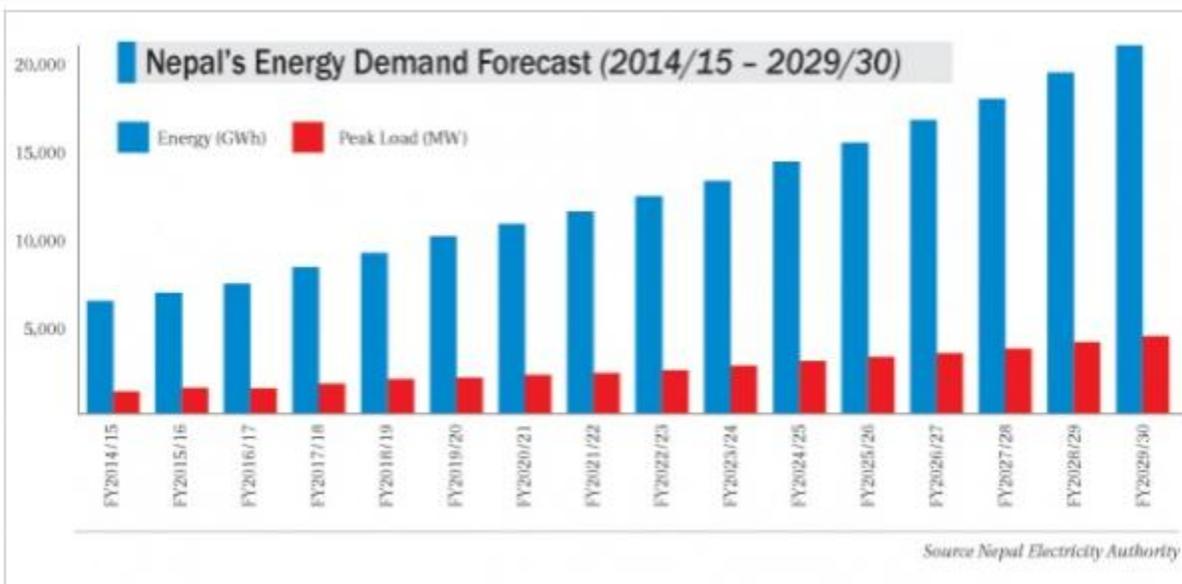


Source: My Republica; 7 Dec 2015

NEA's energy demand forecast will be reviewed, says NPC vice chair



National Planning Commission (NPC) Vice Chairman Yubaraj Khatiwada on Monday said that energy demand forecast of Nepal Electricity Authority (NEA) will be reviewed.

Speaking at an interaction on energy crisis organized by National Business Initiative, Khatiwada said that the current forecast is in linear model and based on suppressed demand which does not reflect the reality. “The demand forecast should be reviewed now, keeping fossil fuel substitution in mind.

We cannot achieve economic progress with the existing energy demand forecast,” added Khatiwada.

Country's energy demand is growing by around 100 MW annually. But growth in hydropower generation is disappointingly low.

According to NEA's demand forecast, peak load demand will be only 2,000 MW by 2019/20 and 4,100 MW by 2030.

Energy experts and independent power producers have long been demanding that NEA review its energy demand forecast, stating that the forecast is suppressed and conservative and that it doesn't consider increasing use of electricity for cooking purpose.

“With LP gas in short supply because of the blockade, people are in desperate need of electricity to prepare meal,” Energy expert Amrit Man Nakarmi said, presenting a paper on Energy Consumption in Nepal. He also said demand for electricity has increased by around 400 MW after India imposed blockade. “It's a good opportunity to replace import of petroleum products,” he added.

The country imports petroleum products worth around Rs 50 billion annually.

In his paper, Sher Singh Bhat, deputy managing director of NEA, denied demand for electricity has increased. "Rise in demand mostly comes from rural areas that too during peak hours," he added. He further said peak hour demand currently stands at 1,350 MW which falls during normal hours.

NEA's refusal to buy energy referring to the energy demand forecast has worried project developers. The power utility says energy will be surplus in national grid after 2017/18.

