussions are in progress with various Municipal Corporations, DISCOMs, Metro Rail Authorities etc. for expanding Energy Vehicle Charging Station network.

Realizing the significance of energy saving aspect for sustainable development, PGCIL is pursuing business opportunities in energy saving by way of conducting energy audits and implementation of Energy Efficiency & Sustainable development projects in various Government as well as private agencies, e.g. industries, institutions, commercial establishments, State Transmission Utilities, etc. PGCIL is a BEE Grade-I Energy Service Company (ESCO) for investing /implementing energy efficiency projects and has a large pool of certified energy auditors/energy managers who are well qualified to offer energy efficiency solutions. During the year, the Company signed MoU with CSIR-NEERI for long term association in the area of Energy Efficiency and Sustainable Energy. The MoU would facilitate setting up Waste to Energy plants, Solid Waste Management etc. in various establishments.

To reduce carbon footprint and make operation more climate resilient, PGCIL has been installing solar street lighting and Solar PV Systems in its substation premises and office establishments. It has already installed about 6 MWp Rooftop Solar PV systems covering more than 70 locations, which are cumulatively generating about 8 million units of electricity annually, thereby reducing CO2 emission of approx. 8000 MT per year. Further, process for establishment of additional 5 MWp Rooftop Solar PV systems is in progress at 66 locations.

Power Grid Corporation of India Ltd

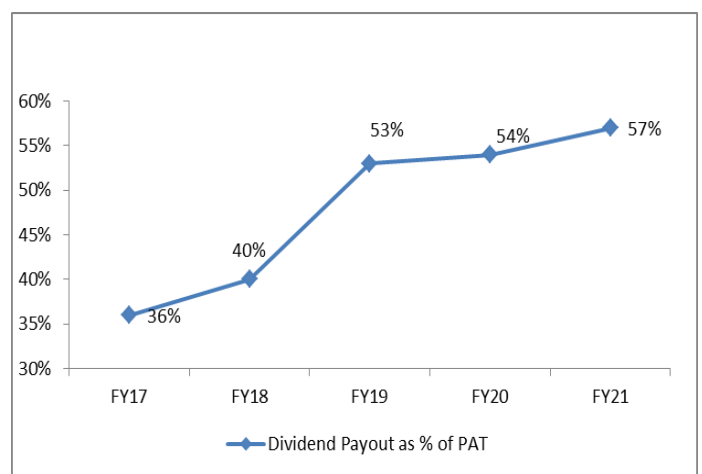
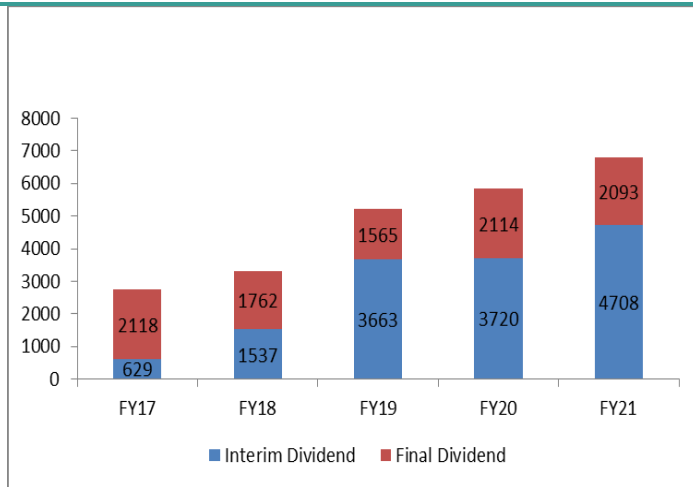
14 December 2021

Promising returns to Shareholders

PGCIL has been consistent in rewarding its shareholders by way of distributing dividends. In FY21, PGCIL paid a total of ₹ 6,801 crores as dividends, with dividend payout standing at 57% of Net Profit. In July 2021, PGCIL declared Bonus share in the ratio 1:3.

