

Nepal's hydropower regulation and challenges for offshore financing

A. Souche and W. Rossiter, DFDL, Thailand
A.R. Upreti, Pioneer Law Associations, Nepal

Landlocked between China and India, the Federal Democratic Republic of Nepal has strong prospects for hydropower expansion that have long been recognized by development agencies, developers and investors alike. However, only around 800 MW of Nepal's hydropower potential of 43 000 MW is exploited, representing approximately 90 per cent of Nepal's total current generation capacity. This paper demystifies the law, procedures and regulations governing the development of new hydro in the country.

Nepal's Ministry of Energy (MOE) estimated the country's electricity demand at 1423 MW for 2015 to 2016, with the deficit partly made up by imports of 230 MW from India. Meanwhile the electrification rate is a modest 58 per cent. As such, there is a strong incentive to develop the hydropower sector further, to provide electricity access and energy security, as well as for export opportunities.

Nepal shares a number of comparative advantages with the Lao Peoples' Democratic Republic (Lao PDR) in that it is a frontier market with vast hydropower potential, has relatively modest domestic power needs for its population of 28.5 million, is adjacent to large, high-growth energy markets, and borders with China. However, while the hydropower sector in the Lao PDR has managed to advance considerably over the last two decades under the oversight and stability of a one-party socialist state, Nepal has witnessed political turmoil most of this period.

Following a Maoist-led uprising in 1996 and the eventual transfer of power from King Gyanendra, Nepal officially became a secular state in 2006 and held its first elections in more than a decade in 2008. After several minority administrations in the intervening years culminated in the appointment of an interim government, a new round of elections was held in November 2013 and a new constitution was passed in September 2015. Government leadership is presently allocated between the major parties on a rotational basis and fresh elections are expected by December 2017, as specified under the current constitution.

Such political uncertainty has led to extended delays in establishing regulations and institutions to foster the hydropower sector in Nepal, and, ultimately, some reluctance from investors to proceed with project development. Regular personnel changes at the ministerial level also make it challenging for interest groups to sustain ongoing dialogues with government.

Institutional overview

Nepal has long recognized the importance of its hydropower resources to enhance economic development and to generate revenue from energy exports. Established in 1985, the Nepal Electricity Authority (NEA) had a monopoly on hydropower development and generation until enactment of the Hydropower Development Policy 1992. Since then, independent power producers (IPPs) have entered the sector and now contribute approximately 35 per cent of current hydropower capacity.

With daily scheduled load shedding an ongoing issue, several concept papers related to the energy crisis were released in 2008, 2011 and 2012, setting ambitious targets for hydropower development. The latest, issued in February 2016, is the first to include a detailed action plan with specific deadlines. It contemplates, among others aspects, force majeure extensions, government guarantees for NEA payments, convertible off-take arrangements, convertible currency denominated power purchase agreements (PPAs), issuance of up to 10 per cent equity to project-affected populations, simplified land acquisition processes, and prescribed timelines for environmental and social clearances. However, as with previous iterations, it remains to be seen to what extent the current concept paper will be implemented in the foreseeable future.

As in other developing markets, Nepal has a complex array of government agencies responsible for specific approvals, permits and licences in relation to hydropower developments that may appear daunting to foreign investors. Despite that the vast majority of hydropower developments in Nepal are unsolicited there is no effective one-stop system in place, although one has been under consideration for some time. The standard concession period is 30 years for export projects and 35 years for domestic consumption.

A direct line ministry of the Government of Nepal (GON) is the MOE, which oversees policy, planning and regulation of the sector. Within the ministry is the Department of Energy Development (DOED), responsible for implementing electricity regulations and issuing various licences and permits. The state-owned NEA is the exclusive off-taker for grid electricity and also acts as the agent for power exchanges with India.

The Investment Board of Nepal (IBN) is involved in the development and licensing process for hydropower projects with installed capacity of 500 MW or more, being entitled to negotiate and execute Project Development Agreements (PDAs) or Project Investment Agreements with private investors on behalf of the GON. Meanwhile, the MOE oversees PDAs for projects under 500 MW. Given the strong potential benefits for development, the overview provided below is limited to hydropower projects with a capacity between 50 and 500 MW.

Obtaining concessions for hydropower developments

Along with a number of other permits and approvals required for hydropower projects, perhaps one of the most important for hydropower developers initially is

Site of the Upper Trishuli project, for which a PDA was recently signed (see details on p20).



the Survey Licence, issued by the DOED. This enables the conducting of feasibility studies and environmental studies and is valid for five years. Assuming the results are positive, a Generation Licence (GL) can then be obtained, also from the DOED. The terms of the GL typically stipulate that a PPA must be obtained from the NEA within one to two years to remain valid. Further, Rule 21 of the Electricity Regulation requires developers to begin physical construction within one year from the date of issuance of the GL.

For most local hydropower developers in Nepal, the GL and PPA are considered sufficient for a project to proceed. While a more comprehensive concession agreement is possible in the form of the PDA, there is a view among local developers that negotiation of a PDA will cause substantial delays and is not necessary to obtain finance in any case. The recently concluded PDA for the 216 MW Upper Trishuli project does not instill confidence in the process, with negotiations extended over two years. The perception of readily available finance is also well founded, given the number of hydropower projects that have proceeded with the assistance of local lenders, who typically rely on the GL and PPA as security.

However, the numerous benefits that a PDA can potentially offer to a project in terms of the allocation of risk should not be dismissed. Project risks that are typically addressed in a PDA (or other concession-equivalent) include political or community resistance, policy continuity, a fair return on investment, expropriation of assets, a predictable time frame in administrative and regulatory processes, and competing rights on the site or water-use, among others. Most international finance sources are well aware of the importance of ensuring a degree of certainty over such aspects as they are considered critical for the long-term viability of a project. As such, a PDA is generally a prerequisite to access international finance.

