

The 60 versus 90 MW Battle over Upper Trishuli-3A

The Victors and the Vanquished

Classic Case of throwing the Baby out with the Bathwater!

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Abstract: Chronicling the Upper Trishuli-3A (UT-3A) controversy is necessary because it provides a classic example of what ails our power sector and why we suffer such long load shedding. With a concessional US\$120 million loan from China, UT-3A was tendered in February 2009 as a 60 MW project but with an 'alternative proposal' caveat. Bids were opened in May 2009 and the lowest evaluated bidder, China Gezhouba Group Company (CGGC), included a '25% of the cost' caveat for the '90 MW option'. NEA had envisaged starting project construction 'from the dry season of 2009'. However, a full two years lapsed before the order to commence work on the 60 MW UT-3A was given in June 2011. This unduly long two year delay and the 'chalkhel' therein could be another chronicle in itself. The 60 versus 90 MW controversy then spilled over to the public. The blistering partisan stands of the media were compounded by the bureaucratic 'save your necks' committees' recommendations. Twenty months after the commencement order for the 60 MW was given, Prime Minister Baburam Bhattarai's cabinet approved 'in principle' the 90 MW upgrading in January 2013. This decision was lambasted for abuse of power 'for personal and party's benefit no other motive than earning cash.' Strangely, the cat was finally belled by Khil Raj Regmi's bureaucrat-led Interim Election government when the NEA Board on 31st May 2013 approved the 90 MW upgrading to 'optimize available resources.' The NEA Unions, supported by political stalwarts, immediately rose up in objection. In a mere 12 days, the Interim government buckled and the NEA Board was forced to eat the humble pie: it reversed its 90 MW decision to 60 MW for a 'more congenial environment' in the supply of electricity. This article attempts to analyze this controversial issue by reconstructing the sequence of events and decisions so that latter-day researchers will judge the victors and the vanquished in the UT-3A controversy.

Key words: Plant optimisation, Upper Trishuli-3A, NEA, Nepal

Upper Trishuli-3A 60 Megawatt Project Salient features¹ of UT-3A Project

Run-of-River hydropower

Headworks: 1 km downstream of Mailung/Trishuli confluence (19 km north of Trishuli town)

Access road: 2.3 km new and 11.3 km upgrading

Design discharge: 51 cumecs based on 70% exceedance flow

Gross head: 144.5 meter

Headrace tunnel: 4.095 km

Installed capacity: 60 MW (2x30 MW units)

Minimum Power: 43.75 MW

Gross annual generation: 489.76 GWh (average annual generation: 460 GWh)

Transmission line: 48 km to Kathmandu, 220 kV initially charged at 132 kV

Estimated project cost: 109.224 million US\$

Specific energy cost: 3.03 US Cents/kWh

Estimated project completion date: 2014

Some important milestones of UT-3A

January 22nd 2009: Tender Floated for 60 MW with Alternative Proposal clause

May 5th 2009: Bid Opened

May 28th 2010: Contract Agreement (with subject to condition)

February 28th 2011: Nepal Government and China Exim Bank sign Loan Agreement

April 15th 2011: Nepal Government and NEA sign Subsidiary Loan Agreement

May 18th 2011: Loan Agreement Effective

June 1st 2011: Commencement of Work Order given to CGGC (completion in 35 months-May 1st 2014)

January 3rd 2013: 'in principle' approval by Cabinet for 90 MW upgrading

May 31st 2013: 654th NEA Board approves 90 MW upgrading for US\$ 132.00 million

June 12th 2013: 656th NEA Board retracts its 90 MW decision to 60 MW

The August 2009 NEA annual report stated that the Detailed Project Report (DPR) of 60 MW, 460 GWh UT-3A had been prepared in 2007 (FY 2064/065) by NEA using its own resources. Estimated cost of the project then was US\$125 million and this project was envisaged to be financed through a US\$120 million concessional loan from the China Exim Bank under the Engineering, Procurement and Construction (EPC) model. Based on the 2007 DPR, tender was floated on 22 January 2009 with the Alternative Proposal clause² and the bids were opened on 5 May 2009. The August 2009 NEA annual report also stated that evaluation was in final stage and 'actual construction of the project is envisaged to start in the dry season of 2009.'

As indicated above, UT-3A had been designed by NEA as a 60 MW project with an average annual energy generation of 460 GWh at a high 70% exceedance flow. NEA unwittingly planted the first seed for controversy by inserting the clause 'Alternative Proposals by Bidders' in the tender document, which allowed bidders to suggest possible enhancements to the project. Media³ reports indicate that, of the four bidders, China Gezhouba Group Co. Ltd. (CGGC) quoted US\$111 million for the 60 MW with an 'additional 25% cost' for the 90 MW 'alternative.' However, finding that its other competitor, Sino Hydro, had a lower bid of US\$ 90 million, CGGC offered, on

the bid closing day, a discount to bring its price down to US\$89.1179 million. Bids were then evaluated and the EPC contract for major works of 60 MW UT-3A was awarded to CGGC with a 'subject to' clause at US\$ 89.1178 million on 28th May 2010. This 'subject to' clause⁴ stated that the 'contract will be effective once the loan agreement with the Government of China is accomplished.' It took a full one year for the loan to be effective and CGGC was granted the work order to commence on 1st June 2011. This meant the period between the tender opening date (5th May 2009) and the order to commence work (1st June 2011) took a full two years. This unduly long two-year delay incubated and hatched various *chalkhel* in the *urja* sector.

