

Empowering Telangana Farmers with Free Solar Pumps

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HYDERABAD:

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Telangana faces a power shortage due to the huge demand from Hyderabad city, industries and agricultural pumpