ENSURING ELECTRICITY FOR ALL: KEY CHALLENGES AND POSSIBLE APPROACHES

Summary report of the roundtable organised by
Prayas Energy Group and Pune International Centre at Pune on 18th February 2012

With nearly 8 crore households to be provided connections and severe shortage in rural power supply, "Electricity for all" - that is providing connections to all rural households and providing them quality power supply - is a tough challenge for India. As a national commitment and a development imperative, this challenge has to be met. On 18th February 2012, Prayas (Energy Group) along with Pune international Centre organised a roundtable in Pune, to discuss possible approaches to achieve this national goal. Shri.Sushilkumar Shinde, Union Minister for Power was the Chief Guest and senior representatives from the Ministry of Power, Planning Commission, Ministry of Finance, Financial Institutions, Regulatory Commissions, Grass-root organisations, Academia and other stakeholders in sector participated in the roundtable. This is a summary report of the proceedings of the roundtable aimed at capturing key takeaways from the discussion.

The roundtable began with a theme presentation by Prayas Energy Group. The presentation was based on background paper prepared by Prayas. The paper noted the focus has to be on six states of Bihar, UP, West Bengal, Odisha, MP and Rajasthan, which account for 75% of the un-electrified households. Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) has achieved significant progress. Reports indicate that 1.8 crore rural households have been given connections; village electrification has risen from 74% to 92%. Unfortunately, availability of power for rural households is often less than 6 - 8 hrs / day and many villages are yet to be energised. A large number of APL households have not taken connection. This is sub-optimal utilization of RGGVY investment and unless hours of supply are increased significantly, the risk of rapid degradation of RGGVY supported infrastructure is high. One of the key reasons why power supply is inadequate in rural areas is that it is not a commercially viable proposition for DISCOMs. It requires considerable investment, leads to high recurring costs, generates low returns and makes an estimated loss of Rs. 3.9 per unit supplied. Reeling under the burden of current and past financial losses, DISCOMs face a structural disincentive to supply to rural households. The problem is more acute in six States, which account for 75% of the un-electrified households. Considering the poor financial health of the DISCOMs and the large number of newly electrified poor households, these States will find it near impossible to supply quality power on the new rural network. To overcome this 'structural disincentive' Prayas suggested that central government should take the initiative to make cheap power available to DISCOMs to supply rural households, with strict monitoring arrangement to ensure that 24 x 7 power supply is provided.

Prayas's suggestion is to allocate low cost power to DISCOMs at a fixed rate (say at Rs. 2.5 per unit), to meet normative requirement of 200W per household in targeted districts. Power procurement can be done by a SPV using PPA based on competitive bidding or via bidding for coal from captive mines. With a separate PPA, SPV can provide procured power to DISCOM conditional to ensuring 24x7 power supply to beneficiary households. To ensure zero load-shedding, SERCs/RLDC can monitor DISCOMs based on feeder load data from automatic meters. CERC (according to a PPA), can revoke and reallocate share of non-complying DISCOMs. Calculations indicate 14 GW power capacity would be required to operationalize this approach. In case of direct purchase of power through competitive

bidding, assuming power purchase cost of Rs. 3.5 per unit and sale price of Rs. 2.5 / unit to identified DISCOMs, the scheme would entail annual support of Rs. 10, 000 crore from central resources. Alternatively, if coal mines are allocated for this 14 GW capacity (i.e. equivalent to ~70 million tonne/year) then there would be no direct fiscal impact. This investment of allocating 14 GW of cheap power would enable 7 crore rural households (25% of total population) in 170 backward districts to get reliable power supply. This proposal was presented in the roundtable and was followed by detail discussion. Following are some of the key takeaways from the discussion.

Key Takeaways from the Round Table

1. There was consensus that the challenge of "electricity for all" cannot be met by States without removing the structural disincentive for DISCOMs to supply to rural poor. This needs central government support and RGGVY could be restructured to address this issue.

2. The structural disincentive can be addressed through multiple methods like cash transfer to consumer, cash transfer to DISCOM or allocation of low cost power to DISCOM. The option chosen should be easily implementable and gradual reduction of support in future should be possible to mitigate fiscal impact. From these considerations, there are problems with the first two options and allocation of low cost power (say at Rs. 2.5/Unit) could be the most promising option.

3. One of the suggestions for procurement of power for low cost power allocation option is allocation of captive coal blocks for RGGVY. Honourable Minister and few others supported this suggestion. It was felt that this would be the best use of country's natural resources to power most poor and weaker sections of the population. There would also be no direct fiscal implication in this approach.

4. Effective implementation of the suggested contractual arrangements and monitoring mechanism is crucial for successful implementation of the proposal. This is possible if all the actors, including the State governments are politically committed to honour the proposal. Once low cost power is made available under the condition of zero load shedding, power supply in rural areas would improve, resulting in raising expectations of the people and increased political pressure on the State to continue the 24 x 7 power supply. There was a suggestion that pre-paid meters with remote recharge feature using mobile communication could be used to increase accountability. It is necessary to have discussions with the States to fine tune the scheme, especially with the six states, which would greatly benefit from this.

5. Prayas has suggested that the amount of power allocation be calculated based on a normative household requirement of 200 W and 1 Unit/HH/day. As pointed out, this would result in DISCOMs having approximately 3 units to sell (at higher tariff) after supplying 1 unit to households, thus reducing the amount of support needed by the DISCOMs. This is attractive, though details like the exact amount of units available for sale, the possible revenue etc could vary across DISCOMs and need to be worked out.

6. Prayas has suggested that as an immediate measure, un-allocated power of NTPC could be used to kick start the scheme. This needs careful examination, since some of the un-

allocated NTPC share is already tied up in firm contracts. But there should be at least some power available to commence pilot implementation in a few districts in States keenly interested in the scheme. Also the approach could be implemented based on un-contracted power projects from the private sector which are nearing completion.

7. Decentralised Distributed Generation (DDG) does have a role to play as complimenting grid power. Considering the near full reach of the grid, DDG is a precursor to grid where grid has not reached or in grid interactive form as supplement to grid power.

8. There was an opinion that some DISCOMs already have allocation of low cost power from existing projects and upcoming UMPPs but this is not being used for 24 x 7 supply to rural feeders. It was explained that this is low cost power, available without a condition of 24 x 7 supply to rural feeders, is best sold to paying consumers, thus improving the financial health. Hence, only additional low cost power in sufficient quantum could be the incentive for DISCOM for ensuring 24 x 7 supply to rural feeders.

9. It was felt that based on further detailing of the approach in light of the discussion at the roundtable and based on interactions with different states, as an immediate step, pilot scheme on these lines could be implemented in few states and districts.

10. Considering that the challenge of household electrification is concentrated in the Eastern States, it was agreed that Ministry of Power and Prayas Energy Group would organise a similar roundtable with the concerned States to evolve further action plan in this regard.

Summing up

It was heartening to see the participation of senior professionals from different background in the discussions and the round table. It shows the serious commitment to meet the challenge of "electricity for all". We hope that the Ministry of Power and the Planning Commission initiate steps to take this idea forward. Prayas and Pune International Centre are committed to lend support to any such steps. We plan to bring out a detailed publication on the round table and the same will be widely circulated for further discussion and actions.

Background paper and theme presentation by Prayas Energy Group can be downloaded from this link on our website.

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