Upper Trishuli-3A Controversies

The media, as the nation's fourth estate, played an important role in highlighting the UT-3A controversies. With the benefit of hindsight, it may be stated that some reporting focused only on one side of the coin. The projected picture was thus blurred and the danger of seeing the trees for the forest always lurked. Some of the major arguments of the 60 MW and 90 MW are highlighted below:

60 MW Proponents

- UT-3A was tendered and the EPC contract had already been awarded for a 60 MW project. Upgrading to 90 MW violated the Public Procurement Act 2063.
- About 35-40% of the construction work on the 60 MW project had already been completed.
- Adding a 30 MW Unit would increase project costs by approximately US\$43 million⁵.
- Proposed 30 MW upgrade would result in two to three year commissioning delay.
- Commissioning delay would further aggravate the existing dry season load shedding of 14 hours per day.
- Addition of 30 MW Unit will add only wet season energy of about 150 GWh per annum.
- The wet season addition of 150 GWh would mean a loss of approximately Rs 80 crores (@ Rs 5.40 per kWh) per annum which, over the project's 30 year life span alone, would mean a loss of Rs 24 arabs⁶ (billion).

90 MW Proponents

- A 90 MW plant would make optimal use of Trishuli river's flows. 60 MW had been designed at Q70 while 90 MW was at Q52 when the government has already approved the policy to design projects at Q40.
- Would upgrade the flow for the downstream Upper Trishuli 3-B (about to go under construction) from 37 MW to 55 MW, thus increasing the present 296 GWh average annual energy by another 100 GWh.
- With 2x30 MW units, maintenance of a unit in dry season would mean losing high value flows of about 14 MW. Installation of third 30 MW unit would prevent this spillage of valuable dry season energy. Both 69 MW Marsyangdi and 144 MW Kali Gandaki

A have provisioned three units for this reason

- UT-3A's US\$ 132 million for 90 MW (612 GWh) would mean US\$1,466/kW, far cheaper than the projects⁷ NEA is presently executing: a) 30 MW **Chameliya** (184 GWh) estimated at US\$ 3,330/kW, b). 14 MW **Kulekhani III** (41 GWh) estimated at US\$ 2,140/kW; and c) 32 MW **Rahughat** (188 GWh) estimated at US\$ 2,130/kW.

It is true that UT-3A's 90 MW would be available for six months⁸ during wet season. But this is the characteristic of all run-of-river projects in Nepal. Policy makers, in the nation's interest, need to devise ways and means to utilize this cheap energy. Export to India should not be the one and only option. Cheap energy to Nepal's own heavy industries like cement and fertilizer would make her goods more competitive and generate additional employment opportunities for the teeming jobless youths in the country. Introduction of seasonal tariffs could encourage electricity cooking and decrease our reliance on imported gas.

The 60 MW versus 90 MW debate also became very contentious in the power sector. NEA carried out a number of in-house reviews but their recommendations conflicted with each other. The June 2011 Review of 90 MW Plant Option for Upper Trishuli 3A Hydroelectric Project recommended 'immediately start negotiation with the Main EPC contractor CGGC in order to upgrade the plant capacity to 90 MW that will benefit the country.' However, one year later, NEA's 23rd June 2012 (2069/3/1) Committee issued a qualified 'not appropriate...however' bureaucratic recommendation: 'in the present context, upgrading cannot be called appropriate. However, in another context..... concrete decision be taken only after detailed studies by concerned experts.' The Energy Ministry's Joint Secretary MB Kunwar's committee gave a similar 'either...or' recommendation: 'either complete the 60 MW project within the stipulated time and cost or in the light of prevailing energy crisis upgrade the project to 90 MW.' The Kunwar committee was well aware CGGC would not be able to complete the 60 MW project within the 'stipulated time and cost.' The committee, therefore, shrewdly placed the onus⁹ on the Cabinet's shoulders.

Based on the Kunwar recommendation, Prime Minister Baburam Bhattarai's cabinet approved the 90 MW upgrading of UT-3A 'in principle' on 3rd January 2013. Dr. Ram Sharan Mahat, immediately responded angrily, alleging¹⁰ that Prime Minister Bhattarai had abused his power 'for personal and party's benefit. There is no other motive than earning cash.' These were indeed very serious charges. Furthermore, advocate Lekhnath Chapagain filed a writ at the Supreme Court arguing¹¹ that the cabinet's decision to award the 90 MW upgrading to CGGC without competition had violated the Public Procurement Act. The Supreme Court on 3rd February 2013 refused to issue a stay order on the grounds that the NEA Board had yet to approve the Cabinet's decision. On 31st May 2013, the cat was finally

belled by the 654th NEA Board (*reshuffled by Interim Regmi government*) by awarding CGGC the UT-3A 90 MW contract for the inexplicably incongruous amount of US\$132 million.

