

Comments on Scoping Clearance Application of Panyor HEP in Ranganadi basin in Arunachal Pradesh

The Arunachal Pradesh government has signed a MoU with Panyor Hydro Power Private Limited, a company based in Hyderabad to construct the Panyor hydro electric project. This will be the second hydroelectric project coming up on the Panyor River which is also known as Ranganadi in the downstream. This project with 80 (2x40MW) MW installed capacity is to be considered for ToR clearance in the 69th meeting of EAC to be held on 11-12 November, 2013.

Salient Features Panyor Hydropower project will be located a Lemma, a village five km upstream of the Yazali town in Lower Subansiri district. The proposed project is 12 km upstream of the Ranganadi dam Stage II with a surface power house on the left bank of the river and a 108 m high concrete gravity dam. This reservoir will cover 7.5 km of the river length. The catchment area of this dam is 1315.50 sq km. The tail race channel will be 300 m long. Total area required for the project is 390 ha. Out of this 42 ha is river area, 25 ha is reserve forest and 323 ha is private land. The total estimated cost of this project is Rs 820 crores which imply that per megawatt cost is Rs 10.25 crores.



First Wave of Flash Flood on June 14 2008 near N Lakhimpur town, due to excess water released from Ranganadi HEP without prior warning

Critical Issues It was surprising to see that even though the project has been on EAC agenda for ToR clearance MoEF website does not have the complete documents for this project. The PFR document of the project was not opening up in the website. Going through the Form I of the project we found several issues which need to be highlighted.

Downstream impacts In regard of the project on the Panyor river it is very important to remember that the catastrophic downstream impacts of hydropower dams in Arunachal, which has been a subject of much debate in Assam, with specific issues raised against the existing 405 MW HEP on Ranganadi. The release of water from the Ranganadi dam on June 14, 2008 had led to flash floods in a vast area and catastrophic devastation in the downstream. The Ranganadi dam is having severe downstream impacts not only in the Ranganadi valley, but also in the Dikrong valley since water from this dam is released in Dikrong or Pare River through an 8.5 km long diversion tunnel. Now construction of another dam on the same river which needs serious analysis since the Form I (p 45) states “Downstream impact on water, land, human environment due to drying up of the river at least 10 km downstream of the dam.”

The drying of the river for at least 10 km downstream of the proposed dam also need to seriously examined keeping in mind the reservoir spread of the Ranganadi stage I project.

Not a single village affected and no rehabilitation? Form I (p 33) states that not a single village would be affected and no rehabilitation needs to be done, which seems doubtful. The document at the beginning states that the project is located near Lemma village. It also suggests for socio-economic impacts where it mentioned about project affected families. These are serious contradictory issues within the same report and the developer should be asked to resolve this.

Environment Flow contradictory The Form I provides contradictory information regarding environment flow. On the last page, the document states “A scientific study shall be done to assess the downstream requirement of water to decide minimum assured release of water (Environmental Flows) for maintaining the aquatic ecology and water quality of river.” But on page 33 in the section 2.7 the document states that environment flow will be 3 cumecs.

Important aspects left out from scoping of EIA study In the scoping for EIA/EMP study there are several important aspect which the Form I has made no mention at all. These include:

1. Impacts of excavation and mining
2. Impact of the project on landslide and other disaster potential of the area and region.
3. Disaster management plan considering the previous flash flood event in June 2008.
4. Impacts of climate change and impacts of the project on local climate

5. Options assessment including potential of micro hydro (below 1 MW capacity) projects. The project will submerge a huge 312 ha of land. The PP (Project Proponent) should look into the options for run of river project rather than a dam with such huge submergence.

Wrong answers given in Form 1 In case of some of the information given in the Form 1, it seems wrong and the PP should be asked to correct it. For example (this is not exhaustive list):

1. In case of point 1.26 (p 11), in response to question “Long-term dismantling or decommissioning or restoration works?”, the Form says “No”. This is clearly wrong. After the useful life of the dam, it will need to be decommissioned and this has to be part of the EIA and TOR.
2. Similarly answer to question 1.27 (“Ongoing activity during decommissioning which could have an impact on the environment?”) is wrongly given as No.
3. In para 1.2 (p 6) there is no mention of land requirement for mining material for the project like sand, gravel, boulders, etc.
4. Para 2.2 (p 12) how much water will be used (KLD) or source is not given.
5. Para 2.3, in answer to minerals No is given, where as the project will require sand, clay, gravel, boulders, etc.
6. In response to Para 2.7, the impact of project on aquatic biodiversity, including fisheries should have been mentioned.
7. In response to Para 3.1 use of explosives is admitted. However, it should be told to PP to minimize the use of explosives considering the impact of them on increased landslides and other disasters.
8. In response to Para 3.3 the PP should have mentioned the impact of project on the people who also use the forests, rivers, get affected by other aspects including destruction of biodiversity including fisheries upstream and downstream.
9. In para 4.2 (p 16) and elsewhere, estimate of 1000 populations for “400 technical and labour staff” is clearly wrong. Also estimate of 200 labour vs 150 technical staff also do not seem correct.
10. Para 4.3 should also include the remains of explosives among hazardous waste.
11. Para 5.8 (p 19) answer (Q: Emissions from any other sources) No is clearly wrong, the reservoir covering 312 ha will certainly emit methane needs to be assessed.
12. In para 8.3 (p 22) and point 12 under environmental sensitivity (p 25-6) the vulnerability due to floods and landslides such others also need to be mentioned and response to them included.

