

Source: The Himalayan Times; 6 May 2018

## **IBN grants generation licence to SJVN Arun-III**

Foundation stone of the project scheduled to be laid during forthcoming visit of Indian PM  
The Investment Board Nepal (IBN) has awarded generation licence of the 900-megawatt Arun-III hydroelectric project to SJVN Arun-III Power Development Company — a subsidiary of Indian government-owned Satluj Jal Vidyut Nigam Ltd. The foundation stone laying ceremony of the project is scheduled to take place during Indian Prime Minister Narendra Modi's upcoming visit to Nepal. Indian Prime Minister Modi is scheduled to visit Nepal on May 11 and 12.

The largest foreign direct investment (FDI) ever from India is going to be realised after laying the foundation stone to take forward the construction of the project. SJVN will invest \$1.4 billion in Arun-III project and financial closure must be achieved by September 29 this year.

SK Sharma, managing director of SJVN Arun-III Power Development Company, said that the project is ready to take off, with construction contract of lot-I (dam) and lot-II (power house) already awarded and the contractors have already started bringing construction materials to the project location.

Arun-III is the largest capacity project in the history of hydroelectricity that is scheduled to be constructed within the next five years.

The Indian government has so far approved investment of INR 57.24 billion proposed by SJVN in Arun-III. Arun-III is an export-oriented project and it will sell the electricity to India. However, it has to sign an agreement with power utilities in India to sell the power in a bid to achieve the financial closure.

Indian Prime Minister Modi will observe the foundation stone laying ceremony of the project from Kathmandu. The project is located in Sankhuwasabha district of eastern Nepal.

The 900-megawatt project was supposed to be constructed under the assistance of the World Bank Group some two decades back. However, political polarisation and protests against reservoir projects back then forced the World Bank to drop the project.

The project was later awarded to the SJVN, a state-owned company of the Indian government, through competitive bidding some 10 years ago. Project Development Agreement (PDA) with SJVN was signed on November 25, 2014 and IBN has granted several extensions for financial closure of the project.

Apart from the local share and free energy to the residents of the affected area, the government will receive benefits worth Rs 348 billion from Arun-III as royalty, income tax, customs tariff and free energy in the concession period of 25 years. The project will also provide 21.9 per cent or 197 megawatts of the generated energy free of cost.

Source: The Himalayan Times; 8 May 2018

## **Tender of 1,200MW Budhigandaki by next fiscal**

The government is planning to issue a tender of the 1,200-megawatt (MW) Budhigandaki reservoir hydropower project within the next fiscal year. The Pushpa Kamal Dahal-led government had handed over the Budhigandaki project to China Gezhouba Group Company (CGGC) in November 2017 after the then energy minister Janardan Sharma had signed a memorandum of understanding (MoU) in June 2017.

The project was supposed to be developed in engineering, procurement, construction and financing (EPCF) model, with the CGGC generating the required funds for the project. However, the subsequent government led by Sher Bahadur Deuba had scrapped the contract with CGGC after the deal landed in controversy.

Issuing a 125-point white paper here today, Ministry of Energy, Water Resources and Irrigation (MoEWRI) unveiled its plans for the Budhigandaki hydropower project.

Releasing the white paper, Minister for MoEWRI Barsha Man Pun said that ministry has set the slogan of 'Prosperous Nepal, Happy Nepali' for 'Energy and Water Resources Decade', which is being marked as the period between 2019 and 2029.

Through the white paper, MoEWRI has announced of its plans to formulate an Integrated National Water Resources law for development, protection, management, regulation and integrated coordination of water resources. Likewise, the ministry is going to study river basin projects and come up with a masterplan within the next three years.

Meanwhile, to develop reservoir projects, the ministry will formulate the modality for benefit-sharing with lower riparian. The white paper has stated that the government will amend the Electricity Act, Nepal Electricity Authority Act and will formulate the Renewable Energy Development Act. Likewise, the government will formulate Electricity Regulation Commission as per 'Electricity Regulation Commission Act-1990' as soon as possible.

In addition, government will work on increasing per person energy consumption to 700 units (kilowatt hours) within five years and to 1,500 units within 10 years in line with the expansion of the energy sector.

Likewise, ministry has said that the country will be self-sufficient in energy within the next three years. To achieve this goal, the government will take necessary actions for timely completion of under-construction projects, upgradation of existing ones and installation of new transmission lines and reduce electricity leakage.

In addition, the ministry has set a new target to complete Bheri-Babai Diversion Multipurpose Project by fiscal 2021-22. Likewise, MoEWRI is also planning to develop the 10,800-MW Karnali-Chisapani mega reservoir project, which will export electricity to neighbouring countries.