Dividend paid (₹ crores)

Dividend Payout as % of PAT



Source: Company data, Khambatta Research

Monetisation of Transmission Assets through Powergrid Investment Infrastructure Trust (PGInvIT)

In order to mobilise resources to meet future capital requirement for Company’s growth, PGCIL has undertaken monetization of assets through Infrastructure Investment Trust (Invit) model. This is in accordance with GoI guidelines and PGCIL is the first CPSE to undertake asset recycling through InvIT structure. In line with the approval accorded by the GOI, PGCIL monetized operational assets held through 5 TBCB Special Purpose vehicles (SPVs) with gross block value of about ₹ 7,200 crore comprising 3,699 ckm of transmission lines and 3 substations having 6630 MVA transformation capacity in May’2021.

Foray into Smart Metering

PGCIL is entering Smart Metering business as the government plans to install 25 Crore smart pre-paid meters across the country. As guided by the management, the company will invest in the smart meter asset development business after tenders are floated by state utilities, and earn revenues through leasing model with an aim to create annuity income. A sum of ₹ 22,500 crore has been earmarked as the central government grant for the installation of 25 crore smart prepaid meters across the country under the ₹ 3-lakh-crore scheme for power distribution entities (discoms) recently

Power Grid Corporation of India Ltd
14 December 2021

approved by the Cabinet. PGCIL plans to invest around ₹ 10,000-12,000 crores over next four years in order to set up the required infrastructure and manage the Smart Metering systems.

Valuation:

The transmission requirements are sensitive to load growth and generation additions and therefore the overall emerging power sector scenario in India augurs well for transmission sector, which is a vital link in the power supply value chain. PGCIL being one of the largest transmission companies in the world and India's principal power transmission company is expected to garner a substantial portion of the business potential in the Indian power transmission sector.

Transmission sector being the major revenue driver followed by Telecom and Consultancy and its recent foray in related businesses like EV charging, Energy Management, Rooftop solar systems and also by exploring potential opportunities in Smart Metering, PGCIL is expected to witness a boost in its revenues going ahead.

At 10x FY24E EPS, we rate PGCIL a BUY with a target price of ₹ 242, an upside potential of 18% from current levels. The Stock trades 2x FY24E P/BV at our Target Price of ₹ 242. PGCIL is expected to capitalize on the opportunities in the Indian power transmission sector.

Abridged Profit & Loss Account (Consolidated)

₹ Crore	FY19A	FY20A	FY21A	FY22E	FY23E	FY24E
Total income	35,059	37,744	39,640	43,015	45,381	48,104
Growth		7.66%	5.02%	8.52%	5.50%	6.00%
Cost of operations	4,839	4,803	4,647	4,872	5,219	5,532
EBITDA	30,221	32,940	34,993	38,144	40,162	42,572
Depreciation & amortization	10,541	11,607	12,039	12,450	13,073	13,726
EBIT	20,282	22,261	24,138	26,984	28,565	30,433
EBIT Margin	57.85%	58.98%	60.89%	62.73%	62.94%	63.27%
PBT	11,674	12,907	15,139	19,008	20,190	21,640
Tax expense	886	-3,531	-3,464	-3,992	-4,442	-4,761
PAT	10,034	11,059	12,036	15,017	15,748	16,879
Adjusted PAT*	10,034	11,059	13,115	15,017	15,748	16,879
PAT Margin	28.62%	29.30%	30.36%	34.91%	34.70%	35.09%
Diluted EPS (₹)	19.18	21.14	23.01	21.53	22.58	24.20
Diluted EPS (₹)**	14.38	15.85	17.26	21.53	22.58	24.20

Source: Company data; Khambatta Research, *Adjusted for Exceptional items, **Adjusted post Bonus issue

Power Grid Corporation of India Ltd

14 December 2021

Abridged Balance Sheet (Consolidated)

₹ Crore	FY19A	FY20A	FY21A	FY22E	FY23E	FY24E
Total shareholders' equity	59,088	64,695	69,936	74,441	79,166	84,229
Total debt	1,35,630	1,38,421	1,30,975	1,31,673	1,33,625	1,33,241
Trade payables	365	227	187	193	203	216
Provisions	1,069	1,167	1,307	1,476	1,644	1,839
Total equity & liabilities	2,47,358	2,56,653	2,55,749	2,62,465	2,70,940	2,77,693
Fixed assets	2,11,537	2,17,622	2,09,911	2,18,466	2,26,898	2,32,177
Loans & advances (non-current)	188	272	323	355	390	429
Financial assets (current)	11,740	10,997	11,842	13,026	14,328	15,761
Cash & cash equivalents	3,648	4,850	4,487	6,659	4,226	2,879
Other bank balance	689	604	871	1,107	1,290	1,497
Total assets	2,47,358	2,56,653	2,55,749	2,62,465	2,70,940	2,77,693

