

Source: My Republica; 27 January 2018

## **President Bhandari urges investors to invest in hydro sector**

President Bidya Devi Bhandari has stressed the need for developing infrastructures to promote economic development. Harnessing hydropower was an infrastructure development and also constitutes a base for prosperity, she added.

President Bhandari said this while inaugurating Nepal Power Investment Summit organized by Energy Development Council in Kathmandu aiming at providing key role in the development of power sector in the country.

She said rapid development of renewable energy sources also requires due attention in the context of negative consequences for environment posed by impact of climate change and excessive use of fossil fuels.

Stating that our enormous natural resource is not being utilized, the President added majority of our population is deprived of access to even minimum electricity facility.

Urging the investors to invest in hydro sector, President Bhandari said that hydro sector was a fertile one to make investments adding, "I would like to call upon local and foreign investors to actively get involved in utilizing our enormous hydropower resources."

On the occasion, she assured that the government was committed to creating a favorable atmosphere for investment by taking due consideration of the investors' interest and real needs.

"We need capital, technology, market feasibility and development of cross-border transmission line for implementation of large-scale projects and the government will accord top priority to attract foreign investment in hydropower," she reiterated.

The President also said that there was a good opportunity to invest in hydropower sector as the demand for electricity was soaring in Nepal and South Asia, where rapid development was being expected.

On the occasion, Bhandari said that development of hydropower in Nepal would benefit the neighboring countries as well and eventually contribute to economic development of the region.

During the program, Indian Ambassador to Nepal Manjeev Singh Puri said that India was always supportive of Nepal's energy sector's development, adding that both the countries were jointly working in this sector.

A total of 350 plus representatives from different countries are attending the three-day-long summit.

The government would be requested for the implementation of the recommendation of the summit, the organizers said. RSS

Source: The Himalayan Times; 28 January 2018

## **Innovative ways of financing for hydels sought**

Experts and industry insiders have called for more optimisations and innovative ways of financing in the country's hydropower sector. Speaking at a panel discussion on 'FDI in Nepal's Power Sector' during the Nepal Power Investment Summit, which kicked off in the Capital today, hydropower developers said that there are no ways other than attracting foreign investment in Nepal's power landscape to boost economic growth of the country.

"However, since hydropower projects are capital intensive and have longer gestation period, innovative financing solutions like equity financing is the need of time," said Rajen Kandel, director of Kandel Group.

According to him, lack of investment opportunity within Nepal and the growing demand of energy every day offers high level of investment scope for international investors to build hydropower projects in Nepal.

Similarly, N L Sharma, chairman of India-based Satluj Jal Vidyut Nigam (SJVN), pointed out political instability, lack of tax incentive, hassles during the land acquisition process and clearance of forest, and environment as some factors hindering foreign direct investment (FDI) in Nepal's energy sector.

Informing that the Arun III, which is a 900-megawatt hydropower project financed by SJVN, was soon kicking off, he suggested government to make sure to develop transmission lines before the completion of any hydropower project.

Meanwhile, speakers at the discussion panel also called for an independent power sector regulator to check the demand and supply side situation as well as to fix the energy tariff in the country.

Apar Neupane, vice-president of Finance at Equicap Asia Pvt Ltd, opined that the mismatch in the interests of several stakeholders was the biggest hindrance for attracting FDI to Nepal. "From the government to the project affected area, from the developer to the contractor and financier, there are multiple stakeholders involved and they all have their own interests. When interests collide, the project gets affected," he stated.

Meanwhile, Joseph Hoess, director of Dragon Capital, Vietnam, said that the hassles that foreign investors have to go through while doing the ground works were what was aggravating the situation. "Private investors seek maximum returns within a short period of time, but here in Nepal we have to invest for more than five years doing basic things like getting approvals and clearances," he informed. Organised by the Energy Development Council (EDC), the three-day long summit aims to introduce Nepal as a safe investment space in the hydropower sector.

A total of 350 delegates from 24 countries including those from SAARC region, Europe, China, Korea and the US, among others are participating in the event that will last till Monday, according to the organisers.

Source: My Republica; 29 January 2018

## **More RoR plants to get 'take or pay' PPAs**

A recent decision of the Ministry of Energy has paved the way for hydropower producers, particularly those developing Run of River (RoR) type projects, to sign power purchase agreement with Nepal Electricity Authority (NEA).

The Ministry of Energy couple of weeks back directed the power utility to sign more PPAs with RoR projects on take or pay basis after the seven-year energy development plan revised the target of generating 17,000 MW in seven years, up from 10,000 MW in 10 years set earlier in 2016.

Take or pay means that NEA must pay power developers regardless of whether it needs energy or not. The decision is different from take and pay PPAs that NEA signed with several hydropower plants. The agreement means NEA can purchase electricity for project only when it needs and pay for the developer, accordingly. It had several projects unfeasible for bank loans.