13. The whole document keeps mentioning 25 ha forest land without inclusion of the community managed forest land in Arunachal Pradesh. This is clearly wrong information.

14. Under point 3 in on Environmental sensitivity (p 24) in response to “Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, over wintering, migration”, it is not sufficient to investigate with forest dept, as the response says, since there are several aspects here (e.g. aquatic biodiversity) that are beyond the domain of forest department.

Cumulative Impact Assessment The information given in para 9.4 (p 24) is clearly wrong. There are at least eleven hydropower projects at various stages in the combined Ranganadi-Dikrong basin, including one operating, one under construction, three TOR approvals given and five additional MoA signed (in addition to the proposed project), see details below:

1. 405 MW Ranganadi HEP (Existing, transferring water from Ranganadi to Dikrong)
2. 110 MW Pare HEP (under construction)
3. 60 MW Par HEP on Dikrong (TOR approved by EAC on 8/9/2012)
4. 60 MW Dardu HEP on Dikrong (TOR approved by EAC on 8/9/2012)
5. 66 MW Turu HEP on Dikrong (TOR approved by EAC on 8/9/2012)
6. 25 MW Adum (Upper) Panyor HEP: Upfront premium and application fee of Rs 11.05 lakhs received by Arunachal Pradesh government from BSS Arunachal Energy Development Pvt. Ltd. (on 10/03/2010)¹
7. 21 MW Panyor Lepa Middle HEP: Upfront premium nad processing fee of Rs 9.4 lakhs received by Arunachal Pradesh Government from JMD Power Solutions Pvt, New Delhi (on 27/08/2010)
8. 25 MW Papumpam HEP: allotted to: Meena Entrade and Engineering Pvt. Ltd. Naharlagun, AP. on 19/08/2008²
9. 15 MW Papum HEP: allotted to Patel Tours and Travels (Mumbai) on Dec 12, 2008
10. 12 MW Poma HEP: allotted to Patel Tours and Travels (Mumbai) on Dec 12, 2008

Hence a credible basin study is required BEFORE any more (including Panyor) projects are considered in Ranganadi-Dikrong basin.

¹ <http://www.arunachalhydro.in/pdf/Monitoring/upfront.pdf>

² <http://www.arunachalhydro.in/pdf/Monitoring/alloted%20projects.pdf>

Costly Project Per MW cost of this project will be Rs 10.25 crores according to current estimates. This will be costly affair considering that per MW cost of solar PV project would be lower than this.

Until the above issues are resolved, the project should not be considered for Scoping clearance.

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Annexure: Panchayati Raj Institutions question the project

<http://www.arunachaltimes.in/archives/ju09I%2012.html>

July 12, 2009

PRIs question Govt on power project

ITANAGAR, July 11: Panchayat leaders of Pistana and Yachuli circles of Lower Subansiri district have voiced their protest against coming up of Panyor Hydro Electric Project, which they claimed was 'kept secret' from the public.

In a representation to the Chief Secretary yesterday, the PR leaders led by Zilla Parishad Chairperson Likha Tongum said that Panyor Hydro Electric Project came to light when M/S Raajratna Energy Holdings Private Ltd of Shimla, started surveying and investigation works in the area. They urged the Chief Secretary to cancel the MoA signed with the private company immediately in the interest of local sentiments.

To the surprise of the people of the area, MoA to this regard was already signed between the govt and the company on February 25 last for implementation of the 80 MW project on BOOT basis for which an amount of Rs 80 lakhs (at Rs 1 lakh per MW) as processing fees was already paid in the name of the Secretary Power, Govt of AP. The grass-root leaders alleged that the whole process was carried out secretly and kept under wraps.

They leaders further came down heavily on the agency for "totally undermining the project affected panchayats".

If any agency wants to tap the natural resources available, they have to take the confidence of at least the local panchayat leaders, which is a normal procedure in a democratic setup, the leaders said.

"The local panchayats are the sole custodian and owner of natural resources in the region since time immemorial," the leaders said and have decided to protest against the execution of the project.