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IPO Note – POWERGRID Infrastructure Investment Trust.

28-April-2021

RETAIL RESEARCH

Issue Snapshot:
Issue Open: April 29 – May 03, 2021

Price Band: Rs. 99 – 100

*Issue Size: 773,499,100 units

Issue Size: Rs. 7734.99 cr (Fresh Issue of 4993.48 cr + offer for sale of 2741.51 cr)

Reservation for:
Institutional Investor: Upto 75%
Non Institutional Investor: atleast 25%

Bid size: 1100 Units and in multiples thereafter

Trading Lot: 100 units

Issue Type: Book Built Issue

Listing: BSE & NSE

Book Running Lead Manager: ICICI Securities Ltd, Axis Capital Ltd, Edelweiss Financial Services, HSBC Securities and Capital Markets (India) Private Ltd

Registrar to issue: KFin Technologies Private Limited

Sponsor/Project Manager: Power Grid Corporation of India Ltd

Investment Manager: POWERGRID Unchahar Transmission Ltd

Trustee: IDBI Trusteeship Services Ltd

*= Based on upper Price Band

Background & Operations:

Powergrid Infrastructure Investment Trust is an InvIT set-up to own, construct, operate, maintain and invest as an infrastructure investment trust as permissible in terms of the InvIT Regulations, including in power transmission assets in India. It registered with SEBI as an InvIT on January 7, 2021. Its Sponsor, Power Grid Corporation of India Limited, also acting in the capacity of its Project Manager, is a CPSE under the Ministry of Power, GoI and is listed on BSE and NSE.

The Trust's Sponsor is engaged in project planning, designing, financing, constructing, operating, and maintaining power transmission projects across India and undertakes operations in the Indian telecom infrastructure sector. As of December 31, 2020, its Sponsor also provides transmission and distribution consultancy services in India and other jurisdictions, with footprints in 21 countries (including India). Trust's Sponsor, through its wholly-owned subsidiaries, is setting up, implementing and operating transmission projects at various locations in India where the right to provide transmission services is procured under the Tariff based competitive bidding (TBCB) mechanism. As of December 31, eight of the Inter-state transmission system (ISTS) SPVs had commenced commercial operations, comprising 39 transmission lines (6,398 ckm), with a total power transformation capacity of 9,630 MVA. The remaining Sponsor TBCB Projects are at different stages of development. Of the Sponsor TBCB Projects, it proposes to acquire five projects initially with a total network of 11 power transmission lines of approximately 3,698.59 ckm and three substations having 6,630 MVA of aggregate transformation capacity, as of December 31, 2020, across five states in India (the Initial Portfolio Assets).

The Initial Portfolio Assets were awarded to Powergrid's InvIT Sponsor under the TBCB mechanism on a build-own-operate-maintain (BOOM) basis. The Initial Portfolio Assets earn revenues, i.e. availability based transmission charges, pursuant to the transmission service agreements (TSAs), from the DICs under such TSAs irrespective of the quantum of power transmitted through the transmission line. In addition, maintaining availability of the Initial Portfolio Assets in excess of 98%, gives the right to claim incentives under the TSAs. The transmission charges for power transmission projects acquired through the TBCB mechanism, including the Initial Portfolio Assets, is contracted for the period of the relevant TSAs, which is 35 years from the Scheduled COD of the relevant power transmission project, and is subject to renewal in accordance with the relevant TSA and the CERC. The Investment Manager, POWERGRID Unchahar Transmission Limited, a wholly-owned subsidiary of its Sponsor, is responsible for managing Powergrid InvIT and the Initial Portfolio Assets as well as undertaking investment decisions relating to assets.

The Trust intends to distribute at least 90% of the net cash available for distribution to its Unitholders once at least every quarter in every financial year. It is well positioned to take advantage of the growth potential of India's power transmission industry given its financial position, support from its Sponsor and the robust regulatory framework for power transmission in India. Powergrid InvIT is focused on providing stable and sustainable distributions to its Unitholders. It has been given a credit rating of Provisional [ICRA] AAA (Stable), CARE AAA (Is); Stable and Provisional CCR AAA/Stable by ICRA Limited, CARE Ratings Limited and CRISIL Ratings Limited, respectively.

Investment Objectives:

The investment objectives of the Trust are to carry on the activities of and to make investments as an infrastructure investment trust as permissible in terms of the InvIT Regulations and the Trust Deed. The investment of the Trust shall be in any manner permissible under, and in accordance with the InvIT Regulations and applicable law including in holding companies and/or special purpose vehicles and/or infrastructure projects and/or securities in India as permitted under the InvIT Regulations. The Trustee shall ensure that subscription amount is kept in a separate bank account in name of the Trust and is only utilised for adjustment against allotment of Units or refund of money to the applicant till the time such Units are listed

Use of Proceeds

The Offer comprises a Fresh Issue by the Trust and an Offer for Sale by the Selling Unitholder.

Offer for Sale

The Selling Unitholder will be entitled to the proceeds of the Offer for Sale and the proceeds received from the Offer for Sale will not form part of the Offer Proceeds. The Trust will not receive any proceeds from the Offer for Sale.

Fresh Issue

The proceeds of the Fresh Issue will be up to Rs 49,934.84 million. The Offer Proceeds will be utilised towards the following objects:

