

Nepal's geopolitical location is its soft power

NEPAL, HYDRO ELECTRICITY, AND GEOPOLITICS OF ENERGY

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Nepal is geo-strategically situated between China and India, both aspiring for regional leadership. Currently less than one per cent of Nepal's enormous hydropower potential is being utilised. Development of large hydropower projects could generate enough power to meet Nepal's domestic electricity demand and enable Nepal to export surplus electricity to its neighbouring countries, thus creating opportunities for rapid economic growth in Nepal.

Both India and China are competing for financial control of the proposed hydropower developments in Nepal.

ENGAGEMENT WITH INDIA

Pancheswar Multipurpose Project, is being proposed as Indo-Nepal joint venture to generate 6,720 MW of electricity and irrigate



93,000 hectares of Nepali land.

India's state company SJVN is implementing 900 MW Upper Arun Hydro-electric Project in eastern Nepal. Similarly, Indian infrastructure group GMR has signed an

agreement with Nepal for the construction of a 900 MW Upper Karnali Hydro-electric project.

Besides the operationalisation of Dhalkebar-Muzaffarpur, Kusaha-Kataiya and Parwanipur-Raxaul

cross border transmission lines, India has shown interest in Butwal-Gorakhpur, and Lamki-Bareilly cross border transmission lines.

A landmark umbrella power trade agreement was signed in 2014

between Nepal and India. The agreement treated electricity as a commodity, ensuring free access to their respective markets. However, the recent guidelines on cross border power trade published by Indian government seems to have treated power export from Nepal, as an issue of strategic national and economic importance, barring parties other than Indian companies to export power to India.

ENGAGEMENT WITH CHINA

China is heavily dependent on coal and petroleum to supply energy to its rapidly expanding manufacturing sector, and domestic power demand is increasing every year. Nepal can provide a partial

solution to meet its power demand. An agreement has been signed with a Chinese company to develop the 760 MW West Seti storage hydropower project. Recently, Nepal Government awarded construction contract to China's Gejuwa Group to develop 1,250 MW BudhiGandaki Storage Hydro-electric Project. It is understood that Nepal has proposed with China for the construction of 400 kV transmission line between Rasuwagadhi-Kerung.

ENGAGEMENT WITH BANGLADESH

Bangladesh is also willing to invest 1 billion dollars build 1,110 MW Sunkoshi II and 536 MW Sunkoshi III on the Sunkoshi River in central Nepal. If Nepal must export electricity to Bangladesh, the transmission line has to go through a small section of India. It is understood that GMR, the developer of the 900 MW Upper Karnali Hydro-electric Company is planning to export 300-500 MW of power generated by the project in Nepal to Bangladesh via India.

CONCLUDING REMARKS

China, India and Bangladesh, power-hungry neighbouring countries can provide both finance and power market for Nepal's energy development. The challenge for Nepal, therefore, is to award projects to especially to India and Chi-

hydrohighlight

na in a way that maintains cordial relation between the two powers. Nepal needs to take an assertive position on its water resources, in the context of Sino-Indian rivalry for energy development in Nepal. If Nepal relinquishes too much control over its hydropower and related resources, it could, in the long term, jeopardise its water and energy security. In the case of storage hydro-electric projects, Nepal's national interests lie in ensuring equitable distribution of water, value of water, downstream benefits, price of storage energy *et cetera*.

Nepal's geopolitical location is its soft power, which should be used very cautiously for economic development of Nepal.



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Source: My Republica, 11 Sep 2017

Govt signs ADB loan for power transmission, distribution

The Government of Nepal has signed an agreement with the Asian Development Bank to receive a loan of US\$ 150 million (approximately Rs 15 billion) to implement electricity transmission lines and distribution efficiency enhancement projects. Likewise, the ADB has also provided grants of US\$ 2 million from the Japan Fund for Poverty Reduction to the government of Nepal.

The Power Transmission and Distribution Efficiency Enhancement Project will support expansion of transmission lines in different parts of the country. The project tasks include construction of transmission lines, upgrading of sub-stations in Barhabise, Laphsiphedi, Khimti, and Chapagaun areas, and rehabilitation and capacity enhancement of distribution system in the Kathmandu Valley. The project is of 4.5 years' duration.

