

Source: The Kathmandu Post; 16 Dec 2017

Chameliya hydro likely to come online in Jan

A wet test of the Chameliya Hydropower Project, which stalled due to problems in one of the radial gates near the intake, will resume within a week, raising expectations that the 30 MW plant will begin producing electricity in the first week of January.

The test started in November, but when it was discovered that two radial gates couldn't be closed after a large part of the concrete in the gate had been eaten away by the river water, it had to be stopped.

The radial gate in a hydropower plant is a very important structure as it blocks the water flowing in the river and channelizes it into the intake tunnel and ultimately to the turbines to generate electricity.

China Gezhouba Group Corporation, the civil contractor hired by the project owner Nepal Electricity Authority (NEA), completed repairs to the radial gate on Friday. Technicians repaired the gate after diverting the river's water by building a temporary structure.

"It will take a couple of days for the concrete to set," said Ajay Kumar Dahal, the NEA appointed project chief of Chameliya.

"Then we will start clearing the debris and boulders that have accumulated during the maintenance.

This will be completed in a week, and the plant will be handed over to Korea Hydro and Nuclear Power Company, the electro-mechanical and hydro-mechanical contractor of the project."

The Korean contractor will then begin the wet test of the project. During the wet test, water from the tunnel will be channelised into various hydro- and electro-mechanical equipment including the plant's turbines.

Technicians will then check if all the machines are functioning properly. "The wet test should be completed by the end of December," said Dahal. "If everything goes as planned, we will start generating electricity from the first week of January."

When the project, located in Darchula district in far west Nepal, eventually goes online, it will mark the end of a troubled construction period which saw time and cost overruns.

The construction of Chameliya started in January 2008, and it was originally scheduled to be completed by June 2011. But the completion date was pushed back repeatedly due to disputes between the state-owned power utility NEA and the contractors.

Work at the site came to a halt in May 2014 after the government refused to make an additional payment of Rs1.09 billion which the contractor had asked for due to cost variance resulting from the squeezing of the tunnel. The contractor agreed to resume work after being summoned to the Energy Ministry and told to do so immediately by then energy minister Janardan Sharma.

The Chinese civil contractor for the project, which returned to work in October 2016 after more than two years, then speeded up work and completed the civil works within the September deadline.

Source: The Himalayan Times; 16 Dec 2017

8-MW-Cascade set to produce electricity within December

The construction work of 8-megawatt-cascade of Rs 1.20 billion Himal Dolakha Hydropower Cascade Project in Godak and Ragapani of Ilam Municipality has reached its final stage, officials informed.

“The construction works have accelerated with the intent of producing electricity within December-end,” Rup Mani Rajbhandari, Chief Executive Officer of the Project said, “The construction of four-kilometer-long canal has concluded.”

Electricity will be produced by channeling water from Rajduwali intake into the canal and to powerhouse in Ragapani.

“The powerhouse has been equipped with a transformer along with a switch-yard,” Narendra Chettri, Public Relation Officer of the Project informed, “We are now working on a four kilometer long 33 kv transmission line to transport electricity.”

According to the officials, the project will connect the transmission in the national grid through Kabeli Corridor.

Source: The Kathmandu Post; 17 Dec 2017

Kabeli Corridor Transmission Line: World bank pulls out from project

[BIPLAV BHATTARAI](#)

The completion date of the Kabeli corridor has been affected after the World Bank—a Washington based multilateral lending agency—pulled its assistance due to the delay in construction work. It will push back the completion date of the 132 kv transmission line which would have connected around 150MW of electricity produced in various hilly districts to the national grid.

Although the power line should have been completed by the end of 2013, the project deadline was extended time and again till December 2016. However, after the

project didn't meet the December deadline, the multilateral lender pulled out from the project.

According to Dipendra Raj Dwibedi, project chief of the power line, the fund allocated by the government from this fiscal year's budget will not be enough to complete the transmission line project.

The project requested the government to allot Rs 350 million. However, the government allotted only Rs 130 million in the current fiscal year.

The political instability, negligence from the contractor, difficult terrain and dispute with the locals over the right of way to erect tower and pull the power lines have been the major reasons behind the delay in project development. "If the adequate budget is allocated and dispute regarding the right of way is resolved, the project will be completed by May 2018," said Bhattarai. "We are currently erecting 18 towers. However, the construction of 13 towers has yet to be started due to dispute with the locals of Siddithumka and Chamaita of Ilam."

Although the project office is trying to resolve the dispute by holding talks with the locals, it has not materialised yet.

The project construction started in 2011 with loan and grant financing of \$38 million from the World Bank. After the project failed to meet the completion deadline despite the repeated extension, the multilateral lender dropped the project. The project included 90km-long 132kv double circuit transmission line connecting Damak with Amarpur of Panchthar.

Out of it, only 34km-long section connecting Godak of Ilam with Lakhanpur of Jhapa has been completed. Around 63MW of electricity produced by various projects in Ilam has been transmitted to the national grid via substation at Godak. Apart from Godak, the construction of substations at Lakhanpur, Thapatar of Panchthar and Taplejung has been completed.

Due to delay in construction of the power line, hydropower projects in Panchthar and Taplejung are facing difficulty to evacuate electricity to the national grid.

Source: The Kathmandu Post; 17 Dec 2017

Nepal to press India to agree on funding modality

400kV Butwal-Gorakhpur cross-border transmission line

[BIBEK SUBEDI](#)

-Nepali energy secretary will soon try to convince his Indian counterpart to agree on the funding modality prepared by Nepal to build the 400kV Butwal-Gorakhpur cross-border transmission line, reliable sources said. The request would be made during the Nepal-India energy secretary-level Joint Steering Committee (JSC) meeting scheduled to be held in the Indian capital of New Delhi from December 20 to 22.

A highly-placed source at Nepal Electricity Authority (NEA), the state-owned power utility, who is also attending the meeting, said Nepal will make the proposal to expedite project construction.

The cross-border transmission line will stretch 135 km, of which 20 km will be located in Nepal and the rest in India. Nepal has proposed that both the countries be responsible for construction of the power line that falls within their territories.

During the last JSC meeting held in Kathmandu in February, both the sides had agreed to endorse the detailed project report (DPR) of the project prepared by a joint technical team and asked the technical team to recommend a funding modality for construction of the transmission line.

Later during the meeting of technical team, Nepal had proposed that both the countries finance construction of the project in their respective territories. India, however, did not present its proposal during the meeting and nor did it agree on the proposal tabled by Nepal.

Instead, Indian officials who took part in the meeting repeatedly raised the issue of commercial viability of the project, casting doubts on construction of the project.

“We will get a clearer picture on India’s intention during the upcoming JSC meeting,” said an Energy Ministry source.

Nepal has already arranged funds to develop the portion of transmission line that falls within its territory. It is planning to build the line in its territory using the grant provided by the Millennium Challenge Corporation (MCC), an independent US government agency. An agreement to this effect has been signed.

Nepal and India had agreed to build the Butwal-Gorakhpur cross-border transmission line during the JSC meeting held more than a year ago in New Delhi and had formed a joint technical team to prepare the DPR.

The Energy Ministry has accorded top priority to the planned transmission line project as it can efficiently distribute imported power to high energy consuming cities like Bhairahawa, Butwal, Pokhara and Narayangadh. The power line will also be useful to evacuate surplus energy produced in Budhi Gandaki and Marshyangdi corridors once hydroelectric projects that are currently being built come online.

Source: The Kathmandu Post; 17 Dec 2017

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Source: The Kathmandu Post; 18 Dec 2017

Power lines, substations being upgraded with ADB funding

[Rajesh Khanal](#)

Power lines and substations are being upgraded in 49 locations across Nepal with funding from the Asian Development Bank (ADB) to enhance the electricity distribution system.

The project will improve the load-bearing capacity of transmission lines in the country, allowing the Nepal Electricity Authority (NEA) to provide power to rural areas where there is little or no access to electricity.

ADB has provided funding for the electricity transmission line project under its South Asia Sub-Regional Economic Cooperation (SASEC) Power System Expansion Project.

Under SASEC's Electricity Transmission and Supply Improvement Project, 132 kV transmission lines are being upgraded to double circuit from the existing single circuit system.

Likewise, the Energy Access and Efficiency Improvement Project will upgrade the existing substations besides installing new substations to handle the supply of high power energy.

Among the 49 locations, the ADB has started upgrading the transmission lines in Jhapa, Mahottari, Siraha, Sarlahi, Dhanusha, Ilam, Nepalgunj, Dhangadhi and Butwal. Likewise, the scheme is being implemented in Mirmi in Syangja, Swayambhu and Mulpani in Kathmandu, Phedi in Kaski, Kusma in Parbat and Mainapokhar in Bardia.

Pushkar Manandhar, ADB project officer, said that the installation of a new substation in Mainapokhar, Bardia had been completed; and that the enhancement of the existing substations in Butwal, Dhangadhi and Gaddachowki in Mahendranagar had been finished.

According to Manandhar, expanding the capacity of the substation at Mirmi, Syangja will take six months. "In addition, 60 percent of the civil works at most of these locations have been completed."

The ADB in collaboration with the Norwegian government has been working to enhance energy supply along the Kohalpur-Dhangadhi route. Bibek Chapagain, energy advisor at the Norwegian Embassy, said the Norwegian government had provided a \$20-21 million in grant for the project.

"The existing distribution system is a bottleneck for electrification, so the Norwegian government has been providing support to improve the distribution system by upgrading and rehabilitating transmission lines in the region," Chapagain said.

Bishwo Ranjan Mishra, in-charge of the NEA Western Division, said the enhancement of transmission lines had been completed in Ilam, Nepalgunj, Dhangadhi, Sarlahi, Butwal and Mahottari among the locations selected for the first phase. "We are now installing new substations in these places," Mishra said.

Mishra said that these substations were being fitted with advanced equipment with support from the ADB. "Based on annual demand projections, these substations are expected to support electricity supply for the next 10 years," Mishra said.

"In addition, the equipment at the substations can be customised to evacuate energy via 400 kV lines when electricity production increases as under-construction hydropower projects come online."

