

International Project Financing and Risk Management in Upper Trishuli-1 Hydropower Project

Introduction

Since 1980s, the worldwide process of deregulation of utilities and private participation in public sector projects led to the sharp and consistent growth of project finance (Yescombe, 2002). Meanwhile, project financing was introduced in Nepal for the development of Khimti and Upper Bhotekoshi hydro-projects in build-own-operate-transfer (BOOT) model in 1990s. After Khimti and Upper Bhotekoshi, few hydropower projects developed by the foreign investors utilized international project financing to finance hydropower projects in Nepal. Most recent one is the Upper Trishuli-1 (UT-1) hydropower project of installed capacity 216 MW which is promoted by the Korean sponsors including International Finance Corporation (IFC) and a local investor.

Typical characteristics of the project finance involves special purpose vehicle or company (SPV) having a high ratio of debt to equity in which lenders rely on the future cash flows that project is expected to generate and the security for lenders is the project company's contracts, licenses, or ownership of rights to natural resources (Yescombe, 2002). Because investors do not present guarantees (non-recourse) or pledge only limited guarantees (limited recourse) for the project finance debt, risk management becomes critical for the lenders. As a result, contractual agreements made by the SPV with various stakeholders are of critical importance to the lenders. Similarly, international investors need safeguard over their investment in an infrastructure project built in a foreign host country from various political and policy risks, possible to emanate during the long concession period, through appropriate contractual means or guarantees.

An analysis of the contractual arrangements which SPV of UT-1 hydro-project– Nepal Water and Energy Development Company (NWEDC)– has achieved with its stakeholders is essential to comprehend the risk management in UT-1 project. This article will thus present the structure of project financing and discusses the risk management in UT-1 hydro-project achieved through the key contracts.

Contractual Arrangement

Fig. 1 presents the various contractual agreements attained by the NWEDC with different stakeholders. These contract agreements are at the heart of risk management for both, lenders as well as investors. Of the illustrated contractual arrangements, key contracts critical in managing risks for both investors and lenders are discussed under the subsequent sections.

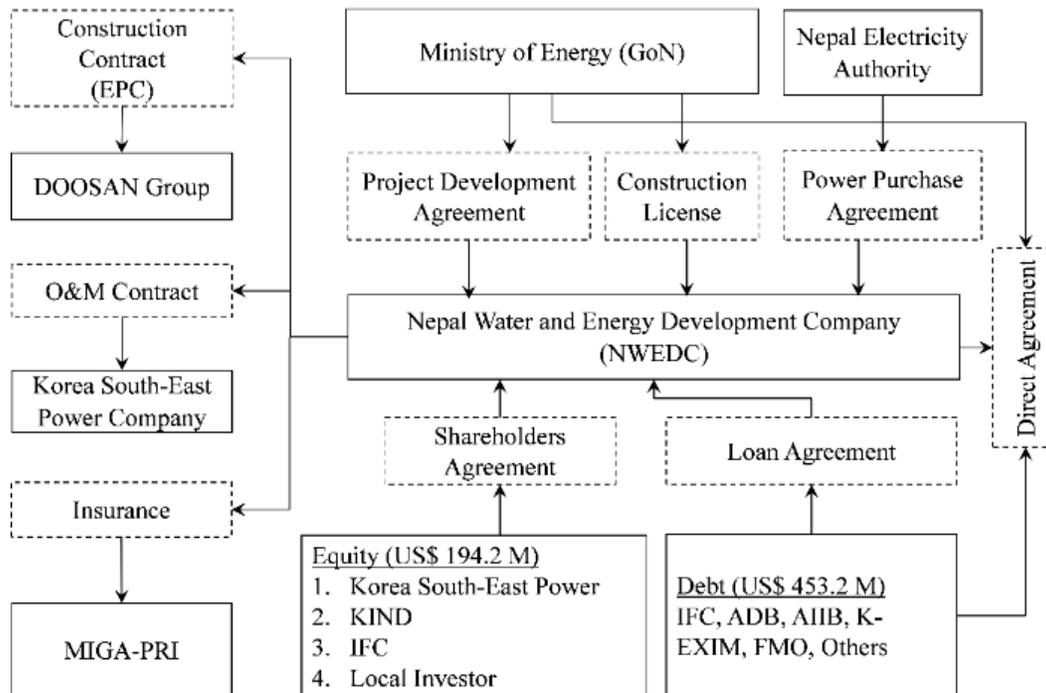


Fig. 1: Contractual Structure of UT-1

Project Development Agreement (PDA)

The role of public sector in risk management especially through risk allocation have become increasingly important in terms of assuring private partners in BOOT/PPP infrastructure projects (Leigland, 2018). For this purpose, Government of Nepal (GoN) represented by the Ministry of Energy signed PDA with NWEDC on 29th December 2016. Agreed after several rounds of negotiation, PDA served as an integral risk management instrument in the project financing of UT-1, delineating the risk allocation between GoN and NWEDC.

