



CRISIL's Rating Rationale – Power Grid Corporation of India Limited

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Online

CRISIL

Rs. 20 Billion Bonds Programme	AAA/Stable (Assigned)
Rs. 6.50 Billion Short Term Debt Programme (Enhanced from Rs. 6 Billion)	P1+ (Assigned)
Rs. 7.50 Billion Bonds Programme (Series XVI)	AAA/Stable (Reaffirmed)
Rs. 15.41 Billion Bonds Programme (Series XIV & XV)	AAA/Stable (Reaffirmed)
Rs. 18.43 Billion Bonds Programme (Series XI, XII & XIII)	AAA/Stable (Reaffirmed)
Rs. 11.59 Billion Bonds Programme (Series IX & X)	AAA/Stable (Reaffirmed)

The rating on Power Grid Corporation of India limited (PGCIL) reflects the company's:

- Critical role in inter-state power transmission in India
- Dominant presence in transmission sector
- Track record of efficient operations
- Significant demand for transmission capacity
- Non-regulatory work emerging as a source of improving profitability

The above strengths offset:

- Average financial profile, high gearing levels and modest coverage ratios
- Inherently weak credit risk profile of customers, mainly State Electricity Boards (SEB)

Rating Sensitivity Factors

- Aggressive debt-funded capital expenditure plans
- Timely completion of projects

Outlook: Stable

PGCIL is of strategic importance to India's power sector, given its role in developing and operating the national power transmission network. This along with a strong demand and regulated tariff regime is expected to aide PGCIL in maintaining its strong credit profile, inspite of higher debt based future capital expenditure plans.

Critical role in inter-state power transmission in India

PGCIL is currently the only power utility involved in inter-state power transmission in India. The company plays a vital role in the Government of India's (GoI's) plans to augment the power transmission capacity. The plan envisages sizeable expansion of generating capacity, and the creation of a National Grid to transfer power from surplus to deficit regions. Further, the company's strategic importance to GoI has been reaffirmed following its designation as a Central Transmission Utility (CTU) under the Electricity Act 2003, and as the nodal agency for implementing an open access at the inter-state transmission level.

PGCIL also benefits from its ownership by GoI. In light of the company's critical role in India's power sector, the central government has constantly supported the utility

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by guaranteeing loans PGCIL has taken from multilateral lending agencies, and some of its foreign currency loans as well.

Dominant presence in transmission sector

PGCIL enjoys a monopoly in the inter-state electricity transmission sector. As part of PGCIL's role as the nodal transmission entity in India, it is involved in constructing and maintaining a high voltage inter-state electricity network connecting the central power companies' generating stations and main load centres. With a network of over 50,750 circuit kms (ckms) of Extra High Voltage (EHV) transmission lines, and with 85 Extra High Voltage Alternate Current (EHVAC) and High Voltage Direct Current (HVDC) sub-stations having transformation capacity of about 49,500 Mega Volt Amperes (MVA), the company wheels around 40 per cent of the entire power generated in India.

Although the transmission sector was opened to the private sector in 1998, PGCIL will continue to identify projects for private investment, and will control and supervise their operations. CRISIL believes that the company will retain its dominant position in the medium term, considering the limited scale of private sector investments in the transmission sector (the first private sector investment, a PGCIL-Tata Power joint venture, is developing a link between the Tala hydro-electric plant in Bhutan, and Delhi). PGCIL is currently pursuing an investment of over Rs. 500 billion for the Xth and XIth five year plans (2002-12), and creating a total inter-regional power transfer capacity of 30,000 MW by 2012. These projects, once operationalised, will reinforce the company's leadership position in the transmission sector.

Track record of efficient operations

PGCIL has a strong operating track record, evident from the system availability of over 99 per cent for its transmission lines; its system availability was 99.74 per cent in 2004-05 (refers to the financial year, April 1 to March 31). The technical loss levels of the company are at 3-4 per cent, comparable with international standards. Line outages, at 3.25 per line in 2004-05, are low. In addition, PGCIL has played a major role in implementing Availability-Based Tariffs (ABT) in the country. The phased implementation of ABT has resulted in the stabilisation of vital grid parameters such as voltage and frequency. The company has also invested in modernising Regional Load Despatch Centres (RLDCs), which has improved the operating efficiency of the transmission system.

Significant demand for transmission capacity

PGCIL is expected to benefit from the growing demand for transmission capacity to transfer power from generating stations. The Ministry of Power's capacity addition target of 1,00,000 MW by 2012 is a key driver of the company's capacity addition plans. These plans are also driven by the limited transmission capacity available for facilitating inter-regional transfers of power. PGCIL has been adding inter-regional transfer capacity, which touched 9500 MW as on March 31, 2005. As a result, there has been a significant increase in the transfer of power across states, from 6,770 Million Units (MU) in 2000-01 to 31,000 MU in 2004-05 (at an estimated value of Rs. 62 billion). To cater to future demand, the company will have to invest in strengthening its existing transmission systems.

Non-regulatory work emerging as a source of improving profitability

The core area of operations for the company, that is the transmission of power, is regulated by the Central Electricity Regulatory Commission (CERC). CERC has

stringent norms for operations, leaving little scope for the company to improve its profitability. PGCIL has therefore increased its focus on non-regulatory work such as domestic and international consultancy services, turnkey execution of projects under the Accelerated Power Development and Reforms Programme (APDRP) of GoI, execution of transmission/sub-transmission work on behalf of state power utilities, rural electrification for Rural Electrification Corporation (REC), and providing a national telecommunications network. Currently, PGCIL acts as an advisor-cum-consultant for schemes costing over Rs. 79 billion under APDRP. In addition, its rural electrification agreement with REC envisages the execution of projects at an estimated cost of Rs. 25 billion. During 2004-05, the company generated Rs. 1.27 billion of revenue from such non-regulatory work. Going forward, the share of such revenue is expected to increase significantly, improving the overall profitability of the company.

