

Power Ministry's New Guidelines for HEPs**Further Concessions for Private Hydropower Projects**

In an attempt to persuade the reluctant private sector to take up Large Hydropower projects (over 100 MW), the Union Ministry of Power has on May 23, '06 come out with new guidelines that provide long term funding at reasonable interest rates so that the tariffs in initial years are lower. The ministry hopes that the resultant tariff competitiveness will provide sufficient payment security to the financial institutions. The bidders will be selected on the basis of tariff based bids. Competing bidders would be required to post a bid bond of Rs 5-10 lakh per MW and a performance bond of Rs 10-20 lakh per MW. Failure to take up the project within a pre-specified time after the award would lead to a call on the bid bond. The project than would be awarded to the next qualified bidder. The performance bond would be linked to achieving specified milestones in a pre defined time frame. The Power Minister plans to offer a series of run of river projects for development by the private sector.

Departure from earlier policy Here it may be noted that the Union Ministry of Power had on Aug 26, 1998 given approval to "Policy on Hydropower Development". That policy talked about "ideal hydro thermal mix of 40:60". However, even as the new guidelines talk about "capacity addition in hydro since independence have not grown in tandem with the additions in the thermal capacity", it has no mention that ideal hydro: thermal mix is 40: 60.

Secondly, unlike all usual govt documents on HEP talking about such projects providing peaking power, the guidelines, strangely has no mention of it at all. The 1998 policy had listed one of the objections as "Providing a differential pricing for peaking power to facilitate greater investment in hydel projects which have the capability to supply peaking power in a cost effective manner." Does this indicate that some of the unrealistic notions about the hydropower projects in government are breaking down? The answer, unfortunately, is No.

Imaginary virtues of Storage projects Sanjay Chadha, Director in Ministry of Power has added a paragraph in the section 3.1 of Chapter 1 of the guidelines, singing praise of the large storage projects. (This became clear the file put up on the MoP website had the track-through

mode changes done by Mr Chadha.) For example, he says, "Moreover construction of large storage dams is the most effective method for controlling floods." This is completely wrong claim, for firstly, unless storage projects have space provided for flood cushion and they are indeed transparently operated to take advantage of such cushion, they do not provide assured flood control benefit. These conditions do not apply to most storage dams in India. Secondly, as the assessment by the

World Commission on Dams makes it clear, large storage dams are not the most effective method of controlling floods.

Large storages are not filling up Moreover, Chadha's uncritical advocacy of large storages *per se* is completely

misleading. For achieving storage also a number of options are available. Also, MoP would do well to look at the performance of existing storages and also the fast rate of siltation of existing storages.

According to an assessment done by SANDRP, out of the official figures of Central Water Commission, out of the monitored storage capacity of 133 BCM (Billion Cubic Meters) over the twelve years between 1994 and 2005, on an average, each year about 36.25 BCM (equivalent of 7.7 Sardar Sarovar Projects) of storage capacity out of only the monitored storage capacity is not filled up for the last 12 years. That means that on an

average an investment of Rs 37 793 crores has remained idle in each of the last 12 years. This happens when in 7 of the 12 years the rainfall was average or above.

Storages are silting up As per the report of the National Commission for Integrated Water Resources Development (Govt of India,

Sept 1999), about 1.4 BCM of existing storage capacity is getting silted up every year. At today's rates creation of 1.4 BCM storage capacity would cost Rs 1448 crores. That means that on an average, each day we are losing Rs 4 crores worth of storage capacity through siltation. And no effective action is being taken to stop this destruction of capacity created at huge expenses.

The Guidelines make it clear that they "do not cover large storage reservoir multipurpose hydro projects, having live storage capacity of more than 30 days and

Interestingly, the guidelines for hydropower development have no mention of HEPs providing peaking power and ideal hydro: thermal mix of 40: 60. Does this indicate that some of the unrealistic notions about hydropower are breaking down? The answer, unfortunately, is in No.

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envisage that such projects be only taken up through MOUs with Government / Public Sector Agencies and Private Sector as done currently.”

Indictment of Public Sector The Guidelines are supposed to be for development of HEPs in General, but they seemed to be geared to offer fresh concessions to Private Sector. The guidelines also seem to be an indictment for the public sector organizations. This is because the guidelines say the private sector has following virtues.

- Minimum delays
- Better capital and operating efficiencies
- Private sector would invest in equity component.

Imaginary virtues of Private Sector

The trouble is that if we look at track record of private sector, we see that these are imaginary virtues. Over the last 15 years when there has been a big push for private sector taking up big hydro projects, only one project of over 100 MW have been completed, namely the 300 MW Baspa HEP in Sutlej basin in Kinnaur district in Himachal Pradesh. However, this project has seen high capital cost, high cost over run, high time over run, long shut downs, poor environmental and social track record and poor record in safe operation of the plant (see DRP issues of Dec '05-Jan '06 and Feb-March '06).

Only other private hydro of substantial size completed over the last 15 years was the 86 MW Malana HEP in Beas basin in Kulu district in Himachal Pradesh. This project again has seen poor record of safe operation, long shutdowns, poor social and environmental performance.