Risk allocation to GoN under PDA in **Error! Reference source not found.** demonstrates that GoN took substantial volume of risks of political, commercial, legal, and developmental nature. Of several risk allocations, it is important to highlight that GoN ensured NWEDC of the due and punctual performance of NEA’s obligations under PPA in various circumstances, including the failure of NEA to make payment to the NWEDC. UT-1 involves debt financing of US\$ 453 million which is a substantially high figure of debt. To mitigate the risk caused by the failure of NWEDC to repay the debt, lenders, NWEDC and IDA entered into an IDA guarantee agreement. Further, GoN ensured to deliver counter-guarantee with respect to the IDA guarantee agreement under PDA. These two substantial supports of GoN including other risk allocation provision in PDA insured sponsors and lenders of UT-1 from various uncertainties possible to occur during the concession period.

Table 1: Major Risks and Risk Allocation in PDA of UT-1

Risk Group	Risks	Details of Allocation
Political Risks	Expropriation and Nationalization	GoN shall not expropriate and nationalize the project. Such action, if performed shall be termed as GoN Event of Default, occurrence of which shall require GoN to pay the Transfer Price defined.
	Change in Taxes	GoN shall compensate any additional tax liability due to change in taxes.
	Political Force Majeure Events	Such events are defined as GoN Force Majeure Events and depending on the events, relief such as time extension or payment of GoN Force Majeure Compensation shall occur.
Commercial Risks	Payment Failure by Off-taker	GoN provided sovereign guarantee to back the financial and other obligations of NEA under PPA.
	Risk of Debt Repayment	GoN counter-guarantee IDA with respect to the IDA agreement (Agreement between the Company, the Lenders whose loans are guaranteed and the IDA).
	Repatriation of Earnings	GoN ensured full repatriation of earnings received from the project.
	Currency Convertibility Risk	GoN ensured prompt availability of necessary foreign currency at the prevailing market rates.
	Severe Market Disruption	It is defined as the occurrence of any material or exceptional circumstances in major international financial markets like Singapore, etc. GoN shall, for maximum 20 months, consider Severe Market Disruption period over the term of agreement, shall not terminate the agreement, or claim compensation over such period, and shall suspend company's obligations.
Legal Risks	Change in Law	GoN shall extend the affected limits and deadlines and shall pay the Change in Law Compensation Amount depending on the cost incurred or loss realized.
	Dispute Resolution	GoN agreed to enter international arbitration under Rules of Singapore International Arbitration Center (SIAC), if necessary.
	Risk of Discriminatory	GoN shall not take any discriminatory action against the company because of its foreign ownership, or to gain commercial or political

Risk Group	Risks	Details of Allocation
	Actions	advantage.
	Risk from Sovereign Immunity	GoN agreed not to claim sovereign immunity against any legal action concerning the project agreement.
Development Risks	Land Acquisition	GoN shall make available all necessary land for the project. Termination of PDA due to land acquisition delay event requires GoN to pay the transfer price equivalent to sunk cost plus transfer taxes.
	Delay in Approvals	GoN shall deliver timely approvals and failure to provide such approvals shall be considered as GoN Event of Default. GoN shall pay the transfer price equivalent to sunk cost plus transfer taxes.
	Force Majeure Events	GoN shall extend necessary timelines or shall pay GoN Force Majeure Event Compensation depending on the nature of events defined over the agreement.
Operating Risks	Water Availability	GoN shall ensure the right to receive uninterrupted flow of water for the concession period, as per the schedule defined in the license.

Table 2: Major Risks and Risk Allocation in PPA of UT-1

Risk Group	Risks	Details of Allocation
Commercial Risks	Market Risk	NEA signed PPA in take or pay structure.
	Foreign Exchange Risk	Exchange Rate Risk to be mitigated using hedging option negotiated.
	Inflation Risk	NEA indexed tariff to escalate by 3% per annum for first 8 years from Commercial Operation Date (COD).
Commercial Risks	Risk of Delayed Payment	NEA agreed to maintain a continuous and irrevocable letter of credit.
Legal Risks	Dispute Resolution	NEA agreed to enter international arbitration under Rules of UNCITRAL, if necessary.
Development Risk and Operating	Power Evacuation Risk	NEA shall timely complete the transmission line interconnection and the failure to do so shall require NEA to pay 45% of the total loss in revenue realized.