The following points are some of the key milestones in the 60-to-90 then back to 60 MW reversal decisions:

1. Letter to Energy Minister-cum-Chairman of NEA Board by NEA's 5 Unions on May 28th 2013 (*Jestha 14th 2070*):

The five employees' unions of NEA (*Rashtriya Karmachari Sangathan NEA, Nepal Rashtriya Karmachari Sangathan NEA, NEA Karmachari Kalyan Parisad, NEA Karmachari Sangh and NEA Karmachari Union*)¹² submitted a letter on 14th Jestha 2070 to the Energy Minister-cum-Chairman of NEA Board with the following warnings:

- The 60 MW UT-3A is being planned for upgrading to 90 MW by the NEA Board at the **wrong time** with the **wrong intention** and **against the country's laws**;
- The 60 MW UT-3A, awarded to CGGC on Engineering, Procurement and Construction (EPC) model, has already completed about 35 to 40 percent of the construction work;
- Upgrading the project to 90 MW, at such an advanced stage, would delay the project beyond the stipulated time, thus facilitating huge opportunities for financial irregularities and excessively increasing the project cost. This would mean failure of the project and the death of the EPC model;
- Upgrading is against Nepal's prevailing laws and blatantly overrules NEA's financial regulations;
- If this upgrading procedure is not immediately stopped and the decision taken contrary to our request, then in the interest of the institution the Unions will be forced to organize severe protest programs. The management itself will be responsible for all untoward incidents.

Note while the Unions mention that about 35 to 40 percent of work had so far been completed by CGGC, the NEA Board maintained that only 21 percent work had been completed. It is amazing that such divergence of statistics exist.

2. NEA Board's Decision to Upgrade UT-3A to 90 MW on May 31st 2013 (*Jestha 17th 2070*)

Exactly three days after the Unions' letter, the NEA Board on Jestha 17, 2070 in its 654th meeting decided to upgrade the US\$89.18 million 60 MW UT-3A to 90 MW to an inexplicably incongruous amount of US\$132.00 million. The Board defended its decision through a lengthy press release¹³ highlighting the following salient points:

- The 60 MW UT-3A is financed under China's first concessional loan of US\$120 million to Nepal through the Exim Bank of China;
- The EPC model contract, awarded on June 1, 2011, envisaged completion of project by May 1, 2014;
- However, due to various reasons (*local demands/*

objections, slow drawing approvals, problems in land acquisitions/ access road construction/muck dumping site and various strikes, etc.) only 21% of the work has so far been completed;

- Thus, in June 2013, the contractor presented a new Construction Program where in the completion date of the 60 MW project was pushed back 21 months to February 2016;
- The 60 MW UT-3A has been designed at Q70 flow which is not an optimal utilization. Due to the prevailing '*energy crisis*', the government approved the policy to upgrade the various operational projects by permitting them to design at Q40 flow;
- To optimize the use of river flow, the contractor on March 23, 2011 presented to NEA a new proposal¹⁴ to upgrade the project to 90 MW at Q52 flow;
- With the 90 MW upgrading of UT-3A, the lower 37 MW Upper Trishuli-3B (UT-3B) will also be upgraded to 55 MW, thus addressing one of the demands of local villagers;
- 60 MW at Q70 and 90 MW at Q52 will provide an additional annual energy of 148 GWh of which 24.5 GWh will be available during the dry season;
- A number of projects are presently being designed at Q40. One of them, Upper Tamakoshi, is designed at Q32 only;
- CGGC has proposed that the 90 MW upgrading will be completed within 35 months from the date of signing the agreement, that is, May 2016. This is a mere three months more than the newly proposed completion date of February 2016 for the 60 MW project. A 30 MW project normally takes about 4/5 years for completion.
- The 60 MW UT-3A contracted out at US\$89.18 million has now been proposed for US\$132.00 million for the 90 MW. This means US\$1,466.00 per kW and an energy price of about Rs 2.70 per unit which is extremely low in comparison with the other generating or about to generate projects.
- For instance: Upper Tamakoshi at Q32 has PPA of Rs 4.06 per unit escalated at 3% for 9 years which then becomes Rs 5.16 per unit;
- Private developers at Q40 have PPAs of Rs 4.80 per unit (rainy season) and Rs 8.40 per unit (dry season) escalated at 3% for 9 years which then becomes Rs 5.52 per unit (rainy season) and Rs 9.66 per unit (dry season).
- The 90 MW Upper Trishuli-3A with energy cost of Rs 2.70 per unit and no annual escalation is far cheaper than the purchases made from Khimti, Bhotekoshi, and India¹⁵.
- Some capacity cost examples of ongoing and completed projects:

Project	Capacity	Estimated Cost per kW in US\$
Upper Trishuli	3A 90 MW	1,466
Rahughat	30 MW	1,700
Kulekhani III	14 MW	2,000
Kaligandaki	144 MW	3,500
Chameliya	30 MW	5,300
Middle Marsyangdi	70 MW	5,500

- The addition of the third 30 MW turbine will provide flexibility to prevent spillage of dry season flows while performing maintenance of the power plants. A 60 MW capacity means two 30 MW turbines. When maintenance has to be performed, 14 MW of valuable dry season flows would be spilled. Such would not be the case when there are three 30 MW turbines.
- In the light of the present grave energy crisis, every MW added to the system has an important role. The 30 MW addition to the 60 MW UT-3A is, thus, timely, necessary and justified. The NEA Board has, hence, decided on Jestha 17, 2070 to move ahead with determination to upgrade UT-3A to 90 MW.

In the din and noise of the lengthy press release, the NEA Board considered the upgrading of the lower cascading Upper Trishuli-3B from 37 MW to 55 MW as an insignificant issue. This upgrade should have been stressed and highlighted as the project is about to go into construction and the fate of UT-3A will determine UT-3B's fate. The NEA press release deliberately ignored the cabinet's 'in principle' approval and also failed to mention that the '90 MW option' was part and parcel of the tender documents.

By all accounts, the US\$132.00 million award contract for 90 MW was not transparent. The dispute between NEA and the contractor CGGC for the 30 MW addition was whether the 'additional 25% cost' was figured from the contracted but discounted US\$89.18 million price or the initial CGGC bid of US\$ 111.00 million. At the discounted price (89.18), the additional 25% cost should be US\$ 22.29 million whereas at the initial CGGC bid price (111.00) an additional 25% costs yields US\$ 27.75 million. This should mean the upgraded 90 MW UT-3A should be contracted either at US\$111.47 million (89.18 + 22.29) or US\$116.93 million (89.18 + 27.75). Both these figures were thrown out of the window, when the NEA Board awarded the contract at US\$132.00 million. The NEA press release appears to deliberately ignore this inexplicable figure. It should have gone at length to justify it.

3. Gyapan Patra (Petition) of 5 ex-ministers to Khilraj Regmi, Chairman of Council of Ministers June 6th 2013 (Jestha 23rd 2070):

Six days after the NEA Board's decision to upgrade UT-3A to 90 MW, five former ministers (*Dr. Ram Sharan Mahat-NC, Dr. Prakash Chandra Lohani-RPP, Surendra Pande-UML, Dr. Prakash Sharan Mahat-NC and Gokarna Bista-UML*)¹⁶ on Jestha 23, 2070 submitted a petition (*gyapan patra*) to Khil Raj Regmi, Chairman of the Council of Ministers requesting that the decision to upgrade UT-3A to 90 MW be retracted to 60 MW. The ex-Ministers pointed out that the 90 MW upgrading decision by the Energy Ministry and NEA Board violated laws and was clearly in the interests of the contractor. As a result, they warned, the NEA would have to bear a huge loss from this decision and load shedding

in Nepal would worsen. The ex-Ministers requested the Nepal Government to retract this decision based on the following six arguments:

1. UT-3A is an EPC contract wherein the contractor bears all the project risks and wherein scope variation is not allowed at all. Clause 53 of the Public Procurement Act 2063 also does not permit variation orders. Energy Ministry and NEA Board's decision to upgrade the 60 MW UT-3A to 90 MW is clearly against these laws.
2. CGGC included in its tender **a 3 page alternative design proposal wherein it had clearly stated that the 60 MW could be upgraded to 90 MW at an additional 25% cost.** Three years after the contract agreement and two years after the work order was given, the decision to upgrade the project at nearly double (48%) the cost of what the contractor had given in writing clearly smacks of 'thulo chalkhel ra lenthen'!
3. The contractor is supposed to complete the project in the coming year. Though there has been no obstruction in project construction, there is no possibility of the contractor completing the project in one year. This 60 to 90 MW upgrade will actually save the contractor from paying NEA a huge compensation for delay of the project.
4. Though it is being said that this 90 MW upgrading will mean an additional two years completion period, those acquainted with the project say it will actually take an additional 3-4 years more. This means that not only will Nepalese people have to bear more load shedding, but the NEA will lose 3-4 arabs (billions) of revenue annually.
5. The argument that upgrading the project will help alleviate load shedding is fictitious because the additional 30 MW is available only in the rainy season. No electricity will be added in the dry season. Once Upper Tamakoshi and other projects are commissioned, there are chances of electricity wastage during the rainy season, including UT-3A's additional output.
6. None of the various committees formed to upgrade the project have given their recommendation for project upgrading. The contractor's request for upgrading, after being awarded the 60 MW contract, was immediately refused by NEA. The contractor's 'again and again' upgrading request clearly indicates that the eventual upgrade approval is in the contractor's interest. All Energy Ministers ahead of Dr. Baburam Bhattarai had refused the contractor's request. It was in Dr. Bhattarai's time that the NEA Board refused to approve the Cabinet's 'in principle' decision to upgrade the project.