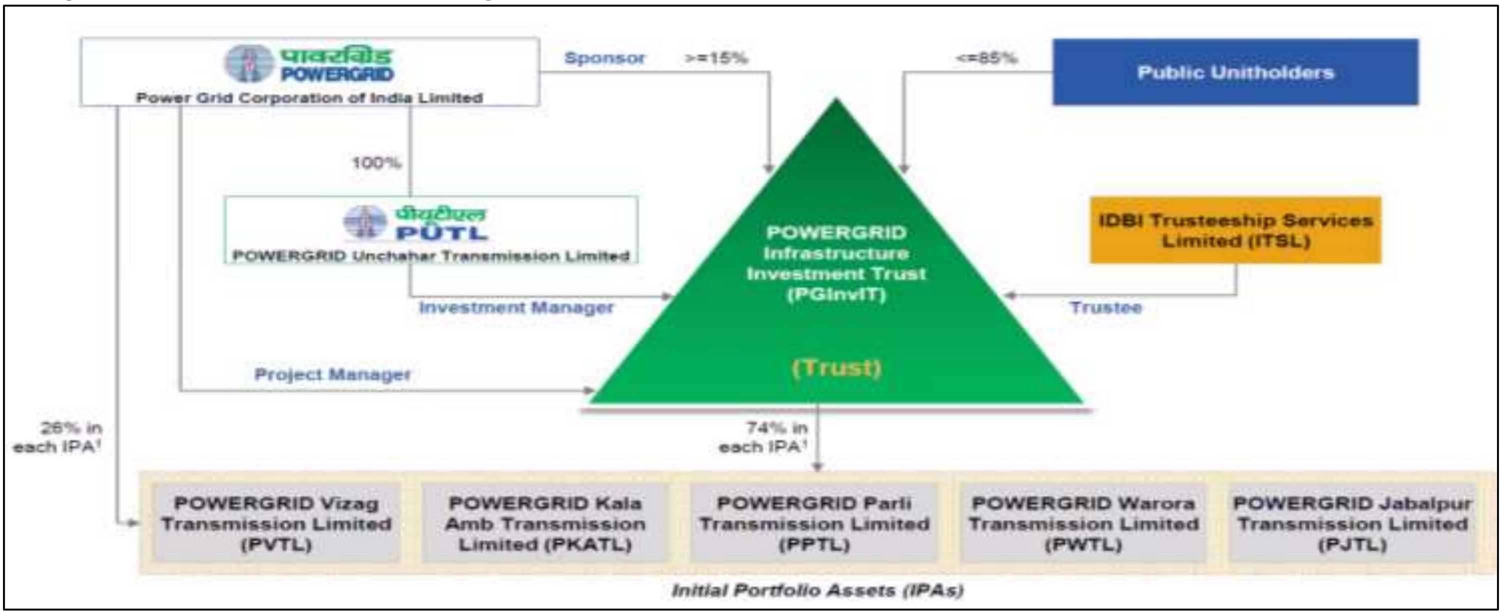
- Providing loans to the Initial Portfolio Assets for repayment or pre-payment of debt, including any accrued interest, availed by the Initial Portfolio Assets; and
- General purposes

Offer Structure

Particulars	Institutional Investors	Non-Institutional Investors
Issuer/Sponsor	**POWERGRID Infrastructure Investment Trust**	
Percentage of Offer Size available for Allotment/allocation	Not more than 75% of the Offer Size	Not less than 25% of the Offer Size
Basis of Allotment/ allocation if respective category is oversubscribed	Proportionate	
Basis of Allotment allocation if respective category is undersubscribed	In case of under-subscription in any investor category, the unsubscribed portion in either the Institutional Investor category or the Non-Institutional Investor category may be allotted to applicants in the other category.	
Maximum Bid	Such number of Units (in multiples of 1100 Units) not exceeding the size of this Offer, subject to applicable limits	
Bid Lot	1,100 Units and in multiples thereafter	
Trading Lot	100 Units	
Who can apply	• QIBs; or • family trusts or systemically important non-banking financial companies registered with the Reserve Bank of India or intermediaries registered with SEBI, all with net-worth of more than Rs 5,000 million, as per the last audited financial statements	Bidders other than Institutional Investors, eligible to apply in this Offer
Terms of Payment	Entire Bid Amount shall be payable at the time of submission of the Bid cum Application Form (including for Anchor Investors)	Entire Bid Amount shall be blocked by the SCSBs in the bank account of the ASBA Bidder that is specified in the ASBA Form at the time of submission of the ASBA Form

Proposed Post Listing Structure

The following structure illustrates the relationship between the Trust, the Trustee, the Sponsor, the Investment Manager, the Project Manager and the Unitholders as at the Listing Date:

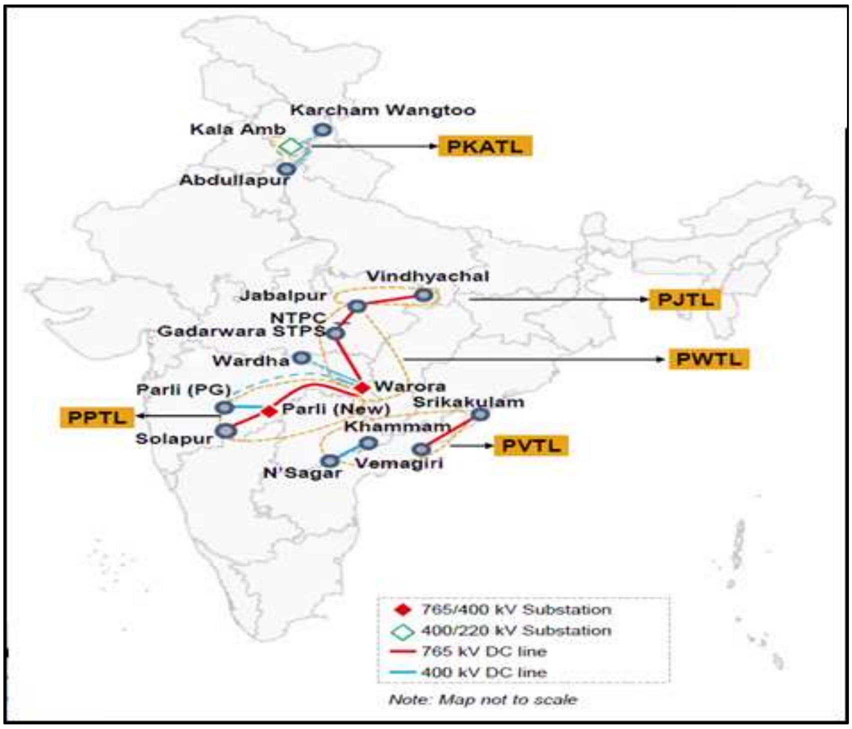


Note: 1. Balance 26% stake shall be acquired in a phased manner, after expiry of the lock-in conditions under the Transmission Service Agreements (TSA)