Risk Group	Risks	Details of Allocation
Risk	Force Majeure Events	NEA shall extend the term of PPA if the company do not receive compensation for the loss in revenue realized from such events.

Power Purchase Agreement (PPA)

Nepal Electricity Authority (NEA), a state-owned utility and off-taker, signed a power purchase agreement with NWEDC for UT-1 on take or pay provision. GoN under PDA had ensured that the tariff shall be denominated and payable in convertible foreign currency in the proportion of total foreign loan to the overall debt financing for maximum 10 years after commercial operation date (COD). However, standard PPA document for projects financed in foreign currency had a provision to establish a hedge fund where GoN, NEA and the project company need to share hedging cost as per the hedging rule of Nepal Rashtra Bank (NRB). Similarly, the payment structure involved foreign and local currency payment where foreign currency payment corresponds to the ratio of total foreign loan to the total investment in the project.

Dissatisfied with the proposed hedging option of NEA, NWEDC negotiated and finally resorted to the foreign exchange rate (FoREX) risk mitigation strategy where, GoN and NEA shall bear currency risk for 10 years and NWEDC shall deliver 17% free energy starting from 14th year after COD. In this manner, FoREX risk was mitigated for the first 10 years of debt repayment while NWEDC is still exposed to FoREX risk after 10 years.

Similarly, PPA also addressed varieties of other risks which are illustrated in Table 2. NEA took full market risk by signing PPA in take or pay provision. Similarly, PPA mitigated risks related to delay in payment, power evacuation, force majeure events and other risks with appropriate contractual clauses.

Political Risk Insurance (PRI)

In the developing countries like Nepal, political risk is the most significant risk for BOT/PPP infrastructure projects, which ranges from labor unrest to expropriation of built assets (Tiong, 1990). Moreover, it is a major constraint to the flow of foreign investment into infrastructure projects in the developing countries (Villar et al., 2010). As a result, specific political risk management instrument is necessary for safeguarding the investment made into infrastructure projects.

For investing into UT-1 hydro-project in Nepal, investors purchased political risk insurance from Multilateral Investment Guarantee Agency (MIGA). MIGA's insurance covered equity investment of US\$ 87.4 Million against the risk of breach of contract by the public sector, for a period of 15 years

(MIGA, 2019). Under this facility, investors are assured to receive insured sum of equity investment in an event when the political risk defined in the scope of insurance materializes.

Direct Agreement

GoN under PDA had ensured that it shall enter into the direct agreement with NWEDC and the lenders. Since project financing in UT-1 involves non-recourse debt, it is essential for the lenders to mitigate risk from all circumstances that might lead to the failure in receiving repayment. Direct agreement is an instrument of rescue for this purpose. It transfers the company's rights, title and interests and all rights to payment under PDA, PPA and other agreements to the lenders. This agreement between the lenders, GoN and the project company provides exclusive rights to the lenders to step into and take charge of the project company (step-in rights), if certain delineated situations such as company's event of default occurs.

Moreover, direct agreement also provides lenders the right to receive payment through the issuance of special instructions to GoN. Further, it permits lenders to perform debt securitization without the prior approval of GoN. This debt securitization facilitates the restructuring of the debt portfolio of lenders and improve their balance sheet, burdened with long-tenure project finance loans. All these provisions under direct agreement are substantial to mitigate the credit risk for the lenders.

Conclusion

This article outlines and discusses the risk management attained through key contracts between different stakeholders involved in the international project financing of Upper Trishuli-1 hydropower project. The discussion highlights that public sector support in risk management via PDA, PPA, Direct Agreement and IDA indemnity agreement were instrumental in managing the key critical risks in investing and lending to the UT-1 project, constituting significant equity investment and debt financing equivalent to US\$ 647.4 million. More importantly, the active participation of public sector for risk management in this project has rendered significant exposure to the public sector regarding the international project financing process and its structure. Finally, it has also enhanced the negotiation ability of public sector institutions in risk allocation. The experience of public sector in international project financing of UT-1 will become a stepping stone for future project finance transactions.

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