Source: The Kathmandu Post; 4 August 2018

Power line project to ask for national pride status

BIBEK SUBEDI

Millennium Challenge Account (MCA) Nepal, an entity formed to oversee the implementation of US government-funded projects worth $630 million, is planning to request the government to include its Electricity Transmission Project in the list of national pride projects.

A board meeting of MCA Nepal held on Friday decided to request the National Planning Commission (NPC) to list the power line project being developed with a US government grant as a national pride project.

MCA Nepal was established by a Cabinet decision in April to execute projects being developed by a grant provided by Millennium Challenge Corporation (MCC), an independent US government agency. "We will soon write to the NPC asking it to list the project as a national pride project so that it becomes one of the priority projects and gets proper attention from the government," said a board member.

After the project is named a national pride project, it will get due attention from the government with a high-level mechanism to clear obstacles that might crop up during its implementation.

The Electricity Transmission Project being executed by MCA Nepal includes the construction of approximately 300 km of double-circuit 400 kV transmission lines in central Nepal.

There are five components in the project—one segment starting from the northeast of Kathmandu at Lapsiphedi and extending to the west of Kathmandu near Ratmate, a second segment from Ratmate to the industrial town of Hetauda located south of Kathmandu, a third segment from Ratmate to Damauli in the west, a fourth segment from Damauli to Butwal in the southwest, and a fifth segment from Butwal to the Indian border which is part of the second Nepal-India cross-border transmission line.

Three substations will also be constructed at Ratmate, Damauli and Butwal.

MCC selected Nepal for its compact programme in December 2014. Nepal was selected for the MCC programme 'in recognition of the country's efforts to establish rule of law and democratic institutions, and its strong performance on MCC's policy scorecard'.

Since then, MCC has agreed to support two broad projects in Nepal—the Electricity Transmission Project and the Road Maintenance Project, as energy shortages and inferior transport network are two binding constraints for Nepal's rapid economic growth.

Out of the total investment of $630 million, MCC will contribute $500 million while the Nepal government will put up the remaining $130 million. The bulk of the investment being made in Nepal will be spent on the development of 300 km of transmission lines and three power substations.

Another large chunk of money will be used to maintain around 300 km of roads. The rest of the money will be spent on activities like monitoring and evaluating the projects being implemented, hiring procurement and fiscal agents, and other administrative expenses.

Source: My Republica; 5 August 2018

48 percent construction of underground transmission line completed

The construction of the first-ever underground electricity transmission line of the country has completed its 48 percent work. One thousand three hundred nine meters long underground line is to be made at Matatirtha under Trishuli-Kathmandu 220 KV double circuit transmission line. Till now six hundred 30 meter lines have been installed. The infrastructure is made to comprise 24 cables in underground.

Minister for Energy, Water Resources and Irrigation Barsha Man Pun, Secretary Anup Kumar Upadhyaya and Managing Director Kul Man Singh Ghising jointly inspected the project site and took information regarding the work-in-progress. During the inspection, the trios have instructed the project authorities and the construction company to complete the remaining civil infrastructure of the project within two months.

In the response, the construction company has assured the government officials that the civil infrastructure of the project within stipulated time if the government would provide the proper security by controlling the local obstruction and to solve the forest issue of the area. 270 employees are being deployed for the project.

Source: The Kathmandu Post; 6 August 2018

Underground power line: Half of project works finished

Nearly half of the construction of Trishuli-Kathmandu 220 kV double-circuit line, Nepal's first underground power transmission line, has been completed.

48 percent of the works—or 630 metre has been completed, out of the 1,309 metre transmission line in Matatirtha area, the project said on Sunday. The underground structure can house 24 electricity cables. A government team led by Minister for Energy, Water Resources and Irrigation Barsha Man Pun made an onsite visit of the project and directed the contractor to complete remaining works within next two months. Pun was accompanied by Energy Secretary Anup Kumar Upadhyaya and Managing Director of Nepal Electricity Authority (NEA) Kulman Ghising.

During the high-level government team visit, the contractor expressed to accomplish the works within the given deadline provided the authority eased hurdles in construction works.

The contractor has also asked the government to ensure security and settle issues related to forest. Nearly 270 workers have been mobilised for construction. Amid concern over the forest issue, minister Pun made a phone call to Minister for Forests and Environment Shakti Bahadur Basnet to immediately resolve hurdles like cutting down trees at the project construction site among others.

"The government will address the problems at the local level and ask the Home Ministry to ensure safety and security at the construction site," said Pun, adding that the government was committed to constructing the structure by the given deadline without compromising on its standards and quality.