As per the ADB, it has started electricity supply enhancement work at 25 additional locations. They are Amua in Rupandehi, Taulihawa, Krishna Nagar, Gadda

Chowki in Mahendranagar, Chandragadhi and Buluchowk in Jhapa, Nijgadh and Simara in Bara, Rautahat, Belbari in Morang, Jaleswor in Mahottari and Jare in Dhading.

According to Manandhar, new substations are being built in Baniyani in Jhapa, Parwal in Mahottari, Mirchaiya in Siraha, Barathawa in Sarlahi and Dhanushadham in Dhanusha.

Meanwhile, the NEA has started work to build five substations at various locations in the Kathmandu Valley in a bid to improve power distribution with ADB support. To this end, the state-owned power utility has selected two Chinese companies to award construction contracts to build 132 kV substations at Mulpani, Phutung and Chapagaon and erect 220 kV substations at Lapsiphedhi and Changu Narayan.

The enhancement of the electricity distribution system is expected to ensure quality and reliable electricity supply. Damma Shahi, a retailer in Bhurigaun, Bardia, said locals had been benefitted with the installation of a new substation in the area.

“Apart from ending power shortages, the substation has enabled people to use electrical appliances like water pump, mill and television, among others,” Shahi said.

The SASEC Power System Expansion Project is expected to be completed by December 2021. The total cost of the project is \$440 million.

The ADB has signed an agreement with the government to provide financial assistance of \$191.2 million, most of the amount in loan, for the project.

Source: My Republica; 18 Dec 2017

Budhi Gandaki Hydro Project: Committee submits report with possible investors

The committee formed to sketch a draft of an estimated cost for constructing Budhi Gandaki Hydro Project has submitted a report with possible domestic investors to the government on Monday.

Those possible domestic investors identified by the Committee include

Nepal government, Nepal Electricity Authority, Karmachari Sanchaya Kosh, (Employees Provident Fund), Rastriya Beema Santhan, insurance companies, hydropower investment and development companies, Nepal Telecom, Upper Tamakoshi Hydropower Company, Chilime Hydropower Company, welfare funds related to army and police, among others.

Similarly, the investors will also include common people and non-banking financial institutes.

Meanwhile, the Committee led by National Planning Commission Vice-Chairman Swarnim Wagle has suggested that the government should bear 35 percent cost of the total investment.

The total estimated cost to be incurred in the production of the Budhi Gandaki hydropower project will be around 270 billion rupees. To realize the hydro project the Committee has asked the government to contribute 35 percent of the total cost to be incurred for required infrastructure development, land acquisition and rehabilitation under Viability Gap Funding.

On November 13, Deuba government had scrapped then Pushpa Kamal government's decision to award Budhi Gandaki hydro power project to Chinese company Gejuwa Group of Power Company.

Led by Swarnim Wagle, Nepal Rastra Bank governor, finance secretary, joint secretary at the Energy Ministry and Managing Director of Nepal Electricity Authority are members in the Committee.

The report also touches upon the present investment situation of the hydro power, investment scenario in the next 10 years, gap between demands and supplies, among others.

Source: My Republica; 19 Dec 2017

Budhi Gandaki can be built by utilizing internal resources, study finds

A study commissioned by the Ministry of Energy has concluded that Budhigandaki Hydroelectric Project can be built by utilizing internal resources. “The project's estimated cost of Rs 270 billion can be collected from different entities. But a viability gap funding (VGF) of up to 35 percent of the cost is needed to make the project commercially viable,” a report prepared by the study panel and submitted to Minister for Energy Kamal Thapa on Monday reads.

The study panel, which was led by Vice Chairman of National Planning Commission, Swarnim Wagle, has also recommended raising existing infrastructure tax and also levying carbon tax on consumption of fossil fuel to mobilize funds for building the mega hydropower project.

The government is currently levying infrastructure tax of Rs 5 per liter of petrol to arrange funds for the project. It has so far collected Rs 15 billion.

The 1,200-megawatt reservoir project will be built in Budhi Gandaki River that flows between Gorkha and Dhading districts. It will have a 263-meter high dam.

After scrapping the decision to award the project to a Chinese firm by the previous government, the government had formed the study panel on November 24 to select a suitable development modality and look for financial modality to build the reservoir project.

The opposition party, which has now won a clear majority in the provincial and federal elections, had expressed serious concern over the abrupt decision to scrap the decision to award the project to the Chinese firm, and vowed to revoke the decision if it returned to power.

“The government should provide VGF of about 35 percent of the project cost, or Rs 94 billion, for land acquisition and resettlement programs for households to be displaced by the project, and also arrange additional resources at cheap rates which is called viability gap lending (VGL). It can recover the amount from infrastructure tax or carbon tax in the future,” a statement issued by the National Planning Commission (NPC), said.

Such tax can be one of the strongest sources of funding as consumption of petroleum product is growing by 15 percent per annually.

The panel has identified institutions like Nepal Electricity Authority, Employees Provident Fund, Citizens Investment Trust, Rastriya Beema Sansthan, insurance companies, Hydroelectricity Investment and Development Company Limited, Nepal Telecom, Upper Tamakoshi Hydropower Company, welfare funds of Nepal Army and Nepal Police, general public and non-banking financial institutions potential investors.