Details of Initial Portfolio Assets

SPV Name	Line Length (ckm)	(COD)*	Tenor of TSA	Remaning TSA life (years)	Equity Stake*	Residual Equity Stake	Date of Acquiring 100% Equity Stake in SPV	Gross Block (Rs mn)	Fair Value (Rs mn)	Revenue Projections (in mn) FY22	FY23	FY24
POWERGRID Vizag Transmission Limited	956.84	Feb-17	31-Jan-52	31.10	74%	26%	1-Feb-22	13098	23,385	2,956	2,426	2,202
POWERGRID Kala Amb Transmission Limited	2.47	Jul-17	11-Jul-52	31.55	74%	26%	12-Jul-22	3214	4,805	730	711	692
POWERGRID Parli Transmission Limited	966.12	Jun-18	3-Jun-53	32.44	74%	26%	4-Jun-23	18463	27,100	3,285	3,285	3,285
POWERGRID Warora Transmission Limited	1028.11	Jul-18	9-Jul-53	32.54	74%	26%	10-Jul-23	22321	30,311	3,644	3,644	3,644
POWERGRID Jabalpur Transmission Limited	745.05	Jan-19	31-Dec-53	33.02	74%	26%	1-Jan-24	15295	22,095	2,522	2,522	2,522
Total								72391	107,697	13,138	12,588	12,344

Source: Offer Document, * =Equity Stake proposed to be acquired by the Trust, COD =Date of Commercial Operations



Competitive Strengths:

Strong lineage and support from Sponsor and Project Manager: The experience and expertise of Power Grid Corporation of India Limited, Powergrid InvIT's Sponsor, provides it with a significant competitive advantage within the Indian power transmission industry. Its Sponsor is engaged in project planning, designing, financing, constructing, operating, and maintaining power transmission projects across India, undertakes operations in the Indian telecom infrastructure sector and provides transmission and distribution consultancy services in India and other jurisdictions, and operates training facilities for professionals in transmission technology and management. It occupies a key position in the GoI's plans for the growth and development of the Indian power sector. As of March 31, 2019, its Sponsor was the third largest CPSE in terms of gross block and is the largest power transmission company in India in terms of length of transmission lines measured in circuit kilometres.

In addition, Powergrid InvIT's Sponsor was awarded four intra-state projects through the TBCB mechanism and has recently emerged as the successful bidder in the bids for five TBCB projects, with letters of intent dated January 29, 2021, January 29, 2021, February 1, 2021, February 16, 2021 and February 16, 2021 issued to its Sponsor by the relevant bid process coordinators. As of December 31, 2020, it operated, on a standalone basis, 1,238 transmission lines aggregating to 161,742 ckm, 248 substations (including HVDC substations and GIS substations) with 411,000 MVA of transformation capacity. Further, as of December 31, 2020, its total transmission assets, including its wholly owned subsidiaries, consisted of 1,277 transmission lines aggregating to 168,140 ckm, 252 substations with an aggregate transformation capacity of 420,630 MVA. In addition, its Sponsor benefits from a strong balance sheet by leveraging it to support its growth. It also has a diverse set of equity investors, including foreign portfolio and institutional investors, mutual funds and insurance companies, and access to a wide range of project finance and debt instruments from Indian and international markets and investors.

Powergrid InvIT's Sponsor's management team has a strong understanding of the technical and financial aspects of the transmission business. They have a successful track record in negotiating, structuring and financing investments in power transmission assets, and managing such assets. In addition, it has been operating, maintaining and managing the Initial Portfolio Assets under the terms of the relevant operations and maintenance (O&M) agreements. Since its Sponsor will also act as its Project Manager and will continue to provide O&M services to the Initial Portfolio Assets, the Trust will benefit from its Sponsor's experience including from its O&M expertise.

Consistent and stable cash flows from assets with long term visibility and low counter party risks*:* Powergrid InvIT derives its revenues for electricity transmission from contracted transmission charges under long term TSAs which characterizes its power transmission business with low level of risk. The transmission charges for each Initial Portfolio Asset are contracted for the period of the TSA, which is 35 years from its respective Scheduled COD. The transmission charges consist of fixed 'non-escalable' transmission charges and in case of PVTL, fixed 'non-escalable' transmission charges and 'variable escalable' transmission charges. Since transmission charges are fixed for a period of 35 years, there is minimal price risk arising from transmission charge resetting, which provides stability, consistent cash flows and long term visibility. Further, inter-state power transmission projects receive transmission charges on the basis of availability, including in case of outage due to a force majeure event, subject to requisite approvals and irrespective of the quantum of power transmitted through the system. Maintaining annual availability in excess of 98% also gives the Trust the right to claim incentives under the terms of the respective TSAs, ensuring adequate benefit to maximize availability. The long residual life of the Initial Portfolio Assets provides long and stable visibility of cash flows. Since the Initial Portfolio Assets are on a BOOM basis, it will be in possession of these assets perpetually, which further ensures stability of cash flows.

Power transmission projects are characterized by low levels of operating risk. Once a transmission project has been commissioned, it requires low levels of expenditure for O&M, which means that the Trust will have the benefit of owning a critical and strategic asset without incurring significant additional operational costs. Each Initial Portfolio Asset has also entered into an O&M agreement with its Sponsor pursuant to which its Sponsor shall be responsible for operations, maintenance and periodic repairs required for the Initial Portfolio Assets. The scope of the O&M arrangement includes, among other things, routine O&M and preventive maintenance, breakdown rectification work, carrying out loping of trees during patrolling of transmission lines, and meeting charges toward the up-keep of sub-stations. This arrangement provides the Trust with necessary expertise for the O&M of such assets, visibility of maintenance costs and, therefore, steady and predictable cash flows.