In view of the above reasons, not stopping the upgrading will mean going along with those who break the laws and resort to corruption. The Cabinet cannot shirk its responsibilities by throwing it on the shoulders

of Energy Ministry and NEA Board. It is the responsibility and duty of the government to stop the decision of its institutions that go **against the laws, the nation, and its people!**

Public memory is short. The two Energy Ministers ahead of Dr. Baburam Bhattarai were Gokarna Bista and Dr. Prakash Sharan Mahat. It should be noted that Dr. PS Mahat manned the *Urja Mantralaya* from tender opening date (*May 2009*) to commencement of work order date (*June 2011*) – the two years wherein the *chalkhel* was intense¹⁷! Such a *gyapan patra* by the stalwarts of three parties (*NC, CPN-UML and RPP*), with three of them hailing from Nuwakot district itself, added fuel to the agitation of NEA's unions. The Unions starting with the token pen-down strike escalated their agitation by obstructing management vehicles from the office and then by disconnecting the electricity supply at the Pulchowk Ministers' quarters. The straw that broke the camel's back for the cobbled-up Interim government was the Union threat to also disconnect the electricity supply of their Chairman of the Council of Ministers at Baluwatar.

4. NEA's Press Release Retracting the 90 MW Decision Back to 60 MW on Jestha 29, 2070 (12th June 2013):

The following are the main highlights of NEA's press release of Jestha 29, 2070 (12 June 2013) while retracting the decision on UT-3A from 90 MW to 60 MW:

- As per the 19th Poush 2069 (3 January 2013) 'in principle approval' decision of the Nepal Government (cabinet) to upgrade the 60 MW UT-3A to 90 MW, the NEA Board through its 654th meeting of Jestha 17, 2070 (31 May 2013) with the view to maximize¹⁸ the available resources, decided to upgrade the 60 MW UT-3A to 90 MW along with the required additional costs.
- Before taking the Jestha 17, 2070 (31 May 2013) decision to upgrade the project, complete technical, financial and existing legal provisions had been studied and analyzed.
- Present design of UT-3A at Q70 is not the optimal utilization of the available river discharge;
- With the government's announcement of 'energy crisis', the policy to allow various ongoing projects to upgrade their capacities at Q40 is still valid.
- Upgrading UT-3A will also upgrade UT-3B from 37 MW to 55 MW.
- Altering the existing Q70 design to Q52 provides an additional 148 GWh of which 24.5 GWh will be available during the dry season.
- This will support the Kulekhani power plant to fill up its reservoir for use in the dry season.
- The 60 MW UT-3A, at a contract price of US\$89.18 million, has been upgraded to 90 MW at US\$132 million after negotiation with the contractor at various phases.
- This 90 MW capacity means US\$1,466 per KW and the generated energy will be available at Rs 2.70 per unit. Benefit/Cost ratio is 1.89 and the payback

period approximately 4 years.

- With such good returns, to limit UT-3A's capacity to 60 MW and not optimize the available resources was not justified at all. If this upgrading is not done now, optimal utilization of the project site would not be possible in future. In the present context, upgrading was in national interest and there was, in NEA's long-term interest, no alternative to upgrading. '*Kalkhanda/time*' will definitely assess this issue.
- But the trade unions of NEA opposed the upgrading and initiated actions affecting not only NEA's normal activities but also disrupting electricity supplies to vital areas. When this issue was already before the country's authorized authority and the Court, the trade unions escalated their agitations and, through press releases, threatened to affect all the activities of NEA. This affected not only NEA's service delivery but also the projects under construction, thus creating a non-congenial environment.
- Bearing in mind that all of these problems could be sorted out through negotiations, the NEA Board called the Trade Unions for talks. However, despite repeated negotiation between NEA Board and Trade Unions, these issues were not resolved. The Unions showed no flexibility at all. Besides demanding that the NEA Board withdraw its upgrading decision, the Unions refused to discuss other alternatives.
- Hence, bearing in mind the above poisonous environment created by the 60 to 90 MW upgrading of UT-3A and to return normality to NEA's services to the general public, the NEA Board meeting of 29th Jestha 2070 (12 June 2013) withdrew its decision of 17th Jestha 2070 (31 May 2013) to upgrade the capacity.

Though many of the above points repeat the previous arguments put forth while approving the 90 MW upgrading, the NEA Board now deemed it a necessity to refer to the cabinet's 'in principle' approval which had been deliberately ignored in its previous press release. The Board, for face-saving purposes, attempted to promote the message that it was merely following the dictates of previous government's cabinet decision. The press release of NEA Board cited only one reason for its withdrawal of 90 MW upgrading: to create '*congenial environment in electricity supply*,' fixing the blame on the NEA Unions for threatening more disconnections of electricity. Electricity supply is categorized by our laws as an essential service and the existing Essential Services Act clearly outlines how to tackle such disruption cases. However, the cobbled-up Interim government preferred to take the path of least resistance and bowed down to the wishes of the NEA unions.

