June 19, 2025

Druk Green Power Corporation Limited: Ratings reaffirmed

Summary of rating action

Instrument*	Previous rated amount (Rs. crore)	Current rated amount (Rs. crore)	Rating action
Long term – Fund-based – Term loan	1,400.00	1,383.00	[ICRA]BBB+ (Stable); reaffirmed
Issuer ratings	0.00	0.00	[ICRA]BBB+ (Stable); reaffirmed
Total	**1,400.00**	**1,383.00**	

**Instrument details are provided in Annexure-I*

Rationale

The rating reaffirmation reflects the strong credit profile of Druk Green Power Corporation Limited (DGPC), which operates hydropower projects with a total installed capacity of 2,453 MW in Bhutan. DGPC is a strategically significant enterprise, wholly owned subsidiary of Druk Holding & Investments (DHI), the holding company for government owned companies and 100% owned by the Royal Government of Bhutan (RGoB). It plays a vital role in fulfilling the country's domestic electricity needs and continues to contribute nearly 22% of the Government's non-grant revenues through royalty, taxes and dividend payments. DGPC also benefits from a stable regulatory framework, access to concessional financing (low-cost, long-term loans facilitated by the RGoB for hydropower development) and favourable power export arrangements with PTC India Limited (PTC) which has been authorized by Government of India for cross-border electricity trade with Bhutan.

DGPC, by virtue of its parentage, enjoys strong linkages with the Government of India (GoI), which has supported the development of various projects (aggregate 2,136 MW) by providing the entire funding (60-70% through loan and 40-30% through grants) and ensuring a complete offtake of the surplus power to India (after meeting domestic demand) through PTC India. While DGPC ensures that Bhutan is self-sufficient in meeting its domestic power requirements, the surplus generated and upstreamed as dividends in addition to the royalty and tax payments is an important source of revenue for the Government of Bhutan.

DGPC's projects have continued to deliver strong operational performance by consistently generating power in excess of the design energy as well as operating within the normative parameters (auxiliary consumption, etc.). All the projects at a combined level generated 10,691 million units (MUs) in CY2024, higher by 11% compared to the design energy generation of 9,635 MUs. This, coupled with a cost-plus domestic tariff and higher export tariffs, has resulted in healthy profitability metrics, a conservative capital structure and strong debt protection metrics. DGPC's export tariff (Rs 2.23-4.54/unit) is extremely competitive in the Indian power market and is comparable to the prevailing solar tariff and is much lower than the conventional thermal tariffs in India.

The counterparty credit risk is mitigated by the strong credit profile of the DGPC's offtakers: PTC India Limited (PTC; rated [ICRA]A1+), Tata Power Trading Company Limited (TPTCL) and Bhutan Power Corporation Limited (BPCL; fellow subsidiary of DGPC responsible for transmission and distribution of power in Bhutan). Although the financial profile of the discoms that are the ultimate beneficiaries of DGPC's power in India is weak, the payments from PTC have been timely. This was also evident during CY2020-CY2022 as well, when despite the weak collection from the discoms in India on account of the relaxations/deferment of payments by customers during the Covid-19 lockdown, the payments from PTC remained timely. The average receivable days improved to 52 days in CY2024 compared to 77 days in CY2023.

Although DGPC benefits as an RGoB enterprise, the rating is ultimately constrained by the susceptibility of its operations to potential changes in tax/royalty or other such demands like higher dividends to support the Government in times of an economic slowdown. The RGoB has complete control over the operations of DGPC by virtue of its 100% holding and presence in the company's board. Hence, the operations of the company are vulnerable to any change in the Government's regulations/policies.

The rating of DGPC is exposed to significant project execution and funding risks due to the increased scale and complexity of its ongoing and planned hydro projects of ~1,920 MW and solar energy projects of ~500 MW, with capital investments worth ~Nu. 13,000-14,000 crore over the next four years. These risks stem from high execution challenges associated with hydropower projects, including the risk of delays and cost overruns. Also, a timely tie-up of equity and debt funding for these projects so that they are completed within the scheduled timeline remains a key monitorable. Further, the tie-up of long-term off-take agreements for these projects remains important to sustain the healthy profitability of DGPC, going forward.