The decision has ended uncertainty among hydropower developers regarding PPA. The developers can now enter the generation phase after signing PPA with the power utility.

The decision allowed the NEA to raise PPA cap for RoR projects to 5,100 MW from existing 3,000 MW. National Energy Crisis Reduction and Electricity Development Plan unveiled in February, 2016, required NEA to put PPA cap for RoR projects at 30 percent to ensure balanced energy mix and discourage RoR plants which operate at low capacity during winter months when energy demand hits peak.

Different RoR projects having a combined capacity of 2,000 MW are waiting for the response of NEA on their PPA proposals. Different projects having combined capacity of 5,000 MW are awaiting nod from the NEA for PPA.

The Independent Power Producers' Association, Nepal (IPPAN) has welcomed the decision. Issuing a statement, IPPAN President Shailendra Guragain said that many developers, whose PPA proposals were pending after PPA signed by NEA reached the 3,000 MW cap, will feel relieved.

### **NEA signs PPA for Upper Trishuli-1**

Meanwhile, NEA has signed power purchase agreement with Nepal Water & Energy Development Co Pvt Ltd on Sunday to purchase electricity generated by Upper Trishuli-1 hydropower project (216 MW). NWEDC is a joint venture company promoted by South Korean and Nepali investors.

NEA Managing Director, Kulman Ghising, and NWEDC CEO, Bo Seuk Yi, signed the agreement on behalf of their respective organizations.

According to the agreement, NEA will pay NWEDC in US dollar for 10 years or until the company repays its foreign loan, whichever comes earlier.

The plant located in Rasuwa on Trishuli River will generate 456.4 GWh of energy annually.

NEA will pay Rs 4.80 per unit for the energy generated during wet months, while PPA rate for the dry months has been set at Rs 8.40 per unit.

NEA also said that NWEDC, together with NEA and the government, will set up a hedge fund for sharing currency exchange risks. Nepal Rastra Bank will prepare guidelines for the fund.

Energy Secretary Anup Kumar Upadhyaya, South Korean Ambassador to Nepal, Park Yong Sik, and IFC country manager Mohammad Rehan Rashid were present in the PPA signing program held at NEA. IFC will arrange loan debt for the project.

The project will enter construction phase in April, setting a target of starting power generation within five years, according to officials of NWEDC.

Source: My Republica; 30 January 2018

## **Energy ministry dragging feet on electricity regulatory body formation**

Electricity tariff in Nepal is one of the highest in South Asia. Experts say unregulated power purchase agreements signed with hydropower developers by Nepal Electricity Authority (NEA) is one of the reasons that has made electricity expensive in Nepal. Realizing the fact, the parliament endorsed Electricity Regulation Commission Act 2017 on September 4 last year, paving way for the government to set up a regulatory institution in the electricity sector. However, the Ministry of Energy is not showing any interest to set up the commission.

Instead, Minister for Energy Kamal Thapa two weeks ago directed the NEA to sign PPAs to purchase an additional 2,100 MW of energy of run-of-river (RoR) projects on 'take or pay' basis.

The plan to set up the commission dates back to 2004.

According to the Electricity Regulation Commission Act 2017, the commission has been mandated to regulate the overall electricity sector, including controlling electricity prices by studying several cost factors in building power plants. The commission is very important as such costs of power plant are directly reflected in PPAs which are ultimately transferred on customers. The commission has also been authorized to set electricity tariff and monitor power purchase agreements between developers and NEA, according to the Act.

Many are of the view that high electricity tariff is unjustifiable in a country like Nepal with abundant hydropower potentials. Professor Amrit Man Nakarmi of the Center for Energy Studies, Tribhuvan University, said that the delay in instituting electricity regulatory commission is making electricity expensive in Nepal. "A study conducted few years ago showed that electricity tariff is second highest in the region after Sri Lanka. The commission can control electricity price by studying the cost of power generation, capital injected in the project, and internal rate of return, among several other factors associated with the project development cost," added Nakarmi.

"The commission can make a comparative study of electricity price, as well as cost of power generation, can control electricity tariff accordingly."

Hydropower projects often inflate power generation cost to negotiate higher PPA rates with the NEA. The power utility lacks technical capacity to calculate project cost inputs efficiently. Its staffers have also been accused to fixing PPA rates of companies promoted by them - a serious case of conflict of interest. Similarly, PPA rates of different categories of plants are fixed without considering features of the project, including geology, water discharge and location, among others. These features largely determine the cost of projects, according to experts.

