Objection to Proposed CDM Status for 600 MW Upper Marsyandi Hydro Power Project in the Manang and Lamjung Districts of Nepal

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The PDD dated 27/07/12 for Upper Marsyandi-II Hydro Power Project (UMS-II) is laden with contradictions. The most obvious point is that the majority if not all of the project’s energy output being evacuated to the Indian NEWNE grid, as noted in section A.1, “Upon completion of the project, the generated electricity (net of auxiliary consumption, transformation losses, power supply to Nepal grid, if any, and Transmission Line losses) will be delivered to the NEWNE grid of India”. The project would meanwhile have undue impacts on several national Conservation Areas and affect the river-dependent livelihood of the indigenous locals of Nepal. It is also pertinent that, with multi- million dollar international investments pouring into the project through Indian based GMR Group, and excessive subsidies available to the project through the Indian government, the project fails the non-additionality test that is integral to the CDM process. The basis of these objections is elaborated below:

1. The Indian based construction giant, GMR Group, has 80% stake in Himtal Hydropower Company Pvt. Ltd. which is developing the 600 MW Upper Marsyangdi Hydro Electric Project. GMR Group, is a subsidiary of the multinational G M Rao-led GMR Infrastructure that has investments in coal fired power plants, highways, airports, agri-business and urban infrastructure, and rakes in a staggering revenue of Rs 40,000 million per annum (approximately 800 million USD). In 2010 it was reported that GMR Energy was in the process of availing Rs 1,600 crore (USD 320 million) from a group of private equity players led by Singapore-based Temasek Holdings and banks to fund its expansion for the above mentioned hydro power project among others.1

2. On p. 27 of the PDD the PP states, “The project activity is located in Nepal and supplies electricity to Indian grid system.” Despite the fact that electricity produced by UMS-2 will not be sold to a Nepali market, the project has used Nepal-based statistics for its common practice analysis. This is clearly nonsensical as the UMS-2 will not be directly influenced by the Nepali investment climate in any foreseeable way. Rather, the PP should be required to examine Indian hydropower scenario, where there are already a number of large projects within the specified range 400 MW to 900 MW that supply energy to the Indian NEWNE grid, which is the same grid to which the proposed Marsyangdi will evacuate electricity. To name a few, there is the 520 MW Omkareshwar Dam (under commissioning stage now), the 540 Chamera-1 (2003) Dam, the 780 MW Idukki Dam (1975), 690 MW Salal Dam, the 300 MW Baspa, the 400 MW Vishnuprayag, the 510 MW Teesta V, the 405 MW Ranganadi, to name only a few in the relevant range of 300-900 MW. None of the above hydro power projects were established with CDM consideration. Therefore, the company’s Common Practice

Analysis is a false justification for a business as usual common practice project and should disqualify UMS-2 from CDM consideration.

3. Large infrastructure projects of this size are rarely additional. Such projects typically involve government support which guarantees that the project would be built, such as setting a tariff high enough to attract a developer, or through putting forward a request for bids through which the bidding company with the most attractive bid is awarded the project.

4. GMR Group has entered into an agreement with the Nepali government to develop the project **through a competitive bidding process**. It is unreasonable to think that the company would have entered into this agreement if the project was financially unviable without uncertain benefits of CDM credits. More so, had the company not won the bid for the project, the project would have certainly been developed by another company. Thus, the project is a business as usual, high profit-yielding endeavor to which CDM is superfluous. The project would have been built regardless of the CDM, based on the best bid received.

5. The PDD does not describe how the tariff used in the financial analysis was determined, nor how the actual tariff provided to Himtal will be determined. Typically in India, tariffs for large hydropower projects are calculated on a cost-plus basis. We would ask Bureau Veritas Certification to thoroughly assess the veracity of the investment analysis, paying particular attention to the tariff and the benchmark, given the way the project was awarded to Himtal and how the tariff will be determined.

As the tariff will be determined on a cost-plus basis, Himtal is guaranteed a predetermined return on their equity investment, regardless of the actual project costs and project output. In this case, the returns are set at a rate by the government, or a government-owned company, that is acceptable to project investors. When the tariff is set on a cost-plus basis, it is by definition set at a viable rate, and an investment analysis is not an appropriate measure of the viability of a project. Changes in assumptions that go into the investment analysis do not change the viability of the project.

6. It is clear that there is not a strong case for the additionality of the project. If a sensitivity analysis were performed on the tariff and benchmark, based on the issued raised here, the case for project additionality would fall. Please also note that a sensitivity analysis should vary all values simultaneously and not just one variable at a time. This is common practice for sensitivity analyses used to test the robustness of the final outcome of a model in most scientific literature, and should be used in CDM investment analyses as well.

7. On p. 21 of the PDD the PP states, “The Project IRR without CDM benefits is 8.82 % against the benchmark of 14.64% thus showing that the project is additional.” This analysis is based on a omission of some crucial facts. Namely, for the years 2009-2014 the Central Electrical Regulatory Commission of India has promised at least 15.5%
returns on equity and 16% for power projects completed on schedule. Since the returns of the project are all but guaranteed at 15.5% (which is .86% higher than the stated benchmark), discounting additional subsidies granted by the state and central government, the project should by no means be considered “additional”.

8. The project site is situated amidst the Gandaki Zone of Western Nepal. The dam, specifically, would be constructed between two important wildlife conservation zones, the Annapurna Conservation Area Project (ACAP) to the West, which is the largest conservation zone in Nepal, and the Manaslu Conservation Area to the East (see [Appendix 1 for Google Map Image](#)). Additionally, as per the PP’s own coordinates provided in the PDD the power house of the UMS-2 seems to actually come within the ACAP. Both ACAP and MCA harbor rare and endangered wildlife species such as the Snow Leopard, Musk Deer, Tibetan Argali, Impeyan Pheasant and Tragopan Pheasant. The company has provided no evidence of conducting a through impact assessment of how the proposed project would affect habitat and migration patterns of existing species, nor have they provided evidence of adhering to established laws dealing with wildlife such as the National Parks and Wildlife Conservation Act (1973). The project is thus legally questionable and environmentally harmful, the assessment of full impacts not even done.

9. In Nepal only 40 % of its population has access to electricity, and almost every household in Nepal faces power cuts on a regular basis. Yet, as stated in opening para and in point 3, the UMS-2 project, although based in Nepal, would guarantee no power supply under the proposed project to the Nepalese. If the project were actually committed to social component of CDM, it would be hesitant to exacerbate already existing regional disparities, and would secure a large portion of its electricity generation for Nepal. In fact, due to this and due to the serious impacts of the project, it is face strong opposition within Nepal and is not able to go forward.

10. As noted above, the project has faced prolonged opposition at both central government level and among local protestors in the region, who say that the project has failed to take consent of the local people. Therefore, the stakeholder consultation which is mandatory for CDM projects, takes on special importance. Yet, the PP has made a mockery of the democratic process—for example, on p.55 they have stated, “The executive summary mentioning the technical details of project, environment impacts and its mitigation measures along with information on CDM related aspects was... circulated to stakeholders during the consultations.” The correct procedure would have been circulation of the full EIA/EMP, not the executive summary (which is just a small fragment of the full length document) in local language, at least one month before the consultation rather than distributing it on the spot. It would be impossible for locals to analyze the entire scope of the project, consult independent experts, or discuss among their community members, given the procedure the PP has followed.

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2 [http://www.upi.com/Top_News/World-News/2012/07/03/Political-turmoil-power-outages-short-circuit-Nepal-hydropower-potential/PC-6291341349989/]
11. It should also be a red alarm that virtually everyone who commented at the above mentioned stakeholder meeting was hesitant or downright opposed to the project. Many felt that the information provided in the executive summary was inadequate in addressing various aspects of the dam. Further, the fact that the company thinks that the “All the queries were answered satisfactorily and have been documented in the Public hearing report” is clearly untrue and hence of great concern (p.55 of PDD). To whom were the queries answered satisfactorily? There is no official document showing that these responses have been provided to the people in writing, or that the people have given consent to the project in the form of a Non-Objection Certificate signed by the VDCs. Given the fact that the project will affect hundreds of villages and thousands of lives, the company’s flippant attitude towards stakeholder process should disqualify it from availing CDM credits.

12. On p. 51 of the PDD, the PP states, “In case of loss of agricultural land the standing crop at the time of acquisition…” and on p.53, “In case of loss of forest vegetation, Forest and vegetation will be felled only to the required…” If Himtal has actually conducted a full EIA/EMP as they claim, shouldn’t they know if agricultural land will be acquired, how much forest land will be submerged or how many trees will be felled due to project activity? But throughout the PDD, the PP has provided only vague statements on these matters and not actual numbers. This lack of information shows that the PP is unsure of its own project dimensions and should moreover render the stakeholder process incomplete.

13. On p. 4 the PP claims that the project leads to “poverty reduction” and will “generate employment opportunities to local inhabitants and thus increasing employment opportunities.” Yet, in their PDD the PP has not mentioned any specifics about long term job creation for the local community, such as the number and type of jobs that will be created, number of youths that will be trained in vocational training enters, and the proportion of such jobs that will go to local community. Likewise, they have not stated how many workers will be recruited from outside of Lamjung & Manang District, which is a serious lacuna, as often construction of dams of this scale requires thousands of workers, a large portion of whom come from outside. Migratory workers thereafter overwhelm local indigenous economies and land, and carry with them a range of infectious diseases. None of this has been given long term consideration and therefore the project cannot be considered socially responsible.

14. During the stakeholder meeting, project affected local, Mr. Bimal Raj Lama, brought to public attention the existence of 25 kW Taghring – 1 micro hydro power project, which may come in the impact area of UMS-2. The said micro hydel project is a community run endeavor that would provide benefits to the locals, unlike UMS-2. The company’s solution to remedy the harm caused by UMS-2 is just “to provide compensation”. However, financial compensation will not provide any long term relief towards the electricity crisis faced by locals and the havoc reaped on locally-oriented enterprises. Thus the project cannot be considered socially responsible.
15. In recent years there have been several severe instances of violence surrounding the UMS-2. In May 2011 three Nepal based office buildings belonging to the GMR Indian Company were burnt down by over forty people and two people were severely beaten. Others “including 11 Indians working at the site fled to a nearby army camp to save themselves”3,4. This history has not been mentioned in the PDD, and the PP tries to misrepresent the facts by saying, “Project activity does not trigger any conflicts among local communities” (p. 4 of PDD). This should immediately prompt the UNFCCC to question the integrity of the PP. The UNFCCC should avoid being involved in funding projects that is already creating strong conflicts which will only escalate with time, invoke violence or lead to discord for peaceful citizens.

16. In the nearly 10 km stretch of the river that will be diverted into head and tail race tunnels, water flow may come to a halt during the non-monsoon season months, and as one stakeholder mentioned in the public hearing, it “will greatly have an impact on the surface water sources, [and] agricultural productivity may decrease due to low water availability in the impact area.” On p. 53, the PP admits, “Loss of fish swamping ground, reproductive areas for roe and swamping ground for fry, loss of healthy food web, increase toxicity due to low flow and increase sediment.” However, the PP has not given a scientific analysis as to how they will mitigate these impacts.

17. The downstream impacts of such projects are very serious and various and are experienced all round the year and also over long distances with the flow fluctuations as per power generation rates. The PP has not assessed any of these impacts, nor designed mitigation measures, nor taken measures to ensure that such sudden changes in flows do not lead to loss of life, property and livelihoods.

Considering all of the above points and the fact the project is not additional, nor is it sustainable development, and is not in the interests of the Nepali people it would be inappropriate if the project gets validated, registered as CDM activity or gets CERs.

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5 http://www.ekantipur.com/2010/02/16/national/maoists-halt-work-at-600-mw-upper-marsyangdi-hydel-project/308497/
According to the geographical coordinates provided in the PDD of UMS-2, the site of the power house (represented by the red marker) seems to be inside the Annapurna Conservation Area, whereas the site of the dam (represented by the blue marker) appears to be less than 10 km east of the same.