Khatiwada also said NEA has to be prepared to sign Power Purchase Agreement with firms generating energy from solar and wind plants. He also said

NPC will include energy and food security as strategic issues in upcoming plans.

Commenting on different hydropower project development models, including the development committee model, Khatiwada said hydropower development is not like running a trust. The government is building Budhigandaki - the largest storage project in the country - in development committee model. The development modality of Nalsyaugadh Hydropower Project (400 MW) is also the same.

"Company formation is the best model for hydropower project development in Nepal as it can also transfer ownership to public by launching initial public offering," added Khatiwada.

He also said Nepal will be able to export energy by developing mega projects. "The government has already signing Power Trade Agreement (PTA) to facilitate energy export," he added.

The government has also signed project development agreements with Indian firms Satluj Jal Vidyut Nigam for Arun III and GMR for Upper Karnali.

Source: The Himalayan Times; 8 Dec 2015

Loadshedding to continue to go up in coming years: NEA

Average monthly spending of every household of five to cook food						
Year	Kerosene	LPG (10 kg)	Electric hotplates	Biogas*	Traditional fuel, wood (Rural)	Traditional fuel, wood (Ktm)
2000	Rs 270	Rs 410	Rs 680	Rs 320	—	—
2003	Rs 340	Rs 510	Rs 790	Rs 320	Rs 400	—
2014	Rs 1,760	Rs 1,030	Rs 960	Rs 1,120	Rs 630	—
2015	Rs 1,350	Rs 990	Rs 860	Rs 780	Rs 780	Rs 1,530

Source: Amrit M Nakarmi, Professor, TU

*Cost without subsidy for biogas plant with capacity of 6 cu m

Induction heater: Rs 860

Source: Amrit M Nakarmi, Professor, TU

Nepal will continue to face power cuts during winter even after addition of around 820 megawatts of electricity in the next two to three years, Nepal Electricity Authority (NEA), the state-owned power utility company, said today.

Nepal currently generates around 762 MW of hydroelectricity. But during winter, power generation capacity dips by more than half because most of the hydro projects in operation are run-of-the-river.

Run-of-the-river hydro projects generate electricity whenever there is water in the river. So, as soon as water level dips, electricity production from these projects falls.

This problem is expected to become even worse this winter because several hydro plants that were damaged during earthquakes of April and May have reduced power generation by 80 MW.

“So, we expect hydro plants to generate only around 327 MW of electricity this winter,” NEA Deputy Managing Director Sher Singh Bhat told an interaction organised here by the National Business Initiative.

The only way to solve this problem, according to Bhat, is rapid construction of reservoir-type hydro projects, which can collect water during rainy season and use it to generate electricity during winter. But the country only generates 92 MW of electricity from reservoir-type projects at present.

“In this regard, we must focus on meeting at least 40 per cent of the electricity demand of peak hours through storage-type hydro projects. If we can do this, there’ll be drastic reduction in loadshedding hours,” said Bhat. Peak electricity demand currently stands at around 1,500 MW.

But meeting this target in the next few years is almost impossible because most of hydro projects under construction are also run-of-the-river.

“Several projects that are expected to start commercial operation within two to three years are expected to add 821 MW of electricity to the national grid,” Bhat said. But these projects are run-of-the-river, whose electricity production would fall to around 215 MW during winter.

“So, loadshedding hours will continue to go up during coming winters as well,” Bhat said.

Although rivers in Nepal are said to have adequate capacity to generate 42,000 MW of electricity, power cuts here prolong for over 12 hours per day during winter because of halt in construction of big hydro projects since the mid-1990s.

“Due to dispute over Arun 3 hydro project, the country was able to generate only 30 MW of electricity from 1985 to 1997,” said Khadga Bahadur Bisht, president of the Independent Power Producers’ Association, Nepal. “And over the years, the government has failed to introduce appropriate Acts and policies to give a lift to the hydroelectric sector, while politicians have failed to fulfil their commitments to develop the hydro sector.”

Also, NEA, the country’s sole buyer of electricity, has become virtually defunct due to heavy political intervention and the Commission for Investigation of Abuse of Authority has lately started to ‘interfere in the hydro sector by annulling projects in a haphazard manner’, Bisht added.