The Cabinet had permitted to cut 682 trees that fall under the Mahalaxmi Matatirtha Community Forest, which later on was revised to 336 units.

With the revision, the contractor again has to take approval from the concerned authority.

As the project construction has made it difficult for commuters to walk along the road, locals have started filling gravel at the trench constructed for laying cables. The transmission line will evacuate 60MW of electricity generated by Upper Trishuli-A to Kathmandu. The project is expected to come into operation by mid-January.

The total transmission line length is 45 km. Of the total length, 1,309 metre is being constructed underground. Project Chief Phanindra Raj Joshi said that 127 towers out of 140 towers have been erected so far.

Apart from the power that will be evacuated from Upper Trishuli-A project, the NEA has planned to use the facility for evacuating electricity produced by other similar hydropower projects in the Trishuli corridor.

The project is being constructed under the China's Exim Bank concessional loan.

Source: My Republica; 7 August 2018

Hydro is dead

Bishal Thapa

Nepal must shake off its curse of hydro and move to a 21st century energy strategy that is in sync with evolving trends, technological change and regional context

In 1907, Nepal and China both began constructing their first hydro power plants—Nepal in Pharping and China in Yunnan province. When King Prithvi Bir Bikram Shah Dev inaugurated the Pharping plant by switching on the lights in a public ceremony in Tudikhel in May 1911, the Chinese were still working toward their first 250 KW Yunnan plant.

In the century that has followed, China has gone on to build 315,000 MW of hydro power plants including the single largest hydro power plant in the world, the 22,500 MW Three Gorges plant. Nepal has built less than 1,000 MW.

The conclusion from this comparison isn't that China has outpaced Nepal in hydro power development. Rather, the conclusion should be that the window of opportunity for large hydro power plant in Nepal has now closed.

The future of large hydro in Nepal is dead.

The world has changed in the century since Nepal became only the second Asian country to install a hydro power plant. We have missed a century of opportunities. Instead of now remaining stuck in our 20th century vision reminiscing about missed chances, Nepal must quickly move to an energy strategy for the 21st century.

In 2017, China installed 53,000 MW of solar, higher than the total solar capacity added in the rest of the world. It was also the first time that solar capacity additions in China were higher than of any other types, such as fossil or hydro.

Nepal's energy narrative must be in sync with evolving trends, technological changes and regional energy context. We must change our narrative from a dominance of hydro towards a network of distributed renewable energy systems with diffuse ownership that is appropriately plugged into the Indian grid and directly benefits all Nepalis.

Curse of hydro

In 1911, Pharping hydro power plant had one purpose: To power the homes and palaces of Ranas and Shahs. Since then, Nepal's hydro power plants have provided electricity to approximately 70 percent of its population. Despite the growing supply, the benefits of hydro power development have failed to reach the people of Nepal.

Over the last century, Nepal has failed to develop hydro power not because of technical, financial or policy constraints. Those are the symptoms. The underlying cause is the political economy of hydro—the fact that hydro has profited only a small handful of people. The failure to add capacity is an expression of the stalemate resulting from the struggles among the few that benefit from hydro power development.

The government's recent white paper on energy proposes to make ordinary Nepalis shareholders of new hydro power plants. The policy seeks to correct the long-standing concern that hydro plants have disproportionately benefited only a few. As well-intentioned as it may be, the idea of citizen ownership is not practical for hydro power development. What does citizen ownership even mean? Either government takes all our money and invests it on our behalf in hydro plants or that private developers would raise public money for financing the plants?

Such goals are wishful thinking that simply overlook the underlying problems. If the government or the private sector were a competent promoter of large hydro plants that could be trusted with public finance, we wouldn't be at 1,000 MW today.

The other myth is that hydro plants lead to development of the region where they are located. In most instances, public expenditures in areas where hydro-plants are to be built have merely ended up benefiting hydro plant developers rather than the broader community. Affected communities receive little additional to what they would have had anyway.

Many hydro and associated transmission projects in Nepal are currently mired in local opposition. Developers and investors widely regard such local activism as political opportunism that is seeking to extract short term ransom. There is certainly plenty of political opportunism but there is also fertile ground for such activism. Local communities are often in opposition of even seemingly good projects, partly because they have no reason to be invested in the project's success.

The last century of hydro power in Nepal has been a story of exclusion. There is nothing new—including the Maoist energy minister's rhetoric—to suggest that the benefits will be more broadly shared.