Strong financial position: Powergrid InvIT's financial position will help it to finance its future expansion plans. It has been given a credit rating of Provisional [ICRA] AAA (Stable), CARE AAA (Is); Stable and Provisional CCR AAA/Stable by ICRA Limited, CARE Ratings Limited and CRISIL Ratings Limited, respectively. Its profit for the period for the nine months ended December 31, 2020 and the Fiscals 2020, 2019 and 2018, was Rs 3,371.42 million, Rs 3,788.25 million, Rs 2,480.63 million and Rs, 1,141.34 million, respectively. Following utilization of the Offer Proceeds, its consolidated borrowings and deferred payments net of cash and cash equivalents will be below 49% of the total value of its assets, as prescribed by the InvIT Regulations. Further, it is expected that the low debt position of its balance sheet (relative to assets) will provide with the ability to finance the growth of the business without substantial dilution to its Unitholders in the near future to ensure compliance with the InvIT Regulations. In addition, the security of payments for the transmission service by the Initial Portfolio Assets, as ensured under the terms of the TSAs and the CERC Sharing Regulations, will results in low receivables risk, ensures timely payment and increases its financial strength.

Government support and an established regulatory framework: The GoI has also been supportive in securing the settlement of outstanding dues by the designated inter-state transmission system customers and in addressing right of way issues, as well as expediting forest clearances that are required during implementation of projects. The transmission segment of the Indian power sector is a regulated sector with an established regulatory framework. Various regulatory and statutory bodies, such as the CEA, the Central Electricity Regulatory Commission (the CERC) and various state electricity regulatory commissions (the SERCs), provide institutional guidance in the formulation of policy framework for the participation and ongoing regulation of various stakeholders involved in the industry, including, transmission service providers, such as, Powergrid InvIT's Sponsor and it. The current regulatory framework for the Indian power transmission segment provides significant risk mitigation provisions, such as, availability-based payment structure with no volume risk and the billing, collection and disbursement procedure for adequate payment with limited price risk. Such provisions help in ensuring long-term visibility on returns and predictable cash flows. Accordingly, its Initial Portfolio Assets enjoy the benefit of a well-established regulatory regime and long-term cash flow stability as provided under the existing tariff policy.

Strategic and critical nature of power transmission infrastructure with low risk of emergence of alternate transmission infrastructure: The power sector is a strategic and critical sector as power supply system not only supports critical national infrastructure, national defence and vital emergency services, but also supports the entire economy and day-to-day life of the citizens of India. The Initial Portfolio Assets comprise grid strengthening links, generation linked assets, and assets linked with inter-regional power flow covering both demand and supply centric states of Himachal Pradesh, Maharashtra, Andhra Pradesh, Madhya Pradesh and Telangana, making them strategically and critically important for the transmission of power from one part of India to another. In general, power transmission projects are strategic and critical assets since they operate as vital links in the power supply value chain. Transmission projects, such as the Initial Portfolio Assets, are capital intensive and complex to develop since these are linear in nature. The construction, development and implementation of a transmission project involves various challenges, such as, difficult terrains, obtaining approvals and right of way, land acquisition issues and construction costs. The transmission lines of the Initial Portfolio Assets are predominantly located in areas where developing alternate lines may be difficult due to these challenges. Accordingly, Powergrid InvIT is in an advantageous position to capitalize on opportunities that may arise for increasing power transmission capacity by utilizing its existing right of way, since developing alternate and new lines may be challenging for another entity.

Skilled and experienced Investment Manager having strong corporate governance philosophy: Powergrid InvIT will be managed by qualified personnel of the Investment Manager who have management and operational experience in the power transmission sector and established track records in negotiating, structuring and financing investments of power transmission assets, and managing those assets. Accordingly, it expects to benefit from the skills and experience of the board of directors and the management teams of its Investment Manager while making investment decisions and financially managing the Initial Portfolio Assets. Their experience and leadership will contribute to its growth and success and will position the Initial Portfolio Assets to be operated and managed in an efficient manner. In addition, based on the aforesaid, its Investment Manager has implemented a corporate governance framework which includes corporate governance requirements in addition to those prescribed under the InvIT Regulations, and that the Unitholders will benefit from the same.

Business Strategy:

Focused business model with productive and operational efficiency to enhance returns: Powergrid InvIT intends to achieve stable distributions for its Unitholders by focusing on owning power transmission assets with long-term TSAs, low operating risks, and consistent and stable cash flows, which is consistent with the characteristics of the Initial Portfolio Assets. By leveraging its Sponsor's and Investment Manager's industry knowledge and experience, including in relation to O&M practices, as well as by continuing its focus on this asset class it would be able to maximize its strategic opportunities and overall financial performance. It intends to continue to maintain high transmission availability, optimize its operating costs and incorporate new and efficient technologies as well as undertake further improvement in its O&M practices. It continue to aim to achieve high availability to maximize incentive revenue on a sustainable basis by deploying prudent asset management practices, incorporating new and efficient technologies and services into its operations, conducting technology based routine and predictive maintenance, and following maintenance practices, which ensures improved business performance, reduces as well as optimizes its operating costs while also increasing its revenue generation from the Initial Portfolio Assets on account of high transmission availability.

Powergrid InvIt intends to continue to make improvements in its O&M practices, through increased use of automation and digitisation. It plans to further modernize its infrastructure and services, and aims to continue to follow best industry practices with respect to performance, corporate governance, management and employee training, quality control, environmental excellence and safety. Its focus on modernising its transmission infrastructure and maintenance practices will increase the useful life of its systems, improve operating performance and raise the efficiency of its capital expenditure.

Capitalize on value accretive growth through acquisitions and non-transmission revenues: Powergrid InvIT is focused on the Indian market, where there is a significant opportunity for growth. Other than the Investment Manager and the Initial Portfolio Assets, the Sponsor owns two operational subsidiaries with an aggregate gross block of Rs 50,286.10 million as on December 31, 2020. Further, as of December 31, 2020, there were seven subsidiaries in the construction phase, and the project cost estimated by the Sponsor is Rs 92,000 million. In addition, four subsidiaries in intra-state power transmission (with the project cost estimated at Rs 30,000 million) are also in construction phase. The subsidiaries in construction phase are progressively scheduled for completion by Financial Year 2023. Its Investment Manager intends to capitalize on opportunities to acquire power transmission projects in India that provide attractive cash flows. Its future growth will be derived primarily from its value accretive acquisition strategy, which will be focused primarily on acquiring power transmission projects as and when such opportunities arise, and which would provide long-term, regular and predictable cash flows, demonstrate potential to maintain or enhance returns to Unitholders, and provide potential for long-term capital growth in accordance with its investment objectives. The future acquisitions of projects owned by the Sponsor will be assessed for suitability with investment mandate and are subject to mutual agreement between Sponsor and Investment Manager on its behalf, as well as approval by the Unitholders. Further, its Investment Manager may seek to generate non-transmission revenue from various avenues, including leasing of optical ground wire and transmission towers.