The study panel has also suggested approaching multilateral donors and Exim banks of different countries for funding, and issuing project specific bonds to raise funds from the domestic market. Likewise, it has also suggested ascertaining possible downstream benefits of the reservoir by forming a panel of experts and begins talks with the countries downstream for benefit sharing.

The study panel has suggested the project to encourage positive externalities like tourism, fishery, agriculture, urbanization, irrigation and drinking water, among others, and examine negative externalities like resettlement, environmental impacts; and study integrated development planning and investments of federal, provincial and local levels.

It has suggested implementing the project by adopting company modality with an equity financing of 30 percent and 70 percent of loan financing. “Or the government can build the project on its own through the NEA,” the report states.

Source: The Kathmandu Post; 19 Dec 2017

No takers for Dhalkebar construction contract

[BIBEK SUBEDI](#)

The Nepal Electricity Authority (NEA) is having a hard time finding another contractor to finish the Dhalkebar substation after dismissing the original Chinese contractor. On December 12, the state-owned power utility published a notice inviting interested bidders to submit proposals within a week. This is the third time the NEA has issued a call for tenders. According to the NEA, there may not be any takers this time too.

“Good companies are not interested in bidding for jobs left unfinished by other contractors. Almost 90 percent of the construction work on the substation has been completed,” said a highly-placed NEA source. “Therefore, the chances of finding a contractor this time are low too.”

The 220 kV substation will allow the NEA to boost electricity imports from India over the Dhalkebar-Muzaffarpur cross-border transmission line, and prevent possible power cuts during the dry season. The NEA has planned to appoint a contractor without competitive bidding with the Energy Ministry’s approval if the third tender notice draws a blank.

“The only way to complete the project is to find a good contractor and negotiate with it directly,” said the source. “The Dhalkebar substation is of strategic importance, so the government should allow the NEA to appoint a contractor through negotiations.”

Last September, the NEA fired Chinese contractor Central Power Grid International Economic and Trade Corporation after being fed up with its deliberate delays.

As per the deal signed between the NEA and the Chinese company in June 2014, the substation should have been up and running by September 2015. However, deliberate delays by the contractor led to the deadline being extended for the third time to May 31, 2017, but that deadline too passed after it halted construction without notification.

Former energy minister Mahendra Bahadur Shahi then extended the deadline to October, and directed the Chinese company to complete construction by that date, which led to work being speeded up and most of the goals being achieved. However, the Chinese company started exhibiting defiance after the NEA terminated its contract for the Bharatpur-Bardaghat 220 kV Transmission Line Project for non-performance.

The contractor should have completed the transmission line project in December 2013. After it failed to finish the project even after the deadline was extended for the third time till June 2017, the NEA scrapped the deal. Since then, the contractor has been repeatedly halting work on the Dhalkebar substation to express its displeasure.

Source: My Republica; 19 Dec 2017

Panel identifies potential sources to fund construction of Budhigandaki

A committee led by Vice Chairman of National Planning Commission Swarnim Wagle has submitted a report to Deputy Prime Minister and Minister for Energy Kamal Thapa with potential sources for the required resource to develop the 1,200-megawatt Budhigandaki reservoir project. Located in the Gorkha and Dhading districts, near from the major load centres of the country — Kathmandu, Chitwan and Pokhara — the report submitted today says Nepal could generate enough resources over the next 10 years to cover the cost of construction of the mega project.

The government has been levying petroleum tax of five rupees in sales of each litre of petrol from last fiscal to distribute land compensation to the affected locals of project site and the process of compensation distribution has already begun.

The committee's report has said that the government could generate around Rs 140 to 160 billion from the petroleum tax over 10 years if the consumption of the petroleum products increases by 10 to 12 per cent over the next decade.

Likewise, NEA as a developer could chip in equity investment worth Rs 10 billion to Rs 20 billion in the project. The Employees Provident Fund could make reinvestment ranging between Rs 30 billion to Rs 50 billion in next 10 years akin to its investment in Upper Tamakoshi, Sanjen, Bhotekoshi, among others. Similarly, Citizen Investment Trust (Rs 30 to 40 billion), Nepal Telecom (Rs 15 to 20 billion), Beema Sansthan and insurance companies (Rs 10 to 20 billion) could also chip in resources over the next 10 years.

Hydropower Investment and Development Company, Upper Tamakoshi Hydroelectric Company could make investment of at least Rs 10 billion during the construction period of the Budhigandaki project, as per the report.

The report has also envisioned mobilising Rs three to five billion from Chilime Hydropower Company, Rs five to seven billion from the welfare funds of Nepal Police and Nepal Army and Rs 10 to 20 billion from the public (including migrant workers).

Thus, the country could easily mobilise Rs 270 to 367 billion over the next 10 years to develop the project, which is listed as a national pride project.

According to a study carried out in 2013 by a French company — Tractebel Engineering (France) — the cost of developing the Budhigandaki project is expected to be around Rs 260 billion.

The previous government led by Pushpa Kamal Dahal had handpicked a Chinese Company — China Gezhouba Group Corporation (CGGC) — and handed over the project to be built as per engineering, procurement, construction and financing (EPCF) contract. After the deal landed in controversy, House panels — Finance Committee and Agriculture, Water Resource Committee — instructed the government to scrap the contract.