Average financial profile, high gearing levels and modest coverage ratios

The company's gearing is high at 1.66 times as on March 31, 2005, due to borrowings incurred to finance its ongoing capital expenditure plans, which are primarily linked to investments in the generation sector. Given the trend in implementing generation projects, CRISIL believes that PGCIL will incur further expenditure of about Rs. 90 billion over the next two years. PGCIL's gearing is expected to increase as the funding pattern (debt-equity) for future projects is expected to be in the ratio 2.33:1 as per the CERC tariff norms. Thus, no significant improvement is expected in its coverage ratios in the medium term. The company's ability to tie up long-term loans is a comfort, since this will minimise any refinancing pressures. In addition, the present tariff norms compensate for the interest on loan capital, forex variation on loans, and loan repayments to the extent of one tenth of the loan capital (if repayment amount is over and above depreciation) is pass-through as Advance Against Depreciation (AAD).

Inherently weak credit risk profile of customers, mainly SEBs

PGCIL's profitability is constrained by the weak credit profile of its customers, primarily state power utilities. PGCIL enjoys the benefit of a large number of regionally diverse SEBs as a portfolio; however, the inherent weaknesses of SEBs are a cause of concern for the credit profiles of all the CPSUs. The company has benefited from the settlement scheme as per the Ahluwalia Committee's recommendations, whereby the sundry debtor levels dropped from Rs. 16.45 billion (288 days' sales) in 2002-03 to Rs. 4.51 billion in 2004-05 (65 days' sales). All customers except Bihar, Jharkhand and Delhi have converted their entire receivables as per the scheme, wherein the outstanding payments to CPSUs by the SEBs as on September 30, 2001, along with 40 per cent of the surcharge (the remaining 60 per cent was waived) has been converted into 8.5 per cent tax free state government bonds worth Rs. 17.16 billion. Delhi has converted part of its outstanding payments on similar lines into a bi-partite loan worth Rs. 1.54 billion; Bihar and Jharkhand have also converted part of their payables. As a result, receivables from weak SEBs have been converted into interest-bearing investments in state government debt.

The SEBs presently make their payments on time, and adequate Letters of Credit (LCs) have been opened in favour of the company as per this scheme. However, this payment discipline is directly linked to the implementation of reforms in various states, in the absence of which the sustainability of the prompt payments would be an area of concern once the incentives are phased out after 2006.

Business Description

PGCIL, wholly owned by GoI, was incorporated in October 1989 to construct Extra High Voltage (EHV) alternate current and HVDC transmission lines, sub-stations, Load Dispatch Centres (LDC) and communication facilities in order to move large blocks of power from the central generating agencies and surplus power, if any, to load centres within and across regions. The company comes under the administrative control of the Ministry of Power. It has been recognised as a mini *ratna* public sector enterprise, which has translated into some degree of managerial autonomy. In August 1998, Power Grid Corporation was conferred the statutory status of a Central Transmission Utility (CTU). The status has been retained in the Electricity Act, 2003. The company owns and operates over 50,750 circuit kms of transmission lines, comprising mainly 400 KV transmission lines and HVDC transmission systems. It has sub-stations across the country with a transformation capacity of 49,500 MVA.

Industry Prospects

The Indian power sector has undergone a number of changes, from localised supply areas at the time of independence to the five regional grids - Northern, Southern, Western, Eastern and North-Eastern - operating today. The present focus is on developing an integrated national grid, which is expected to bring down transmission losses. The national grid will also facilitate the further development of the power market through open access to transmission, which has already been implemented by PGCIL for both short term and long term customers.

The GoI has significant plans for adding transmission capacity and strengthening the existing networks. It envisages a significant role for both PGCIL and the private sector in achieving this objective. The private sector will implement projects through the independent private transmission company (IPTC) route or through a joint venture with PGCIL. Initially, a basket of eight projects entailing investment of Rs. 210 billion were identified for the IPTC route. But this initiative has met with limited success. The only private sector investment so far is from Tata Power for setting up a transmission line from Bhutan to Delhi.

Key Financials

		31-Mar-05	31-Mar-04	31-Mar-03	31-Mar-02
		Actual	Actual	Actual	Actual
Operating Income	Rs.Million	25,626	22,737	22,178	23,401
OPBDIT	Rs.Million	20,068	18,079	15,477	16,950
PAT	Rs.Million	7,672	7,309	6,309	6,762
Net Cash Accruals	Rs.Million	12,193	12,145	10,001	10,230
Tangible Networth	Rs.Million	90,012	84,893	77,597	71,041
Total Debt	Rs.Million	133,880	126,617	116,524	100,807
OPBDIT / Operating Income	%	78.31	79.51	69.78	72.44
PAT / Operating Income	%	29.94	32.15	28.44	28.89
ROCE	%	7.51	8.26	7.79	8.98
PBDIT Interest Coverage	Times	3.02	2.34	2.74	2.8
Net Cash Accruals / Total Debt	Times	0.09	0.1	0.09	0.1
Total Debt / Tangible Networth	Times	1.49	1.49	1.5	1.42
Current Ratio	Times	0.56	0.97	1.53	1.33