The government is targeting to generate additional 3,000 MW of electricity in the next three years, 5,000 MW in next five years, 10,000 MW in 10 years and 15,000 MW in 15 years in collaboration with Nepal Electricity Authority (NEA) and the independent power producers (IPPs).

The white paper has also incorporated 'One Province, One Mega Project' strategy, which aims to build a mega hydro or solar project in each province. Likewise, the ministry is also looking to mobilise resources through general public.

Moreover, for long-term benefit of the nation, the government will build a parallel 400/765 kV high-voltage transmission line along the East-West Highway and Pushpalal Mid-hill Highway. And additionally, the government will instal river basin North South 400 kV high voltage transmission line.

The government has also set its sight on completing the second cross-border 400 kV Butwal-Gorakhpur high voltage transmission line within four years, while construction of Duhabi-Purnia, Lamki-Bareilly and Kohalpur-Kakhnau (400 kV each) high voltage transmission lines will be initiated.

The government is planning to complete the construction of 400 kV high voltage Galchhi-Kyirong transmission line in next five years.

The energy ministry has unveiled seven such white papers since 2001. However, it has had little to show till date in terms of major progress.

Against this backdrop, Minister Pun today acknowledged meeting all the targets set in today's white paper is 'complex' and 'challenging'. "However, we are committed to achieving the set goals."

Source: My Republica; 8 May 2018

## **Budhigandaki bidding process on the anvil**

The government is set to initiate a bidding process for the construction of Budhigandaki Hydropower Project from the coming fiscal 2075-76 BS.

The government has stepped up its preparation to hire the contractor wiping out confusion over the modality of constructing the project.

At a programme organized at the Ministry of Energy, Hydropower and Irrigation on Tuesday, Minister Barshaman Pun said, "Necessary preparations are being made in a way to initiate the project construction process in the coming fiscal year".

It may be noted that the erstwhile government had decided to construct the project with the capacity of 1,200 MW with Nepali investment. The Nepali Congress-led government had also decided to provide grant of Rs 100 billion to the project to make it investment worthy. Total estimated investment of the project is Rs 273 billion.

On the occasion, Minister Pun expressed commitment that he would not make any decision to award the contract for the project construction to any foreign company or agency. The government has put the project in the list of national pride.

Source: My Republica; 9 May 2018

## **Govt'll build Budhigandaki on its own: Energy minister**

*Rudra Pangoeni*

Minister for Energy, Water Resources and Irrigation Barsha Man Pun has said that the government will build the 1200 MW Budhigandaki Hydropower Project on its own and the tender process for the project will begin from next fiscal year. Budhigandaki is currently the only ready-to-implement reservoir-based hydropower project. The project's Detailed Project Report (DPR) and tender documents are ready, according to officials.

Speaking at a function organized to unveil the white paper on energy, water resources and irrigation in Kathmandu on Tuesday, Pun said that the government will arrange financing for the project and develop the project. He also informed that the government is currently exploring the sources of financing. The project's estimated cost is Rs 259 billion.

The statement by Minister Pun, a senior CPN (Maoist Center) leader, on the mega plant is a change from the July 2017 decision by the same party's Energy Minister Janardan Sharma and Prime Minister Pushpa Kamal Dahal.

Tuesday's decision on the project is however a continuation of the former Sher Bahadur Deuba government's decision to develop it through domestic resources. In November last year, the Deuba government had terminated the contract for the project awarded to Chinese company China Gezhouba Group Corporation (CGGC) and decided to develop it on its own.

A week after the Deuba government's decision, KP Oli, the then main opposition leader and prospective next prime minister, had expressed dissatisfaction over the government decision and promised to roll it back.

But Pun, one of the key ministers in the Oli cabinet, did not clarify whether Oli has changed his stance on the project. Replying to Republica's query Tuesday, Pun's aide Roshan Khadka said, "We are working on the modality for developing the project and also exploring the sources for financing the mega project." Kundan Aryal, the prime minister's press advisor, said he could not answer the question himself and the prime minister was not immediately available for a response.

In July last year, the then government led by Prime Minister Pushpa Kamal Dahal had decided to award the project to the Chinese firm without competitive bidding. The decision had been criticized by the parliamentary committees and the intelligentsia questioning the poor track record of the Chinese firm in Nepal.

Source: The Himalayan Times; 9 May 2018

## **Erratic plan in power sector generates no results**

Minister for Energy, Water Resources and Irrigation Barsha Man Pun unveiled the white paper and roadmap for the efficient management of water resources to achieve the 'prosperity' agenda of the government today. Pun's roadmap is the seventh strategic plan for the management of water resources and power sector development since 2001.