Later, Deputy Prime Minister and Minister for Energy Thapa, of the incumbent Sher Bahadur Deuba-led government, scrapped the deal with the Chinese company and decided to hand over the project to Nepal Electricity Authority (NEA) in November, ahead of the parliamentary and provincial assembly polls.

Back then, Deputy PM Thapa had formed the committee led by NPC Vice Chairman Wagle. Governor of the Nepal Rastra Bank, finance secretary, joint secretary at Ministry of Energy and executive director of the NEA were members of the committee.

However, the Left alliance, which comprises major political parties CPN-UML and Maoists Centre — had announced earlier that the project would be handed over to the same Chinese company again, when the Left alliance comes to power.

Source: My Republica; 19 Dec 2017

Budhi Gandaki can be built by utilizing internal resources, study finds

A study commissioned by the Ministry of Energy has concluded that Budhigandaki Hydroelectric Project can be built by utilizing internal resources.

Institutions/sectors identified as possible investors	Projected investment
Government of Nepal	Rs 140-160 billion
Nepal Electricity Authority	Rs 10-20 billion
Employees Provident Fund	Rs 30-50 billion
Citizens Investment Trust	Rs 30-40 billion
Nepal Telecom	Rs 15-20 billion
Rastriya Beema Sansthan and other insurance companies	Rs 10-20 billion
Hydroelectricity Investment and Development Company Ltd	Rs 10-15 billion
Upper Tamakoshi Hydropower Ltd	Rs 7-10 billion
Chillime Hydropower Company Ltd	Rs 3-5 billion
Nepal Army/Nepal Police	Rs 5-7 billion
General public (including remittance)	Rs 10-20 billion
Total	Rs 270-367 billion

“The project's estimated cost of Rs 270 billion can be collected from different entities. But a viability gap funding (VGF) of up to 35 percent of the cost is needed to make the project commercially viable,” a report prepared by the study panel and submitted to Minister for Energy Kamal Thapa on Monday reads.

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Source: The Kathmandu Post; 20 Dec 2017

Power imports from India likely to jump 26pc

[BIBEK SUBEDI](#)

Nepal's electricity imports from India are likely to jump 26 percent this winter as production has fallen at domestic hydropower plants with water levels in the rivers dropping sharply.

Last winter, Nepal bought around 380 MW from the southern neighbour when the dry season was at its peak and domestic production had shrunk to its lowest level. Power imports will surpass last year's figure by around 100 MW this winter, the Nepal Electricity Authority (NEA) said. Currently, Nepal is importing around 400 MW from India through various cross-border transmission lines, according to Bishnu Shrestha, chief of the load dispatch centre at the state-owned power utility.

The NEA is importing 150 MW through Kataiya-Kushwa, 120 MW through Dhalkebar-Muzaffarpur, 65 MW through Raxaul-Parwanipur and 30 MW each through the Ramnagar-Gandak and Mahendranagar-Tanakpur cross-border transmission lines.

"Imports are already higher than during the dry season last year when domestic generation was at an all-time low and demand was at an all-time high," said Shrestha. "Going by this trend, electricity imports will go up further in the coming days."

Domestic electricity generation has plunged more than 35 percent below the total installed capacity. The country's hydropower plants are producing a combined 617 MW compared to their total capacity of 956 MW of electricity. While hydropower projects owned by the NEA are generating 363 MW, privately owned plants are putting out 254 MW.

As a majority of hydroelectric stations in the country are run-of-the-river types, output drops sharply during the dry season when the water flow in the rivers goes down. The only power plants with reservoirs are Kulekhani I and II. These projects generate a combined 92 MW.

Hydroelectricity generation at the NEA-owned 144 MW Kali Gandaki Hydropower Project, the country's largest plant, has gone down by more than 27 percent to 104.7 MW. Similarly, the Marshyangdi Hydropower Project is generating only 56.8 MW compared to its installed capacity of 69 MW, according to the NEA. Power generation at the 70 MW Middle Marshyangdi Hydropower Project has come down by around 25 percent to 51.5 MW.

As the water level will continue to decrease until mid-March, electricity generation is likely to go down further which will pose challenges to the state-owned power utility to keep the country free from power cuts.

The NEA has forecast that peak demand will swell to around 1,380 MW in the coming days as more energy will be consumed for heating due to decreasing temperatures.

However, the decline in electricity generation will not lead to a resumption of load-shedding for households, the NEA has clearly stated.

Source: The Himalayan Times; 20 Dec 2017

NEA focusing on improving power distribution system

Pushpa Raj Acharya

After overcoming challenges related to supply side constraints, Nepal Electricity Authority (NEA) has finally moved to improving the distribution system in Kathmandu Valley and other parts of the country. The power utility that was stuck with minimising the prolonged load-shedding had not paid due attention to upgrading the distribution system in the past. Hence, it started facing challenges with the distribution system. Low capacity and old system are the major barriers for reliability in power supply, to increase demand as well as control technical losses.

Against this backdrop, the Asian Development Bank (ADB) is supporting NEA to upgrade the distribution substations and grid substations. Grid substations are being built to increase transmission capacity, reduce transmission losses and stabilise voltage.

In Kathmandu Valley, three 132/11 kV distribution substations — each of 90 MVA capacity — are going to be added in three different places in Mulpani, Chapagaun and Futung for reliable power supply.