Finance Secretary Shanta Raj Subedi and Officer-in-Charge of Nepal Resident Mission of ADB Sharad Bhandari signed the loan agreement at the Ministry of Finance in Kathmandu on Sunday. Likewise, managing director of Nepal Electricity Authority Kulman Ghishing and ADB officer Bhandari signed the project agreement on the same occasion.

The ADB is also providing US \$ 21 million (approximately Rs 2.13 billion) for policy-based loan assistance to Nepal and the amount will be utilized in implementation of SASEC (South Asia Sub-regional Economic Cooperation) customs reforms and modernization for trade facilitation program. The assistance will be mobilized through the government's budget mechanism.

The main objective of this program is to increase the access of legitimate trade for simplification, harmonization, and modernization of trade processes, a press statement issued by the Ministry of Finance stated. With this project, the government has expected to improve national policy and legal framework for trade facilitation, customs procedures, strengthening of organizational structure and capacity of Department of Customs. The program will cover the whole customs administration and its offices throughout the country.

The loan will mature on August 2021.

Source: My Republica, 13 Sep 2017

NEA compelled to change route for Butwal-Mainahiya transmission line

SHER BAHADUR KC

Nepal Electricity Authority (NEA) is considering alternate routes for the 132 KV Butwal-Mainahiya transmission line project as the Department of Roads (DoR) rejected the Yogikoti-Kotihawa road section of Siddhartha Highway for building the transmission line. The NEA had proposed three options for the transmission line: via Yogikoti-Kotahawa Lakhanchowk, from Yogikoti toward the eastern banks of Tinau River, and via the western part of Tinau River.

With the DoR's rejection of the first option, the NEA is considering to build the transmission line on the second or third route.

The transmission line project has been designed targeting electricity supply in Rupandehi district.

"We tried our best to find a less risky area for the transmission line, but it could not happen. So we have forwarded the options of Tinau River area," said Hari Pandey, chief of Butwal-Lumbini 132 KVA transmission line project.

The NEA has decided to build Mainahiya sub-station to end the electricity problem of Rupandehi. As land prices have increased, it is difficult to acquire private land for transmission line. So, the NEA had requested the DoR for the permission to use the Yogikoti-Kotihawa road section.

Pandey said the preparation for contractor selection is underway. The project has already sent an estimate to the NEA for further processing on the transmission line.

"By the mid-October we will call for a tender," said Project Chief Pandey.

Bhairahawa and Lumbini areas of Rupandehi district been facing electricity problem due to lack of sub-station and transmission lines according to electricity load. Even the industries of Lumbini corridor do not get electricity supply as per their demand.

"Lack of coordination among government bodies has delayed the work," Pandey said: "It won't happen now."

According to Pandey, the distance of Yogikuti-Kotihawa road section to Mainahiya is 19 kilometers. The work could have been completed sooner with less investment along this route. The NEA had estimated to spend approximately Rs 800 million for this route. He said the investment will increase if the project has to go for other routes.

"Both east and west banks of Tinau River are risky for transmission line but we don't have any other choice," Pandey said, "These are not feasible for transmission line as there is risk of weak geological structure and flooding."

The NEA officials are concerned about a dense settlement that is just 100 meters away from the eastern part of the riverbank. In the western area there is Motipur industrial corridor, for which 800 bighas of land have already been acquired in the name of Industrial Management Limited to develop the

proposed model industrial area of Province 5.

The NEA has already issued a tender notice of Rs 400 million for purchasing four bighas of land for Mainahiya sub-station and staff quarters. NEA had estimated a timeframe of two years for completion of the project via the highway, but now NEA estimates the project will take at least one more year. Though the project was started in 2010 it was halted due to several reasons in the past.

Source: The Himalayan Times, 14 Sep 2017

NEA plans to make distribution system robust

Nepal Electricity Authority (NEA) has unveiled its plans to expand the electricity distribution system of the country to withstand the supply of 12,000 megawatts of energy within one decade. Stating that the current electricity distribution mechanism is weak and cannot withstand high energy flow, Kul Man Ghising, managing director of NEA, informed that the government will enhance the power distribution system in major urban and industrial states along with the increase in electricity production and its demand.