In recent years, there has been a trend of unveiling strategic plans for power sector development along with the change in the leadership of the ministry. Minister Pun has unveiled his plan to develop one mega hydroelectricity project in each province and ensure share investment from every Nepali in hydropower projects as 'secured investment for the future'. The white paper and roadmap unveiled today envisage developing 3,000 megawatts of power in the next three years; 5,000 megawatts in five years; 10,000 megawatts in 10 years and 15,000 megawatts in 15 years.

It has changed the aim of the 'National Energy Crisis Prevention and Electricity Development Decade, 2016' that envisions developing 10,000 megawatts in 10 years.

Nepal Electricity Authority (NEA), the sole power off-taker had developed its strategy to purchase power as per this strategy. NEA had introduced 'take-or-pay' power purchase agreement in February this year for up to 10,000 megawatts of power that is going to be generated by 2026.

The power utility has fixed a quota of 30 per cent (3,000 megawatts) of the aforementioned quantum of electricity for run-of-the-river projects, 20 per cent for peaking run-of-the-river projects (2,000 megawatts) and 50 per cent (5,000 megawatts) for storage projects.

The quota allotted for run-of-the-river (RoR) projects that are going to be developed by 2026 is already over. In fact, NEA has been discouraging RoR projects as the power generation of the snow-fed river projects goes down to one-third of rated capacity during dry season.

"RoR projects are relatively cost-efficient and can be completed in a short period of time and this might be the reason why private sector players have influenced the minister to come up with the plan of 15 years, under which the quota of the RoR projects can be raised under 'take-or-pay' power purchase agreement (PPA) that will benefit the influential people who want to invest in RoR projects," an independent analyst commented on Pun's roadmap, on condition of anonymity.

"Instead of initiating reforms at NEA, its financial health, unbundling of works — generation, transmission and distribution — among others, to attract foreign and domestic investors in PRoR and reservoir projects, Minister Pun is focused on distributing licence of RoR projects under his 15,000 megawatts in 15-year roadmap."

The independent power producers (IPPs) have said that the problem lies in transmission and NEA says that the real challenges are upgrading and augmenting the distribution system. "Generation is obviously the priority of the country, but not RoR projects. We must go for PRoR and reservoir projects for reliable energy supply for the longer term," as per NEA officials. "To meet the demand, the country imports up to 450 megawatts of electricity in the dry season as the generation from snow-fed river based projects plummets heavily."

In the 107-year history of power generation, the country's total installed capacity has marginally crossed 1,000 megawatts, whereas current demand is 1,300 megawatts. Out of the total installed capacity of 1,073 megawatts, NEA projects contribute 562 megawatts and 511 megawatts is contributed by IPPs. Credit goes to the private sector as the country's power sector has witnessed transformative changes after the investment was opened up for private sector players.

Debates are ongoing on accelerating the development of hydropower, to be independent in energy and also export clean and renewable energy across the region, but the implementation is disappointing. In fact, contribution of

hydroelectricity in total energy consumption stands at only 3.7 per cent.

Since 2001, six strategic documents have been unveiled — one every three years on an average. The government had adopted Water Resource Strategy in 2001, which was revised in 2005 to National Water Plan. In 2007, a plan calling for construction of 10,000 MW in 10 years was adopted, which was then altered in 2009 to become a plan for 25,000 MW in 10 years declaring 'energy emergency'. In the wake of the trade disruptions that affected the import of petroleum products acutely, the government came up with another revamped plan, this time calling again for 10,000 MW in 10 years. And now, 15,000 megawatts in 15 years has been presented by Minister Pun.

“Developing hydroelectric projects is capital- and labour-intensive and the investors do not make investment without any guarantee of returns and assurance of investment protection and this is why we should focus on holistic approach regarding generation, transmission, distribution and cross-border trade,” said Shailendra Guragain, president of Independent Power Producers' Association Nepal (IPPAN). “However, the erratic plans and policies adopted in the power sector could dampen investor sentiment.”

Source: The Himalayan Times; 10 May 2018

## **NEA to end power cuts in industrial areas**

*BIBEK SUBEDI*

The Nepal Electricity Authority (NEA) has set out to conquer new horizons after eliminating load-shedding for residential customers that ended decades of suffering for the Nepali people.

The state-owned power utility now plans to remove power cuts in the industrial sector. Rolling blackouts lasting 3-4 hours are currently in force for factories. This is expected to end by mid-May. The industrial corridors in Birgunj and Biratnagar are already getting uninterrupted power supply on a trial basis. Although the NEA had planned to eliminate power cuts in the industrial corridors by May-end, the programme was moved forward at Energy and Irrigation Minister Barsha Man Pun's orders. The NEA will continue the trial supply to the industrial corridors for a few more days; and if there are no technical glitches, load-shedding will be ended permanently, said a senior NEA official.