Capacity constraints of the distribution substations were witnessed during the trade disruptions in 2015. Back then, NEA was forced to resort to load-shedding despite availability of power because the distribution system could not handle the load and as a result, transformers, feeders and cables were overloaded.

Just before this, NEA with assistance worth \$115 million from ADB, had constructed a new grid substation at Chapali and upgraded grid substation at Matatirtha, which has opened the window to bring more power for distribution in the Valley under the Electricity Transmission and Supply Improvement Project and Energy Access and Efficiency Improvement Project.

Lack of adequate grid substations and low capacity are considered as the major bottlenecks to bring more power from generation plants via national grid to Kathmandu Valley. Along with upgrading the distribution system, NEA in the next step will move to distribution automation, according to NEA officials.

Two other grid substations, 220/132 kV Lapsifedi substation of 160 MVA capacity and 132/11 kV Changunarayan substation of 45 MVA are going to be developed by 2021 as the procurement process has already been completed, as per Pushkar Manandhar, energy officer at ADB, Nepal Mission.

Similarly, ADB has provided support to NEA to double the single circuit 132 kV transmission line from Butwal to Kohalpur and Kohalpur to Mahendranagar, a total of 404-km transmission line. It has also built three new 132/33/11 kV substations at Kusum, Bhuregaun and Pahalmanpur. ADB has also helped in augmenting seven existing substations at Butwal, Shivapur, Lamahi, Kohalpur, Lamki, Attariya and Lalpur, thus contributing to reliable and quality power supply in the region.

In the Kohalpur-Mahendranagar section, the Norwegian government has co-financed the ADB project with grant assistance worth \$9.4 million. Altogether, five new grid substations and augmentation of 11 grid substations have been completed in the last seven years. Similarly, eight new distribution substations and augmentation of 18 distribution substations have been completed in the last seven years under the Electricity Transmission and Supply Improvement Project and Energy Access and Efficiency Improvement Project of the ADB.

ADB has developed these substations and installed another 132 kV transmission line in transmission highway of western Nepal on turnkey basis. In these projects the development partners worked closely with NEA to curb unnecessary delay in implementation of the project. Distribution substations and grid substations developed under the project have enhanced the livelihoods by ensuring reliability and quality of power supply and also helped minimise transmission and distribution losses. It has helped the power utility to maximise revenue as it has paved the way to increase the consumption of power.

The Asian Development Bank has developed the distribution substations eyeing the places where there is a prospect of industrialisation in the future and also in urban and urbanising areas. Manandahar from ADB said that the transmission and distribution infrastructure will cater to the increased demand of electricity for next 15 years.

Hydro Expo in January

For collaboration between Nepali and Chinese companies to develop hydro projects in Nepal

BY APD REPORTER

Independent Power Producers' Association of Nepal (IPPAN) is organizing 'Himalayan Hydro Expo 2018' from January 5 to January 7 in Kathmandu. The event, which will showcase products and services related to hydropower, will witness participation from various countries, notably Nepal, China and India, according to the organizer.

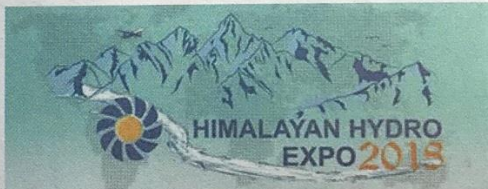
Around 100 stalls have already been booked, mostly from Nepali and

constitution has a provision to prohibit no-confidence motion against the government for two years.

"Nepal is heading towards political stability. This is an opportunity for foreign investors to invest in Nepal," said Shailendra Guragain, president of IPPAN.

IPPAN officials said they want collaboration between Chinese companies and Nepali private companies to develop hydropower projects. Not many Chinese companies are collaborating with Nepali companies to develop hydro projects in Nepal.

Sinohydro developed 50MW Upper Marsyangdi-A Project



Showcasing Hydropower related Products & Services

5th - 7th January, 2018 | 21st - 23rd Poush, 2074

Bhrikutimandap, Kathmandu, Nepal

Indian companies, few of them Chinese. But IPPAN wants more participation from Chinese companies as well as the private sector developers seeking collaboration with Chinese companies in the days to come.

The first international expo of its kind, the event will create a linkage between developers and other key stakeholders, according to IPPAN sources. The expo will also witness the presentation of six innovative ideas related to the hydro sector.

The expo will be organized at a time when the country will be in the process of forming the governments at the central as well as provincial levels. Elections to federal parliament and provincial parliaments were held on November 26 and December 7. The

in Lamjung district in collaboration with Nepali company Sagarmatha Power Company. Likewise, China International Water and Electric Co (CWE) bankrolled to develop 25MW Upper Madi Hydropower Project in partnership with a Nepali company in Kaski. Power generated from these projects has been connected to the national grid. On November 22, three Sichuan-based Chinese companies launched a joint venture with Nepal's Butwal Power Company to develop 1000MW power in the next five years.

IPPAN officials said they want many more such collaborations between Chinese and Nepali companies. The expo is expected to make it possible.