Talking to Republica, Energy Secretary Anup Kumar Upadhyaya defended Minister Thapa's direction of signing additional PPAs on take or pay basis, stating that he was only implement the cabinet decision take last year. "As the PPA rates are already fixed, the regulatory commission cannot change the prices. The factors like project cost and other factors, which are taken into account while deciding PPA rates, are the same regardless of who sets the price," argued Upadhyaya.

NEA on Sunday signed PPA with a Nepal-Korea joint venture company to buy electricity generated by Upper Trishuli-1 hydropower project in US dollar. The decision may clearly affect the prices of the electricity sold to the households as the cost of the project has long been questioned.

Ministry of Energy says that it is drafting regulations to set up Electricity Regulatory Commission. It may take few more months for the commission to come into being, energy ministry officials say.

Source: The Kathmandu Post; 30 January 2018

## **NEA to resume signing 'take or pay' accords**

*BIBEK SUBEDI*

The Nepal Electricity Authority (NEA) is planning to resume signing power purchase agreements (PPA) with run-of-the-river type projects under the 'take or pay' modality until their combined installed capacity reaches 5,100 MW.

The state-owned power utility had stopped signing PPAs under this modality for the past three months, and had switched to the 'take and pay' modality. The 'take and pay' model allows the NEA to buy energy from hydro projects whenever needed and pay accordingly. Under the 'take or pay' system, on the other hand, the NEA has to buy the contracted amount of electricity or pay a fine. The NEA had stopped signing PPAs under 'take or pay' modality after the combined installed capacity of the power projects reached 3,000 MW set by the government in its National Energy Crisis Reduction and Electricity Development Decade plan.

As per the plan introduced in February 2016, the Energy Ministry would develop 10,000 MW of hydroelectricity in 10 years, with 30 percent of the total power envisaged to come from run-of-the-river type hydropower projects.

The plan didn't allow the NEA to sign PPAs under the 'take or pay' modality after the total installed capacity reached 3,000 MW. A week ago, the Energy Ministry hiked the limit to 5,100 MW, and told the NEA to resume signing PPAs under the 'take or pay' modality. According to NEA spokesperson Prabal Adhikari, the ministry has instructed the utility to increase the share of run-of-the-river projects in the total energy mix in line with the government's new target of developing 17,000 MW within seven years. "We will now take the proposal to the NEA board for its approval," said Adhikari. "Once we get the go-ahead from the board of directors, we will start signing PPAs under the 'take or pay' modality." NEA has so far signed PPAs under the 'take or pay' model with run-of-the-river projects with a combined capacity of 3,000 MW. It has signed a PPA under the 'take and pay' modality with a project with a capacity of 100 MW. "First of all, we will change the PPA with the 100 MW project to a 'take or pay' modality," said Adhikari. "This way, we will be able to sign PPAs under this modality with projects with a combined installed capacity of 2,000 MW."

Source: My Republica; 31 January 2018

## **Delay in hydro-mechanical works likely to push back Upper Tamakoshi deadline**

*Ramesh Khatiwada*

### **Indian contractor blames problem in transportation of pipes for the delay**

DOLAKHA, Jan 31: Upper Tamakoshi Hydropower Project (456 MW) is facing the risk of missing its completion deadline due to the negligence of Indian company Texmaco Rail & Engineering Ltd - the contractor of the mega project's hydro-mechanical works.

Project officials allege that the Indian firm is intentionally delaying its work to affect the project.

The project based in Lamabagar of Dolakha has set a completion deadline of December 2018. Four international contractor companies are working on four different packages. The Indian company has received the contract for the second package which covers hydro-mechanical works of the project. Project officials warn that the delay of the Indian firm could push the completion deadline back by at least 18 months. "Hydromechanical work is moving at a snail's pace. The contractor blames the slow work to the problem in transportation and other issues," an official of the project told Republica. "If the government does not press the contractor by taking diplomatic initiatives, the completion deadline could be affected."

The company has been entrusted hydro-mechanical works like laying down pipeline and building gates in tunnel and dam site. While a Chinese company, which won the contract for civil works, has completed most of the civil works, including building an 18.4-kilometer tunnel, the Indian company is creating obstacles in the project work.

According to a technical officer of the project, it is taking at least three days to install a five-meter pipe with the 3.6-meter circumference. "As per the project schedule, around 160 pipes should have been installed by now. But the Indian company has installed only 40 pipes in the tunnel so far," the officer told Republica.

Based on the calculation, it will take at least a year to install the remaining pipes. It will push the completion deadline by two years, the official added.

Ganesh Neupane, the spokesperson for the project, said it takes 12-15 days to transport a pipe to the project site in Lamabagar from Simara. "We have directed the Indian company to speed up transportation of pipes. But it has managed to bring only three pipes per day," Neupane said, adding: "The company is blaming the poor shape of Khadichaur-Charikot road section for the delay in transportation of pipes."