The NEA has been supplying uninterrupted energy to residential customers for more than a year now at the expense of factories where there is load-shedding lasting 3-4 hours during peak times. The power utility has been under constant pressure to remove power cuts in the industrial sector. Industrialists have been demanding uninterrupted power so that they can operate their factories at full capacity. The NEA would have been in a comfortable position to end power cuts in the industrial sector after a month as electricity generation from domestic hydropower projects will swell as water levels rise in the rivers. However, the minister's decision has put the authority in a difficult position.

"It will be very difficult to supply regular power to factories, but we will try our best to manage it," said a senior NEA official. Currently, the total electricity supply amounts to 1,000 MW while demand during peak hours is 1,300 MW. The 300 MW deficit is equivalent to the requirement of industry.

"Therefore, it will be a challenging task to remove power cuts in the industrial sector. We have been holding a series of meetings with officials of the NEA's Load Dispatch Centre to resolve the crisis," said the source. "The centre has informed us that it will be relatively easy to keep the industrial corridor in Birgunj load-shedding free as opposed to other areas."

The NEA has been supplying electricity imported over the Raxaul-Parwanipur cross-border power line to the industrial corridor in Birgunj. "We have increased energy imports over the cross-border power line by around 40 MW," said the source.

The power utility said that the hard times would not last long as domestic generation, which currently stands at 500 MW, was expected to rise in the near future.

With a rise in temperature, the water level in the snow-fed rivers will go up allowing hydropower projects to generate more power.

Although the total installed capacity of the hydropower plants in the country stands at around 1,000 MW, production goes down by more than 50 percent when water levels in the rivers fall during the dry season.



Source: The Himalayan Times; 10 May 2018

## 94.8 MW to be connected to national grid this fiscal

*Umesh Poudel*

Additional 94.8 megawatts of electricity generated from various hydroelectricity projects will be connected to the national grid within this fiscal. According to Nepal Electricity Authority (NEA) — the state-owned power utility — hydroelectric projects with the capacity to produce 94.8 megawatts of electricity are in the last stage of construction and will be completed within the end of this fiscal year. The country's total installed capacity of electricity has just crossed 1,000 megawatts, whereas demand is 1,300 megawatts. Out of total installed capacity of 1,073 megawatts, NEA projects contribute 562 megawatts and 511 megawatts is contributed by independent power producers (IPPs). NEA is currently importing 450 MW of electricity from India to fulfil the demand in the country.

With the addition of 94 megawatts of power, the country's total installed capacity will rise to 1,167 megawatts, but it will still fall short of the demand.

Of the seven projects nearing completion, 25-megawatt Kabeli B1, 21.6-megawatt Lower Hewa Khola and 20-megawatt Lower Modi are the three major projects.

<b>At a glance</b>	
<b>Name of project</b>	<b>Installed capacity</b>
Kabeli B1	25 MW
Lower Hewa Khola	21.6 MW
Lower Modi	20 MW
Iwa Khola	9.9 MW
Rudi Khola A	8.8 MW
Upper Naugad Gad	8 MW
Theule Khola	1.5 MW
	<i>Source: NEA</i>

Also, 100 megawatts of electricity has already been connected to the national grid till date this fiscal, with contribution of 14 projects constructed by NEA and IPPs. These included NEA's key project — the 30MW Chamelia. Likewise, 13.6MW Thapa Khola and 13MW Madkyu Khola were the major projects that were completed by the private sector.

Looking ahead, a total of 661 megawatts of electricity is expected to be connected to the national grid in fiscal 2018-19. The government and NEA will frequently monitor, coordinate and provide necessary support to the projects to ensure they are completed on time, according to officials.

Among others, 456-megawatt Upper Tamakoshi hydel project, one of the national pride projects, is scheduled to be connected to national grid next fiscal. Similarly, 40MW Khanu Khola 1; 27MW Dordi Khola; 25MW Upper Dordi A; 23.5MW Solu Khola; 22.2 MW Upper Chaku A; 22MW Bagmati Khola Small are the other major projects, out of the total 12 projects, to be connected to the national grid next fiscal.

"We are focused on expediting construction of key NEA projects. These include 456MW Upper Tamakoshi, 14.8MW Upper Sanjen, 102MW Middle Bhotekoshi, 111MW Rasuwagadhi and 42.5MW Sanjen, which are to be completed by 2020," said Prabal Adhikari, spokesperson for NEA. "Along with these hydropower projects, the government has completed the construction of 132 kV Balanch-Attaria transmission line, which is providing the backbone for the entire Province 7."