The largely debt-funded capex (debt-equity mix of 70:30) is expected to increase the company's leverage level, with the total debt/OPBITDA estimated to increase to 6.0-6.5 times in CY2028 from 2.5 times in CY2024. Moreover, substantial earnings from these projects are only expected to accrue CY2030 onwards when two of its major hydro projects (Khorlochu and Dorjilung) are expected to get commissioned. Nonetheless, the debt coverage metrics of the company are expected to remain comfortable over the medium term, with the debt service coverage ratio (DSCR) remaining above 1.75x owing to healthy profitability from the existing projects, modest repayments over the near to medium term and moratorium available on the debt availed for the upcoming projects. Additionally, securing long-term offtake agreements in the domestic market and at remunerative tariff which is determined on a cost-plus basis will be crucial to maintaining DGPC's profitability in the future. Therefore, the implementation and offtake risks are expected to remain elevated for DGPC over the coming years. The company is evaluating multiple implementation models—independent power producers, captive arrangements, and public-private partnerships—for its ongoing hydro and solar projects, and has signed MOUs with Tata, Adani, and Reliance to explore these options.

In addition, DGPC is exposed to risks related to hydrology (single-part tariff linked to generation) and exchange rate variation (no hedging instrument available in Bhutan although the overall exposure is lower than the annual operating profits of the company). Lastly, a higher domestic consumption in CY2023 and CY2024 adversely impacted DGPC's export revenues. Therefore, a continued steep increase in domestic demand and consequent lowering of export revenues will be a major headwind and a key monitorable for the rating.

The Stable outlook on the rating reflects ICRA's opinion that DGPC's operations will continue to be supported by the efficient operations of its hydropower project (HPPs) and a stable sovereign credit profile.

Key rating drivers and their description

Credit strengths

Strategic importance to royal government of Bhutan; Government and bilateral support from India –DGPC, wholly owned subsidiary of Druk Holding & Investments (DHI), the holding company for government owned companies being a 100% owned entity of the Royal Government of Bhutan (RGoB), remains a strategically important entity to RGoB as it meets the entire domestic power demand of Bhutan and contributed to 22% of the total revenue (excluding grants) of RGoB in CY2024. Further, it receives concessional funding via RGoB, which includes low-cost, long-tenure loans. This is evident from the past track record of infusing funds for implementing hydro projects in the past and a continued expectation of similar support from the government as DGPC plans to implement various hydro and solar projects over the near to medium term. Additionally, DGPC maintains strong linkages with the Government of India (GoI), which funds (through loans and grants) and offtakes power from major projects. The company is also exploring various modes for implementing the under-construction hydro and solar projects through various modes such as through independent power producers, captive arrangement and public private partnership (PPP) model wherein it has signed Memorandum of understandings (MOUs) with Tata, Adani and Reliance group.

The operational portfolio of DGPC (with the exception of the Basochhu, Dagachhu and Nikachhu HPPs) has been developed under a bilateral arrangement between the RGoB and the GoI, wherein the latter has provided the entire funding for these projects in the form of loans and grants. The entire surplus power (after meeting domestic demand) has been contracted with PTC/TPTCL at export tariffs, which are higher than the approved domestic tariff (on cost plus basis). DGPC's export tariff (Rs

2.23-4.54/unit) is extremely competitive in the Indian power market and is comparable to the prevailing solar tariff but is much lower than the conventional thermal tariffs in India.

Operational excellence with generation performance above design energy level - DGPC has a consolidated hydropower capacity of 2,453 MW across Bhutan. These plants have been consistently generating electricity in excess of their design energy, reflecting high levels of efficiency and reliability and leading to healthy profitability over the years. This consistent performance ensures stable domestic supply and the availability of surplus power for export, which is crucial for profitability. In CY2024, the company achieved 10,691 MUs, 11% higher than the aggregate design energy of 9,635 MUs. Presently, DGPC manages large-scale hydropower assets in challenging Himalayan terrain, demonstrating its robust project execution capabilities and operational resilience.

Long term offtake arrangements & payment security leading to healthy debt coverage metrics- DGPC benefits from long-term offtake arrangements with PTC and TPTCL for a substantial portion of its surplus power, providing cash flow visibility. Also, the strong credit profile of the customers would support timely payments. These entities act as intermediaries, ensuring that timely payments are received by DGPC even when the ultimate consumers (Indian discoms) face financial stress. Additionally, for domestic supply, power is sold by DGPC to BPC, a fellow government-owned entity responsible for the transmission and distribution of Power within Bhutan, wherein the payments have been timely. DGPC benefits from a cost-plus domestic tariff regime and competitive export tariffs ranging from Rs. 2.23 to Rs. 4.54 per unit. Over the years, the company has maintained strong profitability, a conservative capital structure and robust debt protection metrics, supported by healthy generation performance (higher than design energy), attractive export tariffs and cost-plus domestic tariffs. Considering the same, ICRA's expects the DSCR to be above 1.75x over the medium term.