So, finally the drama was over in a mere 12 days. Despite mentioning the upgrading '*issue was already before the country's authorized authority and the Court*', the NEA Board (or rather the cobbled-up Regmi government) could not withstand the pressure and crumbled to its knees. This confirms that the political parties were very much behind the union agitation. The lone scapegoat of this debacle was the Energy Secretary,

Hari Ram Koirala, who was conveniently transferred from the ministry to the ceremonial Office of the Vice-President.

5. Four¹⁹ Unions' Press Release of Jestha 30, 2070 (13th June 2013):

- The Trade Unions asked the NEA Board to take back its '*untimely, wrong intentioned and against the laws*' decision of 17th Jestha 2070 (31 May 2013) to upgrade the under-construction 60 MW UT-3A. They began a strong agitation from 19th Jestha 2070 (2 June 2013).
- Due to strong support from experts of power sector, intellectuals, former finance and energy Ministers, leaders from various political parties, all employee friends of NEA, entire communication media, various professional organizations and entire general public, the 656th NEA Board of 29th Jestha 2070 (11 June 2013) withdrew its decision of 17th Jestha 2070 (31 May 2013) to upgrade UT-3A from 60 to 90 MW.
- This withdrawal proves that the country's prevailing laws, rules, and regulations had been flouted with. This has halted the huge naked financial irregularities in this project. We consider this as being positive.
- The responsibility to pursue the project as fast as possible as per the rules and regulations has now fallen on the shoulders of NEA.
- Action must be taken against those who were responsible in the '*chalkhel*' to change the cost and capacity of the 60 MW project.
- We still feel the need to be 'on guard' against those '*matiyars/accomplices*' who want to prove this achievement wrong.
- There is the need to improve supervision on the works and contracts of Chameliya, Kulekhani III, and Rahughat.
- We strongly demand that action be taken against those officers and others who were responsible for upgrading UT-3A to 90 MW with corrupt intentions. At the same time we warn the senior officers of NEA not to make the same kind of wrong decisions in the days to come.
- We thank the experts of power sector, intellectuals, former finance and energy Ministers, leaders from various political parties, entire employee friends of NEA, entire communication media, various student organizations, professional organizations, local people at the project site and the entire general public for their encouragement and firm support. We henceforth withdraw our agitation programs against the upgrading of Upper Trishuli-3A.

Strangely, the Unions have demanded strong action against those '*matiyars/accomplices*' responsible for the wrongful 90 MW upgrading and even '*warned*' senior NEA officers not to make such wrong decisions in future. Yet, in the same breath the Unions state the responsibility has now fallen squarely on NEA shoulders to implement the 60 MW UT-3A in that '*timely, well-intentioned and as per the country's laws*'. Can a house divided be able to do that? Only time will tell.

Final Word: Throwing the Baby out with the Bathwater?

So, finally, who are the victors and who are the vanquished in this 60 versus 90 MW controversy? Basking in the immediate glow of hindsight, the writer lists below some of the principal actors who committed cardinal sins during the Upper Trishuli-3A's controversy:

- Unwittingly, NEA committed the first cardinal sin by planting the '*Alternative Proposals by Bidders*' seed in the February 2009 EPC Tender Documents. Why NEA asked for this alternative proposal could be an interesting debate in itself. Of the four bidders, only China Gezhouba Group Company (CGGC) offered the alternative proposal.
- CGGC quoted US\$ 111.00 million for the 60 MW and as requested by the tender document offered the 90 MW option for an '*additional 25% cost*'. CGGC, on the last bid submission day, gave a discount so that its offer came down to US\$ 89.1179 million. Whether the '*additional 25% cost*' for the 90 MW option was on US\$ 89.1179 million or US\$ 111.00 million became a moot point. CGGC, thus, committed the second cardinal sin.
- NEA's 2009 August annual report states that tenders were submitted on May 5, 2009 and evaluation was in the final stages with work envisaged '*to start in the dry season of 2009*'. But NEA gave the commencement of work order to CGGC only on 1st June, 2011. It took two years from tender opening of May 2009 to finally give the commencement order in June 2011. This lengthy period incubated and bred the environment for '*chalkhel and len-den*'. The Ministers manning the *Urja Mantralaya* in this period committed the third cardinal sin.
- NEA Board committed the fourth cardinal sin by awarding CGGC an incongruous and inexplicable contract amount of US\$132.00 million for the 90 MW. The '*additional 25% cost*' for the 90 MW option should have been either of the discounted US\$89.1179 million or the undiscounted US\$111.00 million. When this additional 25% cost is added to the awarded contract price of US\$89.1179 million, the contract award should have been either US\$111.398 million or US\$116.868 million and NOT US\$132 million.
- And finally the fifth cardinal sin was committed by the five former Ministers and the five Unions at NEA for demanding that the government retract its decision to 60 MW. They should have, instead, demanded for a fair transparent independent enquiry into how the incongruous US\$132.00 million was calculated.