Optimization of transmission assets through an efficient capital structure: The Investment Manager aims to maintain an optimal and varied portfolio of transmission assets, as well as an efficient capital structure and balanced consolidated leverage, to provide for consistent and predictable cash flows. The Investment Manager intends to employ appropriate financing policies and diversify its sources of financing with the objective of minimizing its overall cost of capital. The Investment Manager will operate within the InvIT Regulations for borrowing, as may, from time to time, be prescribed. If it is in the interests of the Unitholders, the Investment Manager may also pursue growth opportunities that require raising additional capital through the issuance of new Units.

In order to acquire additional power transmission projects to provide the most balanced and optimal capital structure, it intends to consider both private and public markets, for raising debt capital. On account of the revenues generated by the Initial Portfolio Assets, the predictability of cash flows, the contractual agreements governing its operations and the low risk profile of its assets, Powergrid InvIT is well positioned to maintain its balance sheet over the longer term with investment grade credit rating metrics and maintain appropriate levels of debt relative to equity.

Industry:

The Indian Power Sector

Electricity is an essential requirement for all facets of our life. It has been recognized as a basic human need. It is a critical infrastructure on which the socio-economic development of the country depends. Power Sector is a strategic and critical sector and power supply system supports the entire economy and day to day life of the citizens of India. Whilst India is the third largest producer of electricity in the world, in 2014, the share of electricity in India's final energy demand was only 17% compared with 23% in the member countries of Organization for Economic Cooperation and Development (OECD) and ranks well below the global average in electricity consumption (Source: Draft National Energy Policy, NITI Aayog, 2017 (the Draft NEP)). The Draft NEP envisages the share of electricity in India's total energy consumption to rise to about 26% in 2040.

India has a very dynamic and diversified power sector, characterized by the presence of varied power generation sources including conventional sources as well as renewable energy sources, a synchronously operating national grid comprising interregional, regional and state grids and a distribution sector providing electricity to end consumers. The development of adequate electricity infrastructure is essential for sustained growth of economy as well as for energy security.

The three segments of power supply delivery chain are generation, transmission and distribution. Generation is distributed across Central (comprising approximately 25% of the total installed capacity of power stations based on the type of ownership as on March 31, 2020), State (comprising approximately 28% of the total installed capacity of power stations based on the type of ownership as on March 31, 2020) and private sector (comprising approximately 47% of the total installed capacity of power stations based on the type of ownership as on March 31, 2020) entities (Source: All India Installed Capacity Report published by the CEA in March 2020). The transmission sector is divided into inter-state and intra-state transmission projects, in addition to some dedicated transmission projects, and is owned by across Central, State and private sector entities. In addition, transmission network also includes cross-border interconnections with neighboring countries viz, Bangladesh, Bhutan, Nepal and Myanmar to facilitate optimal utilization of resources (Source: Ministry of Power Annual Report 2019 - 2020). The distribution sector is largely owned by States with participation from private sector in some areas. The overall grid management is carried out by different agencies including POSOCO (through NLDC at the Central level and RLDCs at the regional level) and states through their SLDCs in a coordinated manner. The CERC is the regulator at the Central level while SERCs and Joint Electricity Regulatory Commissions regulate the sector at the States and Union Territories level.

Power Demand & Supply

Peak power and energy deficits have considerably reduced over the years. For the year ended 2019-20, peak power and energy deficits were 0.70% and 0.50%, respectively, substantially lower than 10.60% and 8.50%, respectively, recorded for the year ended 2012 (Source: Power Supply Position Reports published by the CEA for March 2020 and March 2012). The shortages in energy and peak power have been 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.

However, despite reduction in peak power and energy deficits over the years, many parts of the country continue to face power shortages due to inadequate growth of transmission and distribution infrastructure in the States and poor financial health of the State power utilities. For the distribution sector Government of India has undertaken a number of policy and reform based initiatives like Pradhan Mantri Sahaj Bijli Har Ghar Yojana (SAUBHAGYA), Affordable 24x7 Power for All, Integrated Power Development Scheme (IPDS), Ujwal DISCOM Assurance Yojana Scheme (UDAY), Unnat Jyoti by Affordable LEDs for All (UJALA) and the recently introduced initiatives as part of Aatmanirbhar Bharat Abhiyan. While, the per capita electricity consumption in India has increased by about 20% from 1,010 kWh in Financial Year 2015 to 1,208 kWh in Financial Year 2020 (Source: CEA Executive Summary on Power Sector, May 2020 (Provisional)), it continues to be significantly lower than the world average per capita consumption, which was more than 3,200 kWh as on March 31, 2018 (Source: National Infrastructure Pipeline: Volume II, Report of the Task Force, Department of Economic Affairs, Ministry of Finance, Government of India (NIP)).

The Transmission Sector in India

In India, the transmission system is a two-tier structure comprising intra-state grids and inter-state transmission system (ISTS) grids, in addition to a few dedicated transmission lines. Power Grid Corporation of India Limited (POWERGRID) is the largest power transmission company in India in terms of length of transmission lines measured in circuit kilometres. As of August 31, 2020, POWERGRID's share in India's cumulative inter-regional power transfer capacity is more than 85% (Source: CEA). Further, for Fiscal 2020, the Trust's Sponsor's share in the transmission charges for ISTS billed by the CTU is over 85% (Source: POWERGRID).

The Indian power system is divided into five regions namely the northern, eastern, western, southern and north-eastern regions. Regional or inter-state grids facilitate the transfer of power across the states within and outside the region. Presently, all the five regional grids viz. northern, eastern, western, southern and north-eastern regions are operating in one synchronous mode with total installed capacity of approximately 370 GW as on March 31, 2020 (Source: All India Installed Capacity Report published by the CEA in March 2020).