Source: Company data; Khambatta Research

Ratio Analysis

	FY19A	FY20A	FY21A	FY22E	FY23E	FY24E
ROA	4.06%	4.31%	4.71%	5.72%	5.81%	6.08%
ROE	16.98%	17.09%	17.21%	20.17%	19.89%	20.04%
Debt-to-Equity Ratio	2.30	2.14	1.87	1.77	1.69	1.58
ROCE	9.88%	10.32%	11.21%	12.26%	12.61%	13.17%

Source: Company data; Khambatta Research

Peer Comparison: Key Financials Metrics (FY21)

₹ Crore	PGCIL	Adani Transmission Ltd	Torrent Power Ltd	Kalpataru Power Transmission Ltd	Tata Power Company Ltd
Operating Revenue	39,640	10,459	12,315	13,017	32,907
EBITDA	34,993	4,483	3,607	1,577	7,367
EBITDA margin	88.28%	42.86%	29.29%	12.12%	22.39%
PAT	12,036	1,224	1,291	671	1,127
PAT margin	30.36%	11.70%	10.48%	5.15%	3.43%
Diluted EPS (Rs)	23.01	9.00	26.90	44.30	3.20
ROCE	11.21%	8.63%	12.42%	17.16%	6.80%
ROE	17.21%	20.10%	12.67%	17.94%	5.41%
Current Market Cap	1,42,613	2,01,876	27,660	5,627	73,557

Source: Company data; Khambatta Research; Bloomberg

Power Grid Corporation of India Ltd**14 December 2021****Key Risk:****Right of Way**

Securing right of way remains a pressing concern for both private and public project developers, with varying policies and regulations being adopted by different states.

Land acquisition

One of the key areas of concern for PGCIL is difficulties in acquisition of land for construction of substations.

Forest Clearance challenges

Delay in receiving the Forest clearance and various decisions on the same from Ministry of Environment Forest and Climate change (MoEFCC) can lead to delay in power transmission thereby affecting the performance of PGCIL.

Increased Competition for Transmission Business

Power Grid may face increased competition for transmission business. As a consequence of reforms stipulated in the Electricity Act, 2003 and other rules and regulations notified by the CERC and CEA, large Indian business houses and international companies, among others, including some that already have a presence in the Indian power sector, may seek to expand their operations in the Indian transmission sector.

Power Grid Corporation of India Ltd

14 December 2021

Guide to Khambatta's research approach

Valuation methodologies

We apply the following absolute/relative valuation methodologies to derive the 'fair value' of the stock as a part of our fundamental research:

DCF: The Discounted Cash Flow (DCF) method values an estimated stream of future free cash flows discounted to the present day, using a company's WACC or cost of equity. This method is used to estimate the attractiveness of an investment opportunity and as such provides a good measure of the company's value in absolute terms. There are several approaches to discounted cash flow analysis, including Free Cash Flow to Firm (FCFF), Free Cash Flow to Equity (FCFE) and the Dividend Discount Model (DDM). The selection of a particular approach depends on the particular company being researched and valued.

ERE: The Excess Return to Equity (ERE) method takes into consideration the absolute value of a company's return to equity in excess of its cost of equity discounted to the present day using the cost of equity. This methodology is more appropriate for valuing banking stocks than FCFF or FCFE methodologies.

Relative valuation: In relative valuation, various comparative multiples or ratios including Price/Earnings, Price/Sales, EV/Sales, EV/EBITDA, Price/Book Value are used to assess the relative worth of companies which operate in the same industry/industries and are thereby in the same peer group. Generally our approach involves the use of two multiples to estimate the relative valuation of a stock.

Other methodologies such as DuPont Analysis, CFROI, NAV and Sum-of-the-Parts (SOTP) are applied where appropriate.

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Buy recommendations are expected to improve, based on consideration of the fundamental view and the currency impact (where applicable) by at least 15%.

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Power Grid Corporation of India Ltd**14 December 2021**

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