By retracting UT-3A's 90 MW decision to 60 MW, the lower cascading UT-3B's capacity has also been reduced from 55 MW to 37 MW. Nepal Telecom has a 30% equity, at par with NEA, in this UT-3B project that is about to go into construction. It is unfortunate that Telecom, as a major shareholder, has not been consulted regarding its views on the UT-3A controversies. On the 456 MW Upper Tamakoshi, Telecom has a minor 6% equity. Due credit must be given to Gokarna Bista who, as Energy Minister, roped in the cash-rich Telecom in cash-starved

NEA projects.

So who are really the victors and the vanquished in this battle? One is not certain whether or not the five former Ministers and the five NEA Unions are the victors. If indeed victory, then, Pyrrhic victory no doubt. As for the vanquished, it is the nation that lost the opportunity to optimize her resources not only at UT-3A but also at UT-3B. Vanquished are the people²⁰ of Nuwakot and Rasuwa who, along with their children and grand children to come, will be deprived of additional electricity royalty through no fault of their own. They were deprived of crores of Rupees from enhanced electricity royalty²¹ that the upgraded capacities would have brought to their villages and districts for a good fifty to hundred years. That is why many, along with this writer, believe that the 90 MW baby has been tragically thrown out with the bathwater!

It is indeed amazing that those at the helm of the nation have devoted so much time and energy (*from bid opening date of May 2009 to 60 MW reversal from 90 MW of June 2013*) for a tiny 30 MW upgrading. For a mere 30 MW capacity (roughly 2.4% of the country's peak demand²²), we have wasted four valuable years fretting, frothing and even threatening to disconnect the electricity supply of the very Chairman of Council of Ministers we enthroned. Yet, we do not refrain from boasting from the top of *Dharara* that we would build 10,000 MW in 10 years and even 25,000 MW in 20 years. While we wail and beat our breasts about the 14/16 hours of load shedding per day that has become a ritual in the dry season, we are quick to resort to *gyapan patras* (*petitions*) and strikes for a mere 30 MW addition. We are indeed a nation of seasoned politicians who eased out constitutional monarchy and ushered in republicanism in an orchestrated manner. We are a nation where our Nepali Congress brethern, RC Poudel, unflinchingly stood 17 times for the post of Prime Minister and only then withdrew his nomination for the larger interest of our nation. We are probably the only nation where our CPN-UML comrade, MK Nepal, despite gamely losing the election from both his constituencies, was deemed the only personality fit to rule over us as our Prime Minister. And then faced with the misfortune of having run-out of politician Prime Ministers, we humbly beg a sitting (*but unwilling?*) Supreme Court Chief Justice to embellish the post of the Chairman of the Interim Council of Ministers.

We are an amazing nation. Having forced over 3 million young industrious Nepalese to become migrant job seekers in the torrid deserts of Arabia (*all due to selfish inter/intra party squabbles*) and despite the leaders' endless crowing of '*chunab ko bikalpa chhaina*', no provisions have been made for such a large number of Nepalese to exercise their '*fundamental voting rights*' during election. Thus, having resorted to all these gimmicks and antics in the last five years while trying to write the constitution, do we really have the moral authority to charge that the 90 MW upgrading

was '**against the laws, the nation and its people?**' This is our Democratic, Loktrantic, Republic New Nepal. Time and only time²³, that great healer and truth teller, will tell who the victors and who the vanquished are in the UT-3A controversy!

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Notes:

- 1 NEA, *A Year in Review— August 2011 (Bhadra 2068)*
- 2 Many are not aware that this Alternative Proposal (90 MW option) was part and parcel of the tender document itself.
- 3 Balaram Baniya in *Kantipur* of Mangsir 30, 2069 (Dec. 15, 2012) and Poush 4, 2069 (Dec. 19, 2012).
- 4 NEA – *A Year in Review, Bhadra 2067 (August 2010)*.
- 5 Op. cit. Footnote 3.
- 6 Op. cit. Footnote 4.
- 7 NEA, *A Year in Review – Fiscal Year 2011/2012 (Bhadra 2069-August 2012)*. Generation Construction Business Group. Readers need to be careful to note that these figures do not tally with those given by the NEA Board in its press release!
- 8 Former Finance Secretary, Rameshwar Khanal, in his interview to *Kantipur* daily stated that 90 MW will be available for only one month. Secretary Khanal was either misquoted or he was misinformed.
- 9 Hari Bahadur Thapa's *Trishuli-3A: Khula Bharastachar ko Model* in *Kantipur* 23rd Jestha 2070 (6th June 2013).
- 10 Mukul Humagain's reporting in *Kathmandu Post* January 4, 2013 (*Poush 20, 2069*).
- 11 *Kathmandu Post, Money, January 8, 2013*.
- 12 On behalf of their Unions, Secretary General Dip Raman Adhikari, Acting Chairman Khagendra Shahi, Chairman Amrit Bahadur Khapung, 'Baristha' Vice-Chairman Indra Prasad Neupane, and Chairman Ram Prasad Rimal, respectively, signed the letter to the Energy Minister.
- 13 *Kantipur Jestha 18th 2070*. (June 1, 2013).
- 14 Note this was before June 1, 2011 when the work order to proceed was given by NEA. Around this time the writer, hearing of this 90 MW upgrading, approached the then NEA MD, Dr. Jivendra Jha, and requested him to go for this 90 MW proposal. Dr. Jha, raising both his wrists above the table, gave this unforgettable reply, '*Pun Sir, I have no desire to go to the CIAA with handcuffs to reply to their questions!*'
- 15 **Khimti and Bhotekoshi** per Unit rates for 2068/069: *Rs 8.0394* and *Rs 8.0378*. But the US\$ rates for 2068/069 fiscal year varied from Rs