Ongoing projects face serious over runs If we look at some other ongoing large hydro projects in private sector, we see that the 400 MW Vishnuprayag HEP in Uttaranchal has had high cost and time over runs. The 400 MW Maheshwar project in Madhya Pradesh has remained stalled for five years due to the agitation by the affected people and by the mismanagement by the developer. The 1000 MW Karcham Wangtoo project in Himachal Pradesh is facing big agitation by the affected people who have now stalled work on the project (see below).

The trouble is that if we look at track record of private sector, we see that these are imaginary virtues. Over the last 15 years when there has been a big push for private sector taking up big hydro projects, only one project of over 100 MW have been completed. Private HEPs to manage to pad up the capital costs to such an extent that it unlikely that they would be investing anything from their pockets.

Attempt to make the 12% free power conditional and unreal (by saying that any additional R&R and environmental costs would be borne by the state governments is likely to create more hurdles for the HEPs this won't be in the interest of the affected people, state govt or the developer.

Do private project really bring additional money?

Another fallacy of the Power Ministry’s argument comes from the fact that the developers are bringing very little additional resources. Most of the money invested in the project comes from financial institutions in public sector. On the other hand, the costs of the private hydro projects are so high that whatever little equity that the developers bring in is less than the padding added by the private sector. So on the whole, private sector is adding no net resource.

Hill states do not need HEP Power The Guidelines are candid in accepting that “most of the undeveloped hydro power sites are located in hill states which are either

surplus in power already, or whose ability to consume power would be much less than the hydro potential existing in the State.” Thus the guideline has to look for ways to push the hill states to take up large hydro projects. The following statement that soon follows is weird: “The hill States possessing the hydro potential must therefore like to develop

their hydro sites for sale of power to other areas and at the same time securing benefits like 12% free power for their own development.” The word “must” in this sentence should clearly not have been there. Such blunders in National Guidelines are deplorable.

12% free power becomes conditional The Guidelines, in spite of the contrary noise by some private developers and also NHPC, says that the GOI OM of May 17, 1989 providing 12% of the power from hydro projects to the host state govt. However, the guidelines add a proviso to this: “In case of projects having unviable tariffs in the initial years, the 12% free power to the home state can be staggered in a manner such that it is kept low in the initial years and higher in the latter years so as to average 12% over the life of the project.” This is likely to add to problems for the host state governments.

Moreover, the Guidelines add that if there are additional expenses on R&R beyond what is provided for upfront in the DPR, than such costs “would be to the account of the State Govt. in line with the GOI Policy of provision of 12% free power to the host state for mitigation of hardships to the local population”. This provision again is an attempt to reduce the obligations of the developer, and create problems for the state govt and the affected people.

Competitive bidding not necessary The Guidelines say that for HEPs over 100 MW, states can continue to develop the projects based on MOUs with the developers. Only condition being that the EPC contract should be based on international competitive bidding. This is a clear and continued departure from the Power Ministry policy of Feb 15, 1995 to the effect that power projects could only be awarded to private developers through competitive bidding.

Project Report The Project Reports can be either prepared by the state govt of they can ask a central govt agency to do the same. The PR are supposed to be according to the guidelines of the CEA and the CWC. The agency selected for developing this project through competitive bidding shall reimburse the cost of the Project report to the SPV. The PR is to be vetted by another reputed agency to ensure that the dam safety, river basin optimization and inter state issues are taken care of.

Facilitating bodies for each HEP The guidelines envisages creation by the central govt of a shell company/ special purpose vehicle/ task force / other statutory/ non statutory organizations for each of the large hydro project with capacity over 100 MW. The role of these facilitating mechanisms would be to take action for:

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- Preparation of the project report
- Land acquisition and preliminary R&R
- Formulation of R&R plan and assessment of cost thereof
- Preparation for EIA & EMP reports
- Various approvals and statutory clearances
- Aggregating demand for power from the licensees of different states
- Power evacuation system, load flow study.

merchant basis. The Evaluation committee can reject all bids if the tariffs quoted are not aligned to the prevailing market prices.

No lessons learnt on Social & Environmental issues It seems the Power Ministry has not learnt any lessons from the past experience of implementation of large hydro power projects. That is why there is little by way of credible norms and mechanisms to ensure that the social and environmental issues of these projects are dealt with in manner that is in the long term interest of the people and also the project. There is absolutely nothing in the guidelines on this score.

This is supposed to be an illustrative list and not an exhaustive one. Here the guidelines say, "Selection of final developer will be through a tariff based ICB. The shell company/ SPV will be thereafter transferred to the successful bidder for execution."

If the project site is being developed for sale of power to other states, than "the host state is expected to necessarily avail the multi stake holder facilitation

It seems that the new guidelines are bound to fail in achieving the objectives set out as they are based on imaginary virtues of private hydro projects and large storage projects. The guidelines also do not seem to be based on past experience of such projects, nor being informed by performance of such projects based on ground realities. There is also no attempt to evaluate the performance of existing large hydro projects to see what has been the performance in terms of power generation per MW installed capacity or in terms of providing peaking energy.

mechanism of GOI as outlined above. If the host state is developing the project for itself than it need not depend on centre for setting up SPV and it can do it on its own or through an SPV set up by itself. The tariff based bids are supposed to be according to the ICB guidelines notified on Jan 19, '05 in either case.

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Final Evaluation The bid is to be evaluated by the SPV/ state govt solely on the basis of the composite levelised tariff quoted by the bidder. The project developer would have to enter into a PPA with the distribution utilities for at least 90% of the design energy. The remaining power can be sold on the

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