“Nepal will have surplus electricity production within the next three years once different hydropower projects are completed. Thus, there is an urgent need to upgrade and enhance the electricity distribution system and transmission lines to assure that the generated electricity is consumed domestically,” said Ghising addressing an event, which was organised to brief the achievements of NEA in the last one year, especially after Ghising was appointed to the top post of the power utility.

Informing that annual domestic demand for electricity currently stands at around 1,300 megawatts, Ghising said the country will be completely self-reliant on power after three years. At present, NEA is importing almost 400 megawatts of electricity from India to fulfil the domestic demand.

As per Ghising, NEA is also promoting the use of electric vehicles in the country to assure that power produced in the country is consumed domestically. “We are planning to set up charging stations in different parts of the country in the near future to encourage people to use electric vehicles. This will ensure that electricity consumption in the country will grow in line with increase in electricity production,” he said.

NEA has also set a target to reduce electricity leakage by three percentage points this year to 20 per cent of the overall electricity supply. By doing this, Ghising informed that the country will not have to face load-shedding during the dry season this year.

Similarly, NEA informed of its plans to promote people’s investment in different hydel projects in coming years, develop high voltage transmission lines connecting East-West and North-South parts of country, reduce operation cost of NEA, adjust electricity tariff as per production cost, carry out feasibility study of Rupa-Begnag Pump Storage Project to balance electricity demand in peak hours and electricity that is wasted at night, introduce smart grid and smart meter system to facilitate consumers and promote energy efficiency.

Source: My Republica, 14 Sep 2017

Lack of law delays hydropower royalty distribution to local units

Rs 1.43 billion royalty collected from different projects in Fiscal Year 2016/17

The Department of Electricity Development (DoED) collected Rs 1.43 billion as royalty from different hydropower companies in Fiscal Year 2016/17.

It is supposed to distribute 5 percent of the royalty to local bodies where hydropower projects are based and 10 percent to concerned provinces, and contribute remaining 85 percent to the central government as per the Inter-governmental Finance Management Bill tabled in the parliament in May. But the department has not been able to distribute the amount to local bodies because of the lack of clarity in the provision specified in the bill as most of the projects are located in more than one local unit.

It had, so far, been distributing royalty to District Development Committee (DDC) of the concerned districts which are now defunct.

“We are required to distribute royalty as per the federal setup. But there is no law yet. Also, the Ministry of Federal Affairs and Local Development (MoFALD) has not responded to our request of clarifying the matter,” Nabin Raj Singh, the director general of DoED, told Republica.

The 85 percent of the royalty contributed to the central fund will be distributed by making separate federal laws, Section 7 of the Bill reads. The Bill is under discussion at the parliament’s Finance Committee.

Newly elected office-bearers of local units are unhappy with the allocation of mere 5 percent, saying that the royalty proposed in the Bill is too little, officials of the MoFALD told Republica.

“The size of the allocated royalty will be much higher than the development programs each unit would get through District Development Committees in the past,” Mahesh Bhattarai, undersecretary of the MoFALD, said. Bhattarai further added that as the Bill is prepared by Ministry of Finance, he knows nothing about its content.

There are 62 hydropower plants in operation in different parts of the country. They pay royalty to the government in two categories. They pay two percent of the average tariff per unit (per kilowatt hour) and Rs 100 per kilowatt installed capacity per year for the first 15 years of generation (for commercial purpose). Thereafter, the rate of royalty is set at 10 percent of average tariff per unit (per kilowatt hour) and Rs 1,000 for each installed kilowatt per year. The new royalty distribution formula is different from the existing 50:50 revenue sharing modality among the central government and the project-affected districts.

A total of 12 percentage point used to be distributed, as agreed, amongst affected districts, while remaining 38 percentage point was equally distributed amongst districts of the affected development region.

Source: The Kathmandu Post, 14 Sep 2017

GMR starts distributing compensation payments

Upper Karnali Hydropower Project

GMR Upper Karnali Hydropower has started distributing compensation payments to locals whose land was acquired by the Upper Karnali Hydropower Project. The 900 MW scheme straddles Dailekh, Surkhet and Achham districts in western Nepal.

Project officials on Thursday launched the payout by handing over a cheque for Rs2.68 million to Bhakta Thapa of Sattalla, Dailekh for his land.

“We will continue distributing compensation to locals after transferring ownership of their land to the project,” said a project official. “We have assigned enough personnel to calculate, document and process the compensation payments.”

A meeting of project officials and the resettlement action plan committee held on Wednesday and Thursday decided to complete the entire compensation distribution process for 1,000 ropanis of private land by mid-March 2018. The distribution of compensation payments in Sattalla will be completed by February 2018.

“As there are some parcels of unregistered land at Bhairavsthan in Achham, it might take some time for the Nepal government to resolve the issue.

Therefore, we have pushed back the completion deadline by one and a half months,” said the official.

All the land title deeds kept at the Land Revenue Office in Achham district were destroyed during the Maoist conflict in 2002 when several government offices were torched.

A majority of landowners have re-registered their land at the Land Revenue Office, but some land parcels are yet to be registered.

Nepal Investment Bank, which is handling the payout, has opened a branch office at the project site, and locals have been opening accounts there. The developer will issue a cheque to landowners and it will be deposited into their bank accounts.

Last November, the developer GMR sealed a land acquisition deal with the residents of Achham and Dailekh after completing the process of pooling private land required for the project. The company signed an agreement with the residents of Sattalla in Dailekh to pay Rs895,000 per ropani. Similarly, it has offered to pay Rs805,000 per ropani to locals of Bhairavsthan in Achham and Sigaudi in Dailekh.

Although GMR was supposed to complete the compensation distribution process by June as per the initial agreement made with locals, the timetable had to be pushed back due to local elections. Subsequently, the onset of the monsoon further delayed the payout.

Source: The Kathmandu Post, 15 Sep 2017

No load-shedding during dry season, says NEA

The Nepal Electricity Authority (NEA) has said that there will be no load-shedding during the upcoming dry season, allaying fears that rolling blackouts may be revived during the rainless months when power generation drops due to a fall in water levels in the rivers.

NEA Managing Director Kulman Ghising said they would give continuity to the drive to free the country of rolling blackouts while speaking at a media interaction programme held on Thursday to mark his first year at the helm.

Although the state-owned power utility's plan to supplement the national grid with alternative energy and replace incandescent lamps with LED bulbs failed, Ghising said they had other plans to keep load-shedding at bay.

The NEA is counting on the Chameliya Hydropower Project which is about to come online to meet the energy demands of the western part of the country.

"The 30 MW project owned by the NEA will come online within a couple of months," said Ghising. "As the project is a peaking run-of-the-river type scheme, it will play a crucial role in meeting the peak demand of the western region."

Likewise, the power utility plans to import another 100 MW from India over the recently inaugurated two cross-border transmission lines to meet the increased energy requirement in the eastern and central regions.

Prime Minister Sher Bahadur Deuba and his Indian counterpart Narendra Modi jointly inaugurated two transmission lines during Deuba's recent visit to India. The newly built 132 kV Kataiya-Kushaha and Raxaul-Parwanipur power lines can transmit 50 MW of electricity each to Nepal. With the new lines in place, Nepal's capacity to import electricity has increased from 380 MW to 480 MW.

"In this way, we will manage to meet the increased demand for electricity in the country," said Ghising. "However, we will not be in a comfortable position. If any of our projects should break down for an extended period during the dry season, we will be forced to implement load-shedding."

The NEA would be in a more secure position if it had been allowed to import LED bulbs from India. The power utility had planned to import 20 million LED bulbs from an Indian government-owned company to sell to its customers on installment basis. The use of these bulbs would have resulted in a saving of 200 MW during peak hours, the NEA said. But the plan had to be dropped following criticism that the NEA had not called for tenders to procure the energy-saving lamps.

Similarly, the NEA's plan to install a 25 MW solar plant in Nuwakot with funding from the World Bank hit a snag after the parliamentary Public Accounts Committee directed it to scrap the deal with the contractor and start a fresh procurement process.

As the project is already one and a half years behind schedule, the World Bank is mulling to dump the \$37-million solar plant project.