The Indian power transmission system has come a long way from the time of independence, when transmission power systems in India were isolated systems developed in and around urban and industrial areas and the State electricity boards (SEBs) were responsible for development of generation, transmission, distribution and utilization of electricity in their respective states. In the eighties, the process of setting up the national grid was initiated with the formation of POWERGRID. POWERGRID was inter alia made responsible for planning and co-ordination relating to ISTS with the Central Government, CEA, regional power committees, STUs and transmission licensees, including inter-regional links. Development of a national grid started with the establishment of limited capacity asynchronous links between the regions for transfer of operational surplus power from one region to other. With the establishment of large capacity pit head power plants having beneficiaries in other regions, AC and HVDC bi-pole links were implemented between regions. In order to facilitate optimal utilization of unevenly distributed natural energy resources, the focus of planning the generation and the transmission system in the country shifted from regional self-sufficiency to national level. High capacity corridors, comprising 765 kV D/C and ±800 kV, 6000 MW HVDC interregional links have been implemented for transfer of power from generating stations located in resource rich areas to the load centres.

With the thrust on harnessing energy from RE sources, integration of RE resources with the grid is India's top priority for both energy security and carbon emission reduction. The Government is taking various initiatives towards achievement of its set targets. The Green Energy Corridors (GEC) scheme comprising transmission strengthening both at inter-state and intra-state levels and establishment of RE management centres is a major initiative in this direction. POWERGRID has completed the ISTS portion of the GEC Scheme (Source: CEA). A number of smart grid technologies like Optical Fibre based communication systems, FACTS, STATCOMs, Wide Area Measurement System too have been put into operation for improving the reliability and stability of the grid. The evolution of the national grid operating at a single frequency has facilitated the development of a vibrant electricity market in the country, enabling access to affordable power. Various electrical interconnections with neighbouring countries like Nepal, Bhutan, Bangladesh and Myanmar exist, which are being further strengthened for increased mutual exchange of power.

Indian Transmission Sector Outlook

NIP has estimated a cumulative capital expenditure of approximately Rs 21 lakh crore in the area of power and renewable energy, accounting for more than 20% of the total pipeline. NIP has set a 'Vision 2025' for the power sector, salient features of which include:

- 24 x 7 clean and affordable power for all;
- total capacity: 583 GW (share: thermal - 50%; renewable - 39%);
- reduction in share of thermal capacity and increase in share of RE capacity;
- RE share in consumption to increase to approximately 20%;
- growth in per capita consumption to 1,616 units;
- promotion of grid storage and offshore wind energy;
- reforms in distribution in the areas of open access, cost reflective tariffs, smart metering, use of digital platforms; and
- EV charging infrastructure.

Growing power demand as a result of the Government's focus on improving the distribution sector: the last mile in power sector, addition of RE capacity, addition of capacities in conventional generation sources, cross-border linkages and adoption of new technologies to address challenges linked to RE integration, are likely to be the growth drivers for power transmission in India.

As per NIP, an estimated total capital expenditure of Rs 3,040,500 million would be incurred on electricity transmission projects over financial years 2020 to 2025.

Tariff Based Competitive Bidding (TBCB)

Being a critical link in the power sector value chain, the transmission sector needed more attention to cater to the growing power demand and the increasing generation capacity. Investments in the form of budgetary allocations, internal accruals and public sector undertakings (PSU) borrowings were unable to fund this growing need. Keeping this in mind, the Electricity Act permitted competition in the power sector, including in the power transmission sector. Promotion of competition in the electricity industry in India is one of the key objectives of the Electricity Act, 2003. As per the provisions under Section 63 of the Electricity Act, 2003 and the Tariff Policy dated 6th January, 2006, Ministry of Power issued "Guidelines for Encouraging Competition in Development of Transmission Projects" and Tariff Based Competitive Bidding Guidelines for Transmission Services" (the "Guidelines"). These Guidelines laid down a transparent procedure for facilitating competition in the transmission sector through wide participation in providing transmission services and tariff determination through a process of tariff based competitive bidding.

As envisaged in the Guidelines, Ministry of Power has constituted a committee (National Committee on Transmission) to identify inter-state transmission projects to be developed through competitive bidding and to oversee the process of competitive bidding. Ministry of Power has also issued standard bidding documents, such as request for qualification (RFQ), request for proposal (RFP), transmission service agreements and share purchase agreements, and also appointed PFC Consulting Limited and REC Transmission Projects Company

Limited as the bid process coordinators (each, a BPC) for carrying out the bidding process (Source: Private Participation in Transmission Sector, Ministry of Power, Government of India).

Bidding Process under TBCB Route
Projects are bid for under a build, own, operate and maintain (BOOM) model as per standard bidding documents notified by the MoP, which comprises a request for proposal and request for quotation and standard form transmission agreement and share purchase agreement. The annual transmission charge for a 35-year period is discovered through this bidding process. The bidder, whose bid is evaluated by the BPC as the lowest annual levelised tariff, is selected. The successful bidder is then required to acquire a special purpose vehicle (SPV), incorporated by the BPC. Once the process of acquisition is complete, the SPV approaches CERC to obtain a transmission license and for adoption of transmission charges. The bidding process is undertaken by the BPC under a well-defined framework stipulated by MoP. The standard bidding document of the MoP comprises bidding documents i.e. the RFQ and RFP for the purpose of bidding. The bidding documents include details of the project, such as, construction milestones, financial and technical qualification requirements to be met by the bidders, details of the model transmission service agreements, other technical, operational and safety criteria and bid evaluation methodology. After the submission of bids, a bid evaluation is undertaken by a committee comprising at least one member from the CEA. The bidder, whose bid is evaluated by the BPC as having quoted the lowest annual levelised tariff, is considered for the award. After selection, the bidder is required to acquire the project SPV from the BPC and make applications to CERC for grant of transmission license and for adoption of transmission charges. The successful bidder is designated as the Transmission service provider (TSP). The TSP commissions the line as per the schedule specified in the transmission service agreement with the long term service customers, the effective date for start of project development being the date of acquisition of SPV by the TSP. In case the TSP commissions the project early, it is eligible to declare the COD as per such early commissioning date, subject to certain conditions.