“But the latest supply disruption has become an eye-opener and many have suddenly become aware of importance of hydro projects,” Bisht said. “So, this is the time to implement reforms and shorten various administrative processes to rapidly start construction of hydro plants.”

Currently, a hydro project developer has to make rounds of seven ministries and 23 government departments, and deal with 36 different laws prior to beginning construction of hydro projects.

“So, we request the government to form a powerful single authorisation desk, comprising officials of various ministries, departments and NEA. This desk should extend approvals on environmental protection and land acquisition, among others, within stipulated time,” Bisht added.

The government should pave the way for development of bigger hydro projects because the country’s petroleum imports bill is swelling every year due to growing demand for fuel to power generators, while water from rivers is going to waste, said Amrit M Nakarmi, coordinator, Energy Systems Planning and Analysis, the Centre for Energy Studies, Tribhuvan University.

Within 2008 to 2010, sales of diesel doubled from 300,000 kilolitres to 600,000 kl, and currently stand at 900,000 kl because many started resorting to generators to produce electricity following hike in loadshedding hours. Also, sales of liquefied petroleum gas have shot up lately because most of the households prefer to use this fuel to cook food.

“A study conducted in 2014 showed that the country could reduce its petroleum imports bill by Rs 50 billion per year, considering use of Rs 25 billion worth of fuel to fire up generators and another Rs 25 billion worth of fuel to cook food,” said Nakarmi.

To replace consumption of LPG and diesel required to power up generators with hydroelectricity, additional 1,300 MW of hydroelectricity must be generated, according to Nakarmi.

“To generate this quantum of electricity, investment of Rs 210 billion is required. This investment would help the country save Rs one trillion over the next 20 years,” Nakarmi added.

A version of this article appears in print on December 08, 2015 of The Himalayan Times.

Source: The Kathmandu Post; 8 Dec 2015

‘Mechanism to project power demand planned’

Dec 8, 2015- National Planning Commission Vice-chairman Yuba Raj Khatiwada on Monday said the government was working on a mechanism that forecasts electricity demand and production so as to make it easier for investors to take investment decisions.

Currently, the Nepal Electricity Authority (NEA) projects the electricity demand in the country, but its projections are often termed “conservative”.

For example, amid growing use of electrical home appliances due to a shortage of cooking gas and petroleum products, the actual demand for electricity could be much higher than what the NEA projects. “As the forecast through the linear analysis modal is not effective, we are planning to develop an exponential-based modality,” he said at an interaction on “Facing Energy Crisis-Preparing Responsibly” organised by National Business Initiative in the Capital.

Khatiwada said the government has given utmost priority to food and energy security in particular. For the purpose, it will work in cooperation with the private sector, he said.

Stressing on the need for signing power purchase agreements even for renewable energy development, Khatiwada said the government was working to develop necessary legal provisions through fast-track. According to NEA projections, the electricity demand in the peak hour (evenings) has reached 1,350-1,500MW, while the demand in the morning stands at 1,080MW and in day time is 810MW. “However, the supply has dropped to 570MW, including 243MW electricity imported from India,” said NEA Deputy Managing Director Sher Singh Bhat.

He said the recently hiked load shedding hours was due to increased demand and a drop in supply. “Besides the 25-30 percent fall in production, a failure to repair hydropower projects with a combined capacity of 80MW that were damaged during the earthquake also contributed to short supply,” he said. Bhat stressed on the need for handing NEA-owned small hydropower projects to the private sector. “On the other hand, the government has to focus on the construction of four big projects -- Budhi Gandaki, West Seti, Dudh Koshi and Nalsigadh -- if it wants to end the power crisis,” he said.

Amrit Man Nakarmi, coordinator at Centre for Energy Studies of Tribhuvan University, said Nepal would need 2,000MW electricity by 2020. “This means an investment of 5-6 percent of the GDP has to be made in the hydropower sector,” said Nakarmi, underscoring the need for an integrated energy strategy and an effective regulatory body.

Khadga Bahadur Bisat, president of Independent Power Producers’ Association Nepal, said the government has to form a single licensing desk to encourage the private sector to invest in electricity production. “The authority could reduce the hassles investors face,” he said.