Delay in hydro-mechanical works has also affected remaining civil works of the Chinese contractor. Dinesh Jung Rana, who is working with the project's hydro-mechanical department since the beginning of the project, said the project office has directed the Indian contractor to speed up its work many times. "The contractor is saying that bad road is delaying transportation of pipes and hence the installation. But we are piling pressure on it to speed up its work," Rana added.

According to Rana, the Indian company has stored the pipes in Birgunj and the powerhouse area of Sunkoshi Hydropower Company citing transportation problem. "Due to our repeated instruction, the contractor has expedited works to transport pipes to the project site," Rana said, adding that the project can be completed in eight months if the Indian contractor completes its work on time.

Project officials said taking action against the Indian company won't be a wise move as it would push the project backward. The better way is to keep pressing it to complete the work on time, project officials say.

Provincial Assembly Member from Dolakha-1, Bishal Khadka, said that negligence of one contractor should not affect the entire project. "Since this is the largest hydropower project with Nepali investment, such obstacles need to sort out as soon as possible," he added.



Source: The Kathmandu Post; 31 January 2018

## **FinMin okays electricity commission regulation**

The government has moved a step closer to setting up a powerful commission to regulate the country's energy sector with the Finance Ministry approving the Electricity Regulatory Commission Regulation drafted by the Energy Ministry.

"The Finance Ministry on Monday approved the draft of the regulation prepared by us," said Dinesh Kumar Ghimire, spokesperson for the Energy Ministry. "We will send it to the Law Ministry for its examination and approval before presenting it to the Cabinet for its final approval." The Energy Ministry plans to submit the draft regulation to the Cabinet within eight to 10 days, according to Ghimire.

After the regulation is endorsed by the Cabinet, the Nepal Electricity Regulatory Commission (NERC) can be formed to set standards to regulate organisations involved in power generation, transmission, distribution and trade.

The Energy Ministry will then initiate the process of establishing the NERC's secretariat and hiring staff including the chairman and members.

The commission will have a full mandate to determine the power purchase rate for the Nepal Electricity Authority (NEA), the state-owned power utility.

The NERC will supersede the existing Electricity Tariff Fixation Commission and set the charges that customers will have to pay to the power utility. The commission will fix the electricity tariff after holding a public hearing.

The commission, according to the regulation, will also establish a code that various entities under its jurisdiction will have to follow.

The code will specify standards for the construction of hydropower plants, transmission lines and distribution networks. It will also determine the voltage that will be supplied to customers by the utility.

Although the plan to form the NERC was floated a decade ago, Parliament only endorsed the Electricity Regulatory Commission Act in August 2017 paving the way for its establishment.

Source: The Kathmandu Post; 2 February 2018

## **Chameliya begins power output from 2nd turbine**

The Chameliya Hydropower Project in the country's far west has started generating electricity from its second unit. The number two turbine at the 30 MW hydropower station grew into life on Wednesday, and started feeding power into the national grid via the 132 kV Blanch-Attariya transmission line.

The Chameliya project, which is owned by the Nepal Electricity Authority (NEA), completed its wet test on Wednesday afternoon.

The second turbine is being operated at around 50 percent of capacity as the project is conducting a load rejection test of the unit. The load rejection test, which will continue for five days, will examine the system's ability to withstand sudden loss of load and capability to subsequently return to normal operating condition. Upon completion of the test, the project will conduct a reliability test when the turbine will be operated at full capacity for 72 hours. "We are planning to complete the reliability test by February 10," said Ajay Kumar Dahal, the NEA appointed project chief of Chameliya.

After the completion of the reliability test of the second turbine, one of the most troubled hydro projects located in Darchula district, will finally start generating electricity at full capacity.

The Chameliya project has been generating 15 MW of electricity from its first turbine. "As this project is a peaking run-of-the-river plant, the first turbine generates 15 MW for three hours in the morning and three hours in the evening," said Dahal.

"After we are ready to operate at full capacity, we will coordinate with the NEA's load dispatch centre and start generating electricity as per the country's demand pattern."

The construction of the Chameliya plant started in 2008. It was originally scheduled to be completed by 2011 at a cost of Rs8 billion. But the completion date was pushed back repeatedly due to disputes between NEA and the contractors. The time overrun has inflated the project cost to around Rs15 billion. The project faced its biggest hurdle in 2014 when all work came to a grinding halt following the government's refusal to make an additional payment of Rs1.09 billion which the civil contractor had demanded for cost variance.

China Gezhouba Group Corporation had asked for extra payment citing "cost variance resulting from the squeezing of the tunnel". The contractor agreed to resume work after being summoned to the Energy Ministry by the then energy minister Janardan Sharma.

The Chinese civil contractor returned to work in October 2016, and completed the construction within the deadline by expediting the project.