Components of Transmission Charges
Transmission charges comprise fixed and variable components and are billed, collected and paid to through the CERC Sharing Regulations.

Availability-based Transmission Charges
Inter-state power transmission projects are entitled to incentive or liable for penalty if actual availability is higher or lower than the target availability. These ‘availability-based’ transmission charges incentivize transmission service providers to provide the highest possible system availability, which is the time for which the transmission system is available. In case of RTM projects, the calculation of incentive is carried out as per applicable CERC Regulations and in case of TBCB projects, the calculation of incentive or penalty, as the case may be, is carried out as per the respective TSA. Also, in the case of lower availability of the transmission system than the target availability, the developer is entitled to recover only the proportionate transmission charges from the beneficiaries. Better operation and maintenance practices, qualified trained manpower and deployment of advanced techniques such as use of helicopters for live line aerial patrolling, hot line maintenance, equipment condition monitoring including dynamic testing and use of thermo-vision scanning may result in higher transmission network availability.

Transmission charges
The transmission charges for ISTS are collected and disbursed to transmission licensees by the CTU as per the CERC Sharing Regulations. The transmission charges comprise a fixed non-escalable charge and may also comprise a variable escalable charge. The escalable charge is escalated based on the escalation rate which is notified by CERC semi-annually. The escalation rate computed by CERC is based on WPI with 45% weight and CPI with 55% weight (Source: CERC Explanation for the notification on Escalation Factors and other parameters for Tariff Based Competitive Bidding for Transmission Service, October 2020). In addition to this, there might be an incentive or penalty payment, as described above.

Key Concerns:

- The Trust is a newly settled trust and does not have an established operating history, which will make it difficult to accurately assess future growth prospects.

- The Trust may be unable to operate and maintain power transmission projects to achieve the prescribed availability which may adversely affect its cash flows and results of operations,

- Substantially all revenues are derived from payments received from Designated Inter State Transmission System Customers (DICs). A delay in payments of billed transmission charges by the DICs to the CTU may adversely affect the cash flows and results of operations.

- As the terms and conditions, including the transmission charges under the TSAs are generally fixed, the Trust may not be able to offset increase in costs, including operation and maintenance costs, solely from transmission charges payable to it under the TSAs. This may adversely impact the business, prospects, financial condition, results of operations and cash flows.

- The ability of the Project Manager to ensure that its power transmission systems are fully operational at all times may be subject to the limitations of the power grid, existing equipment or operational risks outside of its control.

- The financial projections are subject to significant business, economic, competitive, industry, regulatory, market and financial uncertainties and contingencies that could cause actual results to differ materially from those projected.
- The Trust may not be able to make distributions to its Unitholders comparable to its Unitholders' estimated or anticipated distributions or at all.
- Any changes to current tariff policies or regulations governing the CTU or load despatch centres by regulatory authorities could have a material adverse effect on the business, prospects, financial condition, results of operations and cash flows.
- Businesses could be adversely affected if the Trust is unable to maintain or renew its existing regulatory approvals, or obtain any new approvals due to changes to the regulatory environment and the laws, rules and directives of the GoI.
- The Trust may not be able to successfully fund future acquisitions of new projects due to the unavailability of debt or equity financing on acceptable terms in a timely manner or at all, which could impede the implementation of its acquisition strategy and may adversely impact the business.
- The Trust shall not acquire the entire equity share capital of the Initial Portfolio Assets on account of the lock-in conditions for the equity shareholding of the Sponsor in the Initial Portfolio Assets.
- The Trust operates in a highly competitive environment, and increased competitive pressure could adversely affect the business and the ability of the Investment Manager to execute its growth strategy.
- Opposition from local communities and other parties, such as through litigation or by other means, may adversely affect the financial condition, results of operations and cash flows.
- Operations are subject to environmental, health and safety laws and regulations.
- Success depends in large part upon the Investment Manager and Project Manager, the management and personnel that they employ, and their ability to attract and retain such persons.
- If the Trust is unable to adapt to technological changes, its business and financial performance could suffer.
- There is no assurance that third-party contractors will not violate any applicable laws and regulations. The Trust's inability to identify any substitute for such third-party contractors may adversely affect the business operations or planned expansion projects.
- Upgrading or renovation work or physical damage to power transmission projects may disrupt operations and result in unforeseen costs, which may have a material adverse effect on the business, prospects, financial condition, results of operations and cash flows.
- Grid disturbances or failures could adversely affect the reputation and relations with regulators and stakeholders.
- Any infrastructure project including power transmission project that the Trust acquires, which is still under construction and development, may be subject to cost overruns or delays, which may in turn materially and adversely affect the financial and operational estimates and projections, its business, prospects, financial condition, results of operations and cash flows.
- There may not be any eligible acquisition opportunities from the Sponsor or third parties in the future, which may adversely affect Trust's business, financial condition, results of operations and prospects.
- As a shareholder of the Trust Portfolio Assets, the Trust's rights are subordinated to the rights of creditors, debt holders and other parties specified under Indian law in the event of insolvency or liquidation of any of the Portfolio Assets.
- The Trust may be required to record significant charges to earnings in the future when it reviews its power transmission assets for potential impairment. Any such charges will likely have a material adverse effect on the results of operations.
- There are risks associated with the expansion of the business to new areas.
- The Trust may lose transmission revenues and incur significant repair and replacement costs in the event its power transmission projects are rendered inoperable due to force majeure events as categorised in the TSAs.