Credit challenges

Exposure to sovereign credit and policy risk – As DGPC is 100% owned by the RGoB, it gives the government significant control over the company's operations and financial decisions. This exposes DGPC to potential changes in government policies, including adjustments in taxes, royalties, dividend payments, or mandates for financial support during fiscal stress. Additionally, as a major contributor to national revenue, DGPC may face non-commercial pressures that could affect its profitability, including through adverse regulatory changes in the tariff-setting mechanism. Reliance on bilateral agreements for power exports, especially with India, also makes the company vulnerable to shifts in foreign policy or geopolitical dynamics. Therefore, the credit rating of DGPC is constrained by sovereign credit and policy related changes and risks related to Bhutan. However, some upcoming joint venture projects include a "change in law" clause to safeguard investors against potential negative impacts arising from shifts in government regulations or policy changes.

Large capex plans expose the company to project execution, funding & offtake risks; leverage level to increase - DGPC faces considerable project execution and funding risks due to the scale and complexity of its ongoing and planned hydroelectric projects (~1,920 MW) and solar energy initiatives (~500 MW), which together require a capital investment of approximately Nu. 13,000–14,000 crore over the next four years. These risks primarily arise from the inherent challenges of executing large-scale hydro projects, including potential delays and cost overruns. A key credit monitorable will be the timely arrangement of both equity and debt financing to ensure project completion within the scheduled timelines. Additionally, securing long-term offtake agreements will be crucial to maintaining DGPC's profitability in the future.

The company's leverage is expected to rise significantly because of the predominantly debt-funded capital expenditure (with a debt-to-equity ratio of 70:30); the total debt/OPBITDA is projected to increase to 6.0–6.5x by CY2028 from 2.5x in CY2024. Further, any meaningful earnings contributions from these projects are anticipated only from CY2030, when the major hydro projects such as Khorlochu and Dorjilung are expected to be commissioned. Nevertheless, DGPC's debt coverage metrics are likely to remain comfortable in the medium term, supported by healthy profitability from existing operations, modest near-term repayment obligations and moratoriums on debt for the upcoming projects, keeping the cumulative DSCR above 1.75x.

Hydrology risks- DGPC's is exposed to hydrological risk arising from the seasonal and climatic variability in river flows, which directly affects power generation. Reduced water availability during dry seasons or due to climate change can lead to lower output and revenue volatility. As Bhutan lacks hydrological hedging instruments, DGPC remains fully exposed to these natural fluctuations. This risk is particularly critical for export revenues, as surplus generation during peak flow seasons is essential for meeting cross-border commitments. Any prolonged deviation from the expected hydrological patterns could also impact the viability of new hydroprojects under development. However, comfort is drawn from the consistent higher-than-design energy generation.

Rising domestic demand to moderate tariff realisation and in turn DGPC's profitability - Rising domestic demand in Bhutan poses an emerging risk to DGPC's revenue model, which has historically relied heavily on power exports to India. Bhutan's internal electricity consumption is increasing on the back of economic growth, industrialisation and electrification. Hence, more of DGPC's generation capacity is being diverted to meet the domestic needs. This reduces the volume of surplus power available for export, which is typically sold at higher tariffs compared to the domestic rates. The impact was already visible in CY2024, when higher domestic consumption led to a decline in export revenues. With this trend expected to continue, DGPC's profitability, cash flows and debt coverage metrics, especially for new projects that factor in a certain level of export-based income, could be impacted. Additionally, the lack of long-term domestic offtake agreements and the cost-plus nature of domestic tariffs may not fully compensate for the lost export margins, making this a key monitorable for the company's profitability.

Liquidity position: Adequate

DGPC's consolidated liquidity is adequate with expected robust cash flow from operations worth Nu. 1,000-3,000 crore, which will be adequate to meet its debt servicing (Nu. ~1,100-1,200 crore principal and interest repayments annually over CY2025–CY2027). However, the company is expected to remain free cash flow negative between CY2025 and CY2029 due to the ongoing capex for its solar and hydro projects. Therefore, during this period, the company would depend on external debt and equity funding sources to meet its requirement for growth capex. However, the support from RGoB and its established track record of raising funds is expected to support the liquidity profile in the intervening period. In addition, on December 31, 2024, the company had cash and liquid funds of Nu. 1,158 crore and Nu. 1,308 crore on a standalone and consolidated basis, respectively.

Rating sensitivities

Positive factors – ICRA may upgrade DGPC's rating if the sovereign credit profile of Bhutan improves.