Current issues with PDA application procedures

Where a developer chooses to take advantage of the various protections and access to international finance that a PDA offers, the complex PDA negotiation process may seem formidable. The PDA Procedures Guidelines approved by the MOE in 2013 offer some guidance, but also pose a number of challenges for developers seeking to obtain a PDA.

First, the PDA Procedures Guidelines require that a PPA is finalized before applying for a PDA, meaning that the PPA and PDA cannot be negotiated in parallel. This is problematic as to be bankable with potential lenders, the PPA must ensure that the revenue stream

is sufficient to recover all the costs of the project. However, these costs are difficult to determine until the terms of the associated concession are finalized (under the PDA). Such terms include taxes and royalties, tax exemptions, government guarantees, allocation of risk and performance obligations, among others. In short, the PPA and PDA are inextricably linked and are difficult to negotiate consecutively.

In addition, Rule 21 of the Electricity Regulation requires construction of a project within one year (extendible) from the date the GL is issued. However, the PPA would still need to be finalized to apply for the PDA, and both documents will then likely be required to reach financial close, all before construction can commence. While the PDA Procedures Guidelines only require an applicant to hold a 'Project Licence' (either a Survey Licence or Generation Licence), developers seeking a PDA are recommended to proceed with their application at a very early stage in the project timeline, as well as delay obtaining a GL to avoid the associated construction deadline.

Furthermore, the hydropower concession period runs from the date of issuance of the GL, rather than from when the PDA comes into effect, substantially reducing the useful period for the developer to exploit the concession and potentially curtailing the overall bankability of the PDA.

The PDA Procedures Guidelines also provide that the GON shall form a Negotiation Committee to negotiate the PDA; however no guidance is given to the qualification of committee members or its composition and responsibilities, nor its operation. Such omission poses a number of issues likely to cause additional delays: an unclear appointment process, including no minimum qualifications required of committee members; lack of a clear management structure; lack of a negotiation schedule; and potential for unique committees to be formed for each project, likely leading to unpredictable outcomes.

Another consideration is the lack of a clear PDA model. While the MOE has published a model PDA, the GON has since negotiated two PDAs (for the 900 MW Upper Karnali and 900 MW Arun III hydropower projects) that deviate from the published model. In addition, the recently signed PDA for the Upper Trishuli project should offer some guidance.

Finally, unlike developers of power projects in Nepal that choose to proceed with only a Generation Licence, the upfront PDA processing fee of US\$ 1500 per MW is another considerable disincentive for developers seeking a PDA, especially where the project is at an early stage of development.

Assessing PDA viability

The current PDA application process can certainly cause undue delays for hydropower projects in Nepal, and is therefore not viable for many developers, a number of which will continue simply relying on the GL for finance in-lieu. However, developers should be able to overcome the issues outlined in relation to obtaining a PDA (and the associated benefits for both parties), particularly if the application begins at an early stage to maximize the time frame available for its negotiation. In addition, recent and upcoming precedents should make the process more efficient as it evolves.

The sector for small to medium hydropower projects will undoubtedly grow regardless, given the number of

developers willing to proceed with local financing. The PDA process will certainly need to be ironed out to facilitate international developers and larger projects in Nepal, where the vast finance available under project finance models mandates a sufficiently comprehensive concession agreement. ◇



A. Souche



W. Rossiter



A.R. Upreti

Audray Souche is a Partner and Deputy Country Managing Director of DFDL Legal & Tax, Thailand. She has been working in the region since 2004, combining general commercial/foreign investment experience with specialized experience on energy and infrastructure projects. As the Deputy Head of the Regional Energy, Mining and Infrastructure Practice Group, she has been leading DFDL teams on numerous energy, project development, finance and technical assistance matters in the Lao PDR, Cambodia, Myanmar, Thailand, Vietnam and Bhutan. Audray is currently advising the IFC in relation to the hydropower concession regulatory framework in Nepal. Having worked in Phnom Penh and in DFDL's Vientiane and Ho Chi Minh City office, she is currently based in Bangkok.

Will Rossiter is Business Development Manager at DFDL Legal & Tax in the Energy, Mining and Infrastructure Practice Group and specializes in political-economy aspects of the energy sector in Asia. He has previously worked in trademark law with one of the leading companies, and has completed an LL.M in Intellectual Property Law at Monash University, Australia.

DFDL Legal & Tax, 9th Floor, The Dusit Thani Building, 946 Rama IV Road, Silom, Bangkok, 10500 Thailand.

Anup Raj Upreti is a Managing Partner at Pioneer Law Associates, Nepal. He has more than 12 years of practicing commercial law and specializes in financial laws, foreign investment, private equity and capital markets. Anup advises on a diverse range of transactional matters from foreign investment and project finance to private equity. He is also involved in commercial litigation on behalf of various local and international clients and has been involved in legal reform projects covering banking and finance, corporate, insolvency and hydropower laws. Anup is a Licensed Advocate of the Nepal Bar Council.

Pioneer Law Associates, 246 Sahayog Marg, Kathmandu 44600, Nepal.

First involvement in dam work

1953

170

Dams where the Trevi Group was directly involved in the construction or safety rehabilitation

6 million

the total number of meters of grouting performed

2 million

The total number of square meters of cutoff walls installed

Dams & Levees

Trevi, world leader in dam rehabilitation and construction

TREVI Group

trevigroup.com