Source: The Kathmandu Post; 21 Dec 2017

Hydro project held up as NEA dawdles over PPA

Construction of the Upper Trishuli 1 Hydropower Project has been delayed as the board of the Nepal Electricity Authority (NEA) has been taking its time approving the power purchase agreement (PPA) signed with its developer.

The state-owned power utility signed the PPA with the developer Nepal Water and Energy Development Company (NWEDC), a Korean joint venture, a month ago.

As per the PPA, the NEA will buy electricity from NWEDC and make payment in US dollars for a period of 10 years or until the project has repaid its foreign loans, if that happens earlier.

The 216 MW run-of-the-river type project is located in Rasuwa district north of Kathmandu.

The board of the Korean joint venture had immediately approved the PPA. It said that delays by the NEA had pushed back the project's construction date.

NWEDC had planned to hold the ground breaking ceremony in October. "We have already missed that deadline, and we still don't know when the PPA will be approved," said a source close to the Korean joint venture.

The company acquired a generation licence from the Department of Electricity Development on November 9; but without the PPA, it cannot conclude the financial closure and start the project.

Meanwhile, the NEA said that the draft of the PPA signed with the Korean joint venture was currently at the office of the board of directors, and that the board would approve it soon.

"As we have sorted out contentious issues in the agreement with project developer, the board will not take much time to okay the deal," said Prabal Adhikari, chief of the power trading department and spokesperson for the NEA.

"We are aware that the project developer has already acquired the generation licence from the department, and we shouldn't take much time to conclude the pact."

NWEDC is a joint venture company formed by three Korean companies, International Finance Corporation (IFC) and Nepali investor Bikesh Pradhanang. The three Korean companies are Korea South East Power Company, Daelim Industrial Corporation and Kyeryong Construction Industrial Corporation.

Source: The Rising Nepal/My Republica; 22 Dec 2017

Entrepreneurs face problem in lack of construction of Kabeli Corridor

Three hydropower projects, which are in their final stages to generate power, would face problem in lack of attention of the Nepal Electricity Authority in the construction of Kabeli Corridor Transmission Line.

Construction task of the three projects, which would produce a total of 57 MW power, would be completed by April 2018.

Industrialists have complained that power produced from the projects would go wastage after NEA did not pay attention in course of construction of Transmission Line.

Construction of 90-KM Transmission Line from Padajungi of Jhapa to Amarapur of Panchthar is being carried out dividing it into three sections. Of them, construction task of the first section—Godak-Damak section has been completed while two sections are under construction.

Construction of the Transmission Line, started from the fiscal year 2062/63 BS, has now been obstructed due to various reasons including compensation distribution.

Construction of 25 MW-Kabeli 'B-1' hydel project, 22MW-Lower Hewakhola hydel power and 10MW-Ewakhola hydropower project are in the phase of completion.

Chief of Kabeli 'B-1' hydel project, Ramesh Prasad Pokharel, complained that although the project is in phase of completion of construction task, there is a situation where the power will go wastage after NEA failed to pay attention in construction of 132-KV Kabeli Transmission Line.

Independent power producers said that the Indian construction company, which has got responsibility for construction of the Kabeli Corridor Transmission Line, has not put the construction task in priority.

The Kabeli 'B-1' project is constructed by the Arun Kabeli Hydroelectricity Project. Project chief Pokharel said that problem has been faced as the NEA has not paid attention to the construction of the Kabeli Corridor Transmission Line.

Installation of the penstock pipe and machine is going on at the project but it is going to face problem for the lack of a transmission line even when it is nearing completion.

The 22-kilowatt capacity Lower Hewakhola Project is also about to complete. According to project chief Ganesh Subba, the project would be completed by April 7, 2018.

Although preparations have been made to feed the power generated from this project to the national grid through the NEA sub-station located at local Thapatar, problems have been seen in the construction of the transmission line.

The private power producers have been complaining that the NEA of not showing concern towards addressing the problem but only indicating to the problem related to transmission line construction.

Shailendra Guragain, the President of Independent Power Producers' Association of Nepal (IPPAN), said that the projects that are nearing completion are in problem as NEA has not paid attention to constructing the power transmission line for these projects.

He said the NEA should find out as to why the construction companies could not carry out their work in time and the private power producers also to facilitate the construction of the transmission lines.

However, the NEA has said that the construction of the transmission lines is going ahead.

Spokesperson of NEA, Prabal Adhikari said NEA Chief Executive Officer Kulman Ghising has already given the necessary instructions to the construction company to speed up the construction of the pending transmission lines. The NEA has complained that the local administration was not cooperating in this task.

The locals are not content on the distribution of compensation for their land that lies below the 'right of way' of the transmission line. Problems have occurred in the construction of 22 towers because of this.

In this connection, he NEA has urged the Chief District Officer of Paanchthar district to use his good offices to resolve this problem over compensation. RSS

Source: My Republica; 22 Dec 2017

No power cut for household consumers this winter: NEA

Nepal Electricity Authority (NEA) has made clear that it does not have any plan of enforcing load-shedding in this winter season.

Responding to some news reports and people's concerns in social media posts, the power utility said that it has chalked out plans to make optimum use of energy supply in its grid to ensure uninterrupted power supply to household consumers this winter.