Negative factors – Pressure on DGPC's rating may arise if there is a significant reduction in generation on account of poor hydrology or plant breakdown. Moreover, an increase in the receivables impacting the company's profitability, coverage and liquidity will weigh on the rating. Further, a larger-than-expected capital expenditure affecting DGPC's liquidity profile and debt coverage metrics could put pressure on the rating. Any deterioration in the sovereign credit profile of Bhutan would also trigger a downgrade.

Analytical approach

Analytical Approach	Comments
Applicable rating methodologies	Corporate Credit Rating Methodology Power- Solar
Parent/Group support	Not Applicable
Consolidation/Standalone	For arriving at the ratings, ICRA has considered the consolidated financials of DGPC which are enlisted in Annexure II

About the company

DGPC is a wholly-owned enterprise of the RGoB through Druk Holdings & Investments (government company for holding all state-owned enterprises in Bhutan). The company was incorporated in January 2008 through the amalgamation of the Chhukha, Kurichhu and Basochhu hydropower projects. The Tala hydropower project and the Mangdechhu project were subsequently taken over in April 2009 and December 2022.

The current operational capacity of the company is 2,453 MW. DGPC is the sole hydropower operator in Bhutan, responsible for supplying power for meeting the domestic requirements of Bhutan Power Corporation Ltd (a fellow subsidiary, which is also an RGoB-owned enterprise). The offtake arrangements for DGPC's plants obligate PTC India Limited to offtake the entire surplus power from these plants after meeting the domestic requirements.

Key financial indicators

Consolidated	CY2023*	CY2024*
Operating income	1,296.1	2,724.4
PAT	461.9	927.9
OPBDIT/OI (%)	78.4%	83.9%
PAT/OI (%)	35.6%	34.1%
Total outside liabilities/Tangible net worth (times)	0.7	1.0
Total debt/OPBDIT (times)	2.2	2.59
Interest coverage (times)	15.0	6.24

*Source: Company, ICRA Research; All ratios are as per ICRA's calculations; Amount in Nu. crore. *CY corresponds to January-December*

Status of non-cooperation with previous CRA: Not Applicable

Any other information: None

Rating history for past three years

	Current (FY2026)					Chronology of rating history for the past 3 years					
				FY2026		FY2025		FY2024		FY2023	
Instrument	**Type**	**Amount rated (Rs. crore)**	**19-JUN-2025**	**Date**	**Rating**	**Date**	**Rating**	**Date**	**Rating**	**Date**	**Rating**
Term loan	Long term	1,383.00	[ICRA]BBB+ (Stable)	-	-	-	-	13-MAR-2024	[ICRA]BBB+ (Stable)	-	-
Issuer ratings	Long term	0.00	[ICRA]BBB+ (Stable)	-	-	-	-	06-JUL-2023	[ICRA]BBB+ (Stable)	29-APR-2022	[ICRA]BBB+ (Stable)
				-	-	-	-	13-MAR-2024	[ICRA]BBB+ (Stable)	-	-

Complexity level of the rated instruments

Instrument	Complexity indicator
Long term – Fund-based – Term loan	Simple

Issuer ratings	Not Applicable

The Complexity Indicator refers to the ease with which the returns associated with the rated instrument could be estimated. It does not indicate the risk related to the timely payments on the instrument, which is rather indicated by the instrument's credit rating. It also does not indicate the complexity associated with analysing an entity's financial, business, industry risks or complexity related to the structural, transactional or legal aspects. Details on the complexity levels of the instruments are available on ICRA's website: Click Here

Annexure I: Instrument details

ISIN	Instrument name	Date of issuance/sanction	Coupon rate	Maturity date	Amount rated (Rs. crore)	Current rating and outlook
NA	Long term – Fund-based – Term loan	13 Oct 2024	-	31 Oct 2037	1383.00	[ICRA]BBB+ (Stable)
NA	Issuer Rating	-	-	-	0.00	[ICRA]BBB+ (Stable)

Source: Company

Please click here to view details of lender-wise facilities rated by ICRA

Annexure II: List of entities considered for consolidated analysis

Company name	Ownership	Consolidation approach
Dagachhu Hydro Power Corporation Limited	59.00%	Full consolidation
Tangsibji Hydro Energy Limited	100.00%	Full consolidation
Bhutan Hydropower Services Limited	100.00%	Full consolidation
Bhutan Automation Engineering Limited	51.00%	Equity method
Khlorlochhu Hydropower Limited	100.00%	Full consolidation
Druk Hydro Energy Limited	100.00%	Full consolidation

Note: ICRA has taken a consolidated view of the parent (DGPC), its subsidiaries and joint ventures while assigning the ratings

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