- The TSAs, power transmission assets and the transmission licenses of the Initial Portfolio Assets have a limited duration and may not be renewed/ replaced, which may affect the results of operations.
- The Trust does not own the "POWERGRID" trademark and logo. Its license to use the "POWERGRID" trademark and logo may be terminated under certain circumstances and its ability to use the trademark and logo may be impaired.
- As of December 31, 2020, some of the trade receivables have been outstanding for over 90 days.
- Changes in government regulation could adversely affect the profitability, prospects, results of operations and ability to make distributions to the Unitholders.
- The Trust depends on the Investment Manager, the Project Manager and the Trustee to manage its business and assets, and its financial condition, results of operations and cash flows and ability to make distributions may be harmed if the Investment Manager and/ or Project Manager and/ or the Trustee fail to perform satisfactorily.
- There may be conflicts of interest between the Trust, the Investment Manager, the Project Manager and the Sponsor.
- The Project Manager is involved in other businesses that require capital and other resources, and management attention, which in turn could place a burden on its resources and abilities.
- The Investment Manager and the Project Manager are not prohibited from providing management/ consultancy services to its competitors. This could give rise to conflicts of interest, which may have an adverse effect on the business.
- The regulatory framework governing infrastructure investment trusts in India is relatively new and the interpretation and enforcement thereof involve uncertainties, which may have a material adverse effect on the ability of certain categories of investors to invest in the Units, its business, financial condition and results of operations and its ability to make distributions to the Unitholders.
- The Trust must maintain certain investment ratios, which may present additional risks to it.
- Compliance with the European Union Directive on Alternative Investment Fund Managers may increase administrative and regulatory burdens on the Investment Manager and the Trust.
- The Alternative Investment Fund Managers Directive may impose requirements on or restrict the use of leverage by the Trust and the Investment Manager.
- The Trust results may be adversely affected by the outbreak of the Novel Coronavirus (COVID-19) and can be adversely affected by other future unforeseen events, such as adverse weather conditions, natural disasters, terrorist attacks or threats, future epidemics or pandemics or other catastrophic events.
- The Trust is exposed to risks associated with the power industry in India.
- Performance and growth are dependent on the factors affecting the Indian economy.
- The Trust may be exposed to variations in foreign exchange rates.
- A decline in India's foreign exchange reserves may reduce liquidity and increase interest rates in India, which could have an adverse impact on the Trust.
- Any downgrading of India's debt rating by rating agencies could have a negative impact on the business.
- Changes in legislation or the rules relating to tax regimes could materially and adversely affect the business, prospects and results of operations.
- The sale or possible sale of a substantial number of Units by the Sponsor in the public market following the lapse of its lock-in requirement as prescribed under the InvIT Regulations could adversely affect the price of the Units.
- Investors may be subject to Indian taxes arising out of capital gains on the sale of Units and on any dividend or interest component of any returns from the Units.

- The Ministry of Finance, GoI, has constituted a task force to draft new direct tax legislation, the provisions of which may have an unfavourable implication for the Trust.

Balance Sheet

Particulars (Rs in million)	9MFY21	FY20	FY19	FY18
ASSETS				
Non-current assets	**63,752.5**	**64,415.3**	**67,179.5**	**63,874.9**
Property, Plant and Equipment	61,993.5	63,218.9	66,153.3	17,786.6
Capital work-in-progress	22.4	0.0	86.6	45,292.7
Other Intangible assets	1,116.7	1,155.2	884.9	4.0
Intangible assets under development	0.0	0.0	0.0	187.2
Deferred tax Assets (Net)	0.0	0.0	0.0	192.9
Other non-current assets	619.9	41.2	54.7	411.6
Current assets	**4,432.5**	**3,796.9**	**2,823.1**	**1,173.9**
Inventories	310.2	310.2	209.8	108.9
Financial Assets				
Trade receivables	1,881.1	1,737.2	1,189.3	506.7
Cash and cash equivalents	540.7	399.3	27.4	170.2
Other current financial assets	1,404.8	1,259.5	1,305.8	338.6
Current Tax Assets (Net)	0.0	56.8	57.0	49.4
Other current assets	295.7	33.9	33.9	0.0
Total Assets	**68,185.0**	**68,212.2**	**70,002.6**	**65,048.8**
EQUITY AND LIABILITIES				
Equity	**14,881.3**	**15,337.0**	**12,182.9**	**5,134.9**
Equity Share capital	12,130.4	12,006.8	9,986.8	4,422.8
Other Equity	2,750.9	3,330.2	2,196.1	712.1
Liabilities				
Non-current liabilities	**50,184.6**	**44,580.2**	**53,421.5**	**52,367.3**
Financial Liabilities				
Borrowings	47,507.3	44,293.2	53,368.6	52,367.3
Deferred tax liabilities(Net)	2,677.3	287.1	52.9	0.0
Current liabilities	**3,119.1**	**8,294.9**	**4,398.2**	**7,546.6**
Financial Liabilities				
Trade payables (dues of creditors other than micro enterprises and small enterprises)	87.2	8.8	3.9	0.8
Other current financial liabilities	2,997.9	8,268.4	4,305.1	7,387.6
Other current liabilities	31.2	15.4	52.8	157.5
Provisions	0.4	0.8	5.5	0.1
Current Tax Liabilities (Net)	2.4	1.4	30.9	0.7
Total Equity and Liabilities	**68,185.0**	**68,212.2**	**70,002.6**	**65,048.8**

Profit & Loss

Particulars (Rs in million)	9MFY21	FY20	FY19	FY18
Revenue from Operations	9,922.8	13,242.9	9,771.6	3,435.7
Other Income	168.0	98.1	69.6	20.3
Total Income	**10,090.8**	**13,340.9**	**9,841.2**	**3,456.0**
EXPENSES				
Finance costs	2,910.0	4,290.7	3,281.5	1,157.8
Depreciation and amortization expense	1,392.4	3,794.3	2,749.6	932.2
Other expenses	311.9	381.6	329.8	80.8
Total expenses	**4,614.3**	**8,466.7**	**6,360.8**	**2,170.7**
Profit Before Tax	**5,476.5**	**4,874.2**	**3,480.4**	**1,285.3**
Tax expense				
Current tax – Current Year	276.1	851.8	754.0	274.3
- Earlier Years	-561.2	0.0	0.0	0.1

Deferred tax	2,390.2	234.2	245.8	-130.5
Total Tax	**2,105.1**	**1,086.0**	**999.7**	**143.9**
Profit for the period	**3,371.4**	**3,788.3**	**2,480.6**	**1,141.3**