- 72/- to Rs 84/-. With the 2070 Asad rates for one US\$ nearing the Rs 100/- mark, the Khimti and Bhotekoshi power rates have skyrocketed. There are 4 Indian rates: i) **Kosi/2012 – IC Rs 3.51 (NC Rs 5.62)** ii) **Power Exchange/2012 – IC Rs 4.91 (NC Rs 7.86)** iii) **Power Trading Corporation/2012 – IC Rs 4.35 (NC Rs 6.96)** iv) **PTC – 25 years’ levelized tariff for 150 MW from Muzaffarpur-Dhalkebar 400 kV transmission line IC Rs 3.60 (NC Rs 5.76).**
- 16 While Dr. RS Mahat, Dr. PC Lohani and Surendra Pande were former Finance Ministers, Dr. PS Mahat and G Bista were former Energy Ministers. Incidentally, Dr. RS Mahat, Dr. PC Lohani and Dr. PS Mahat all hail from Nuwakot district where the UT-3A is located.
 - 17 Energy Minister, Dr. PS Mahat, even squabbled with his Secretary, Shankar Prasad Koirala, over the appointment of Chairman for the Upper Tamakoshi Company. Dr. Mahat successfully shunted Secretary Koirala to cool off at the mundane inconspicuous Nepal Trust. The same Secretary Koirala now holds the important Finance portfolio in the Khil Raj Regmi Interim government.
 - 18 Note that when the American IPP, Panda Energy, applied for the license to develop Bhotekoshi as a 36 MW project, there was much discussion at the Ministry of Water Resources with a vociferous group demanding that only a 24 MW license be approved. Surya Nath Upadhyay, who was the MOWR Secretary, approved the license for 36 MW, arguing that the nation’s water resources utilization should be optimized.
 - 19 Note only four Unions signed this press release. The missing fifth Union, deliberate or by accident, is the *Rashtriya Karmachari Sangathan NEA*. Khagendra Shahi/acting Chairman *Nepal Rashtriya Karmachari Sangathan*, Amrit Bahadur Khapung Chairman *NEA Karmachari Parishad*, Janardan Bhattarai Chairman *NEA Karmachari Sangh* and Ram Prasad Rimal Chairman *NEA Karmachari Union* signed the press release.
 - 20 In stark contrast to the people of Dolakha on the 456 MW 2,281 GWh Upper Tamakoshi: With an exceptionally high 820 meter head, the 309 MW 1,739 GWh Upper Tamakoshi in Dolakha was very much in the roving eyes of the private sector. The scramble for the project intensified when Finance Minister, Dr. Ram Sharan Mahat, publicly opined that such commercially viable project should be developed by private sector. With such utterances from the serving Finance Minister, NEA’s attempts to get the loan from Employees Provident Fund reached a dead end. This is when the people of Dolakha (left, right and centre politicians along with businessmen) literally ‘ganged up’ to press the government to form the Upper Tamakoshi Hydropower Company, a joint venture of NEA. For the first time in the power sector history, they managed to acquire 10% equity of the company for the people of Dolakha. Not only that, they pressed on to upgrade the 309 MW capacity to 456 MW, adding an additional 542 GWh of energy. ***Nuwakot utterly failed to replicate this!***
 - 21 A back of an envelope calculation indicates an additional generation of 250 GWh of energy per annum (150 GWh from UT-3A and 100 GWh from UT 3-B). Present royalty rate increases from 1.85% to 10% of energy sold in 15 years which means an additional revenue of about Rs 2.5 crores in first year to Rs 13.5 crores per annum after 15 years even at the present sale price of Rs. 5.40 per kWh. Such revenues (Rs 2.5 to 13.5 crores) clinking every year continuously into the scarce coffers of Nuwakot and Rasuwa is a neat tidy sum for her badly needed development works!
 - 22 NEA’s Forecast of system peak demand and energy requirement for fiscal year 2013/014 is 1,271.70 MW and 5,859.90 GWh respectively. This means UT-3A’s 148 GWh through 30 MW upgrading is a mere 2.5% energy-wise!
 - 23 In 1867, the US Secretary of State, William Seaward, purchased Alaska for US\$ 7.2 million from the Russian Czar, Peter the Great. Skeptics called this purchase of uninhabited Alaska "Seawards Folly" until gold was discovered in 1896. Alaska's strategic importances was recognized during the Second World War. Now large deposits of gas and oil have been discovered there.