“Though water flow in rivers recedes in winter season, affecting power generation, we are committed to provide uninterrupted power supply to people,” NEA said in a statement on Thursday.

NEA, however, has enforced load-shedding of three hours per day for industrial users in order to maintain supply to general customers. It has planned to make optimum use of energy generated by powerhouses as well as energy imported from India to provide uninterrupted power supply to households, according to the statement. NEA has said that it will request the government for more power import from India if energy demand increases further.

The total energy demand in the country currently stands at 1,264 MW. However, supply in the grid is only 964 MW -- 372 MW generated by NEA plants (excluding the Kulekhani project of 92 MW), 220 MW generated by independent power producers, and 372 MW imported from India. NEA is trying to offset the deficit of 300 MW in its system by imposing a three-hour power cut to its industrial consumers on a daily basis.

As a part of its 'Ujyalo Nepal' campaign, the authority has discouraged the use of high power consuming electrical devices like heater, iron, washing machine and water pump in the peak hours i.e. morning and evening. NEA has appealed to all its consumers to act responsibly on use of electricity.

Source: The Kathmandu Post; 22 Dec 2017

NEA asks India not to stop electricity supply

The Nepal Electricity Authority (NEA) has asked India not to halt the supply of power to Nepal via the Dhalkebar-Muzaffarpur cross-border transmission line even after the power purchase agreement (PPA) expires at the end of December.

The state-owned power utility made the request after an energy secretary-level joint steering committee meeting between Nepal and India slated to be held in the last week of December was canceled. NEA Managing Director Kulman Ghising has written to Indian state-owned nodal agency NTPC Vidyut Vyapar Nigam (NVTN) to extend the agreement for three more months. The two countries had planned to renew the PPA during the joint steering committee meeting, but after Nepal cancelled the scheduled conference citing lack of preparation, there was confusion regarding the supply of power over the cross-border transmission when the pact expires.

The NEA has said that the supply of electricity over the Dhalkebar-Muzaffarpur power line will not be disrupted. "As we have already communicated with NVTN, we are hopeful that it will give continuity to the power supply," said Ghising. "We are planning to visit Delhi after Christmas to sign a deal to extend the PPA for three months at the same rate."

As per the agreement signed with NVTN, the NEA will be receiving up to 160 MW of electricity until the end of December through the transmission line at the rate of INR3.60 per unit. Currently, the power utility is importing 120 MW of electricity over the power line. This is expected to increase in the near future when demand for electricity grows.

Nepal started importing electricity over the Dhalkebar-Muzaffarpur transmission line in February 2016 after the then prime minister KP Sharma Oli and Indian Prime Minister Narendra Modi jointly inaugurated the cross-border transmission line.

Initially, Nepal was importing 80 MW of electricity through the cross-border transmission line. Imports doubled after electricity generation by domestic hydropower projects dropped sharply during the dry season due to reduced water levels in the rivers. The NEA was able to eliminate power cuts in the Kathmandu Valley and other major cities in the country largely due to the energy imports through the Dhalkebar-Muzaffarpur transmission line.

The NEA is currently importing around 400 MW of electricity from India through nine transmission lines. Most of the power comes through the Dhalkebar-Muzaffarpur, Kataiya-Kushhawa, Raxaul-Parwanipur, Tanakpur-Mahendranagar and Ramnagar-Gandak transmission lines.

The utility is planning to increase imports through these cross-border transmission lines because domestic production is expected to drop further as the dry season intensifies.

Source: The Himalayan Times; 22 Dec 2017

NEA assures 'no load-shedding' for domestic use

Disputing claims of 'undeclared load-shedding' since the last few days, Nepal Electricity Authority (NEA) today said that the power utility has been supplying power as per demand. Issuing a press statement, NEA Managing Director Kulman Ghising, who is famed for eliminating load-shedding from the country, sought to assure Nepalis that there will be no load-shedding this dry season.

Managing load in dry season is a tough task for NEA as generation from the snow-fed rivers drops to one-third of the installed capacity. Currently, peak hour demand is around 1,300 megawatts and to manage the peak hour load, NEA has been cutting power to the industries for three hours a day. NEA has supply capacity of 964 megawatts in peak hours.

"Due to deficit of supply, NEA has been enforcing three hours a day power cut for industrial users," the statement reads. "Dry season is a critical time for NEA to manage load when power generation tumbles but demand soars"

Ghising's statement further says that the unexpected power outage is due to technical reasons and NEA has been mobilising its technical teams promptly to restore supply. "For qualitative and reliable supply of power, NEA has been strengthening the distribution system through capacity upgradation of transformers and feeders."

Distribution system upgradation is being carried out throughout the country as the old system could not ensure reliable supply. Improved voltage profile through strengthening of the distribution system will ensure reliability of power supply and also increase the lifespan of machines, electric equipment and home appliances, as per NEA.

"NEA will ensure efficient distribution in the future and is also preparing to increase power import from India to ensure 24/7 electricity supply."

The NEA managing director has also urged users to use electricity efficiently to support the power utility in load management. "We would urge users not to use electric equipment during peak hours in the morning and evening."

Supply situation

NEA projects

372 MW (excluding 92-MW Kulekhani)

Independent Power Producers' projects

220 MW

Import from India

372 MW

Source: NEA