04.08.2014

Kind attention of: Shri Piyush Goyal

Minster of State (Independent charge) for Power, Coal and New & Renewable Energy, Government of India

<u>Subject</u>: Letter of opposition to policy of Hydropower purchase obligations

Dear Shri Piyush Goyal,

As you are well aware, the Ministry of Power (MoP) is currently drafting a hydropower purchase obligations policy that will mandate power distribution utilities to purchase a fixed amount of hydropower. At the outset we believe that in doing so the MoP is making destructive dam projects bankable by guaranteeing the purchase of electricity without factoring in all the costs, while passing on the burden to consumers for unjustifiable hydropower projects.

The government has been working to revive interest in the beleaguered hydropower sector by providing a safety net for hydropower developers. The policy was lobbied for by Manoj Gaur, Chairman of the Jaypee Group and Anil Ambani, Chairman of the Reliance Anil Dhirubhai Ambani at an advisory group meeting held on February 19 last year, minutes of which we attained via the Right to Information Act. It was claimed that such a policy is justified given that hydropower can help meet the spiraling peaking power demand in the country. There are two questions in this regard. Firstly, there is no assessment of how much of current hydropower generation provides peaking power, leave aside question of optimizing such peaking generation. Secondly, there are serious social, economic and environmental impacts of generating peaking power from hydropower projects, which are not even assessed and are braved by the local people. Daily flood and drought like conditions and the risks of this to unsuspecting humans downstream is just the tip of the iceberg.

Large hydropower the world over is not considered a renewable source in spite of the advocacy efforts of the sector lobbyists. Therefore unlike renewables, the large hydropower sector need not be given a policy impetus. The industry for too long has been hiding behind the pretense that it is needed to manage peaking power demands. The Ministry of Power must come clean on the operation of current reservoirs and divulge information that is credible and data centric to demonstrate that only such a policy can enable state governments to meet respective energy demands. Our advice is that greater efforts be made to ensure that States fulfill their renewable purchase obligations, rather than pursuing a policy impetus for non-renewable projects such as large hydropower. Your Government in the recent budget has given a boost to solar and wind and has left out large hydro; this policy runs contrary to the budget's objective.

Though it was not considered important initially, the social and environmental implications indicate that a cumulative impact study of dam building in river basins is necessary. Few credible assessments exist; before going ahead with a policy to promote hydro projects there is a need for better information to assess the full costs and risks of large hydro, at the river basin scale. When the cost overruns, time delays and risks of low flows are factored into the cost of electricity, hydro is not as cost effective as the industry lobbyists and proponents point it out to be. In fact a 2014 peer reviewed Oxford University study looked at 245 large dam projects in 65 countries constructed from 1934 to 2007 and recommended that developing countries should err on the side of caution from an economic standpoint too. These projects had an average cost overrun and time overruns of 96 and 44 per cent respectively.

We must exercise caution and suggest that dams for large hydro be considered only after information has been shared in the public domain and affected people are given a full chance to study the veracity of the facts. A majority must agree to the project. Also, independent experts must verify the claims of project proponents of the stated benefits by understanding the full environmental and social cost.

Large hydro projects have been positioned in the forefront in tackling climate change, as a source of energy with no "upfront" greenhouse gas emissions. But the fact is that dam reservoirs do generate emissions, and many peer-reviewed studies exist that suggest the quantum of these emissions may often negate the stated benefits. The Ministry of Power must make note of the growing body of international research to determine the impacts such a policy would have in furthering such projects in the Himalayan region. Undoubtedly such a policy would put excessive pressure on Himalayan states like Arunachal Pradesh, Uttarakhand, Jammu and Kashmir and Himachal Pradesh and select others that have potential sites for hydropower generation. The Ministry must also prepare a menu of options that would serve the highest public good, in line with the principles of "Integrated Resources Planning" to monitor and evaluate how different sources of energy stack up against each other in the long term.

Equally important is the fact that large hydro projects change the longitudinal and lateral identity of a river. It is well established that a flowing river transports sediment loads from the uplands to the floodplains and the delta. A dam not only alters this, but also like any engineering intervention invariably impacts the ecosystem functions and services, in part or full. Let us be clear that this policy is in gross contravention to the attempts to create an *aviral* and *nirmal* Ganga as your Government has recently suggested. All rivers, not just the Ganga, need to be *aviral* and *nirmal*.

Data on hydropower generation is not encouraging either. As per a Central Electricity Authority report, hydropower generation dropped from 4.01 GW/h per MW in 1994-95 to 3.35 GW/h per MW in 2011-12. Provisional data from a July 2013 report of the Central Electricity Authority ('Growth of electricity sector in India from 1947-2013') reveals that this has dropped further to 2.90 GW/h per MW in 2012-13. The first priority of the Ministry of Power should be

to study the reasons for this decline rather than advocating a policy without a better understanding of the cumulative impacts in the river basin. It is also startling that the MoP is backing such a policy when the Supreme Court has formed a committee to ascertain the role of hydel projects in exacerbating the recent flood disaster in Uttarakhand where more than 10,000 lives were lost.

A policy that seeks to expedite and favor non-renewable large hydro projects not only run a risk of political disenchantment of the people, but are also repeatedly accompanied with human right violations. The Ministry of Power must exercise the precautionary principle before mandating the policy of hydropower purchase obligations. India has vast renewable energy potential, such as wind, solar, geothermal, and biomass energy, as well as potential to deploy low-impact, renewable pico/mini/micro hydropower projects. We cannot afford to do more of the same when better options are available to us. In this context we urge the government to drop its plans to sanction such a perverse policy.

Best Regards,

Bharat Jhunjhunwala, former professor IIM Bharat Lal Seth, International Rivers Debabrata Roy Laifungbam, CORE Manipur Emmanuel Theophilus, Malika Virdi & Ramnaraya, Himal Prakriti Gyatso Lepcha, Affected Citizens of Sikkim Himanshu Thakker, South Asia Network for Dams, Rivers & People Jiten Yumnam, Concerned Citizens for Dams & Development K J Joy, SOPPECOM Lama Likden, Sangha of Dzongu Latha Anantha, River Research Centre Leo Saldanha, Environment Support Group Manoj Misra, Yamuna Jiye Abhiyan Manshi Asher, Him Dhara Mayalmit lepcha, Concerned Lepchas of Sikkim Partha Jyoti Das, Aaranyak Ramaswamy Iyer, Centre for Policy Research Ravindranath, Rural Volunteers Centre Samir Mehta, International Rivers & River Basin Friends Tseten Tashi Bhutia, SIBLAC Vimal Bhai, Matu Jan Sanghatan Yapching Bhutia, Save Sikkim

BHARAT LAL SETH (Signed on behalf of all signatories)