The biggest tragedy of our unitary focus on hydro has been the neglect of agriculture and water management. We have missed an opportunity to better tame our rivers, create navigation routes, enhance agriculture and reduce our vulnerability to water disasters.

The end results are striking. Parched lands and poor agricultural productivity that have made us net importers of food and driven our young men and women to seek economic opportunities abroad. Every year we lose lives to water disasters.

If aliens were to arrive in Nepal and look back at the century that was, they may regard hydro not as the great unbounded potential, but rather as the curse of Nepal.

Alternate vision

There is an alternate vision—a vision of a new Nepali electricity grid that is predominantly reliant on distributed renewable energy, like solar, wind and low impact hydro.

Such systems are already commercially and technically feasible. Take Germany's example. At 6 AM on January 1, 2018, generation from its wind plants alone met 100 percent of its load. Other plants (coal, gas, nuclear) were forced to turn down, resulting in negative prices (you got paid to keep the lights on!) and surplus energy was exported to other countries. It was 6 AM and the 43,000 MW of solar distributed across approximately 1.6 systems were not yet producing. Germany is on course to ensure that all its generation comes from renewable energy by 2050.

A system with distributed renewable energy will enable all Nepalis to be an owner of generation. Unlikely hydro, we won't have to wait for the generosity of hydro developers or government for the benefits to trickle down to make us feel invested. An electricity grid that is driven by distributed renewable energy offers every Nepali an opportunity to own a generation asset—every roof-top, every bit of open space could be converted into a generation asset.

Like Germany, a system with high levels of distributed renewable energy can only work if it is well connected with a larger grid. There is no doubt that we must create better cross-border electricity interconnection facilities with India. Unlike large hydro which requires dedicated lines, distributed renewable energy could be interconnected through a more diffuse cross-border network. Such a diffuse network has a higher likelihood of creating stronger cross-border connection with India's power system than large dedicated transmission corridors. A diffuse network will enable us to integrate stronger operational links and procedures. As part of the harmonized network, Nepal would have access to a wider range of opportunities for power sales and trading.

If negotiated correctly, there is a better and bigger market for exports of distributed renewable energy than hydro power exports to India.

Aliens are unlikely to land in Nepal to show us the way. It is up to us, Nepali, whether we remain stuck with the failures of the last century or move forward to new possibilities.

Source: The Kathmandu Post; 8 August 2018

Nepal-China power line panel plans first meet

Officials of the Nepal-China joint technical team formed to prepare a detailed project report (DPR) for a cross-border transmission line plan to hold their first meeting this month.

The panel, which consists of five representatives from each country, will hire a consultant to prepare the DPR besides finalising the construction and funding modality of the first ever trans-Himalayan electricity line.

According to a Nepali member of the team, the meeting will take place this month but the venue is yet to be decided. “It seems both sides want to host the first meeting of the technical team in their country,” said Komal Atreya, the government-appointed project chief of the cross-border power line project and member of the technical team. Last week, the Nepali members of the team led by Bajra Bhusan Chaudhary, deputy managing director of the Nepal Electricity Authority (NEA), invited their Chinese counterparts to visit Nepal by mid-August to hold the first meeting.

However, the Chinese side, coordinated by the vice-chair of State Grid Corporation of China (SGCC), invited the Nepali members to China for the first meeting.

“We will soon finalise the venue and have our first meeting which will be a stepping stone to preparing a roadmap for the preparation of the DPR,” said Atreya. “Our plan is to hold the first meeting this month.”

After the roadmap is completed, the team will initiate the process of appointing a consultant to prepare the DPR for the project. The 400 kV transmission line will extend from Galchhi in Nepal to Shigatse in China.

As only 80 km of the estimated 800-km length of the transmission line lies within Nepali territory, the NEA

has asked the Chinese side to take the lead in developing the project.

The Nepali portion of the power line will stretch from Galchhi in Dhading district to Rasuwagadhi on the border with China in the north, according to the state-owned power utility.

The NEA has already finalised the alignment of the power line. According to the NEA, the Chinese side is very keen on executing the project and has prioritised it.

SGCC officials visited Nepal in early 2017 to hold talks with the Ministry of Energy, Water Resources and Irrigation and the NEA to build a power line linking Rasuwagadhi and Kerung.

During the meeting, NEA Managing Director Kulman Ghising asked the Chinese delegation to extend the proposed transmission line further south up to Galchhi so that it could be linked with the Nepal-India cross-border transmission line proposed to be built in Rupandehi district. As the transmission line is necessary to supply electricity to the railway service which China plans to build up to Kathmandu, the northern neighbour is very eager to develop it.

China has already erected a high voltage transmission line up to Shigatse, and if the Nepal government shows adequate commitment, they have agreed to extend it to Kerung within one and a half years, and ultimately connect it with the power line in Nepal, according to the NEA.

Source: The Himalayan Times; 10 August 2018

Nepal, Bangladesh to sign MoU on energy cooperation today

Nepal and Bangladesh are going to sign a memorandum of understanding for 'power sector cooperation' tomorrow to intensify the bilateral engagements for power sector development. Minister of Energy, Water Resources and Irrigation Barsha Man Pun and his Bangladeshi counterpart Minister of Power, Energy and Mineral Resources Nasrul Hamid will sign the agreement tomorrow, according to Joint Secretary of MoEWRI Dinesh Kumar Ghimire. "The MoU will set up the mechanisms through which both countries will be able to move towards deepening the cooperation in power sector."

The MoU will set up a power secretary-level joint steering committee and joint secretary-level joint working group, which will meet every year, and discuss and take forward the issues related to the cooperation in power sector.

"It is a general MoU on energy cooperation. Through this, both the countries will strive towards cooperation in hydroelectricity, solar, wind and other sources of power by setting up bilateral mechanisms," said Mashfee Binte Shams, ambassador of Bangladesh to Nepal. "The joint mechanisms will start working on specific areas, sharing information and exploring the opportunities for investment in solar, hydropower and power grid transmission line to materialise the cooperation in power sector over the period."

Nepal and Bangladesh had started talking on bilateral energy cooperation since the power trade agreement (PTA) was signed with India in 2014. Nepal has identified Bangladesh as a prospective market for hydroelectricity, which is a clean and renewable source of energy.

Following the 'SAARC Framework Agreement for Energy Cooperation (Electricity)' among the SAARC member states in November 2014, Nepal and Bangladesh have seen the prospects of bilateral power cooperation. However, to materialise power trade and power cooperation between the two nations, Nepal and Bangladesh need to hold talks with India. As there is power trade between Nepal and India, and also Bangladesh and India, power trade between Nepal and Bangladesh is not a far-fetched notion as cross-border power trade infrastructure between Nepal-India and Bangladesh-India are already in place, according to Ambassador Shams.

There is prospect of energy trade between Nepal and Bangladesh as GMR Energy India has signed MoU to sell power produced from Upper Karnali Hydropower Project, which is going to be developed under Indian investment, to Bangladesh. For this purpose, an initial MoU regarding connection agreement has already been signed with Bangladesh Power Development Board (BPDB) during the visit of Bangladeshi Prime Minister Sheikh Hasina to India in April 2017.

Bangladesh's current electricity generation stands at around 16,000 megawatts and it will require around 34,000 megawatts of power by 2030 to sustain the high economic growth of above seven per cent. This is why Bangladesh is keen to purchase hydroelectricity, which is clean, renewable and reliable source of energy from Nepal. However, a trilateral agreement among Nepal, India and Bangladesh is a must to use the power grid transmission line in India.

Source: The Rising Nepal; 9 August 2018

Bangladeshi State Minister Hamid in Kathmandu

Minister of State for Power, Energy and Mineral Resources of Bangladesh, Nasrul Hamid, has arrived here today to discuss on the issue of power exchange and bilateral cooperation.

State Minister Hamid arrived here at the invitation of Minister for Energy, Water Resources and irrigation, Barsha Man Pun.

Joint-Secretary and Spokesperson at the Ministry, Dinesh Kumar Ghimire, said that bilateral meeting would be held as well as agreement signed with Bangladesh on Friday.

High-level meeting would be held and an agreement signed between the two countries at a time when Bangladesh has been showing its interest for joint investment in Nepal's energy sector since long.

Bangladesh has already said that it was ready to import around 5,000 MW electricity from Nepal. It was already made public that the preparation was underway to sell the power produced from Upper Karnali Hydropower Project, going to be constructed by Grandhi Mallikarjuna Rao (GMR) company of India, to Bangladesh.

The government was going to sign bilateral agreement with Bangladesh with an objective of taking and selling Nepal's power in regional market.

Power Trade Agreement has already been reached with India. India's consent is necessary to export electricity to Bangladesh. The two ministers during the Second Asia and Pacific Regional Energy Forum held in Bangkok on April 14 held discussion regarding collaboration for energy development.

The Bangladeshi State Minister would also pay courtesy call on Prime Minister KP Sharma Oli, it is learnt. Similarly, he is also scheduled to address an interaction to be organised by Independent Power Producers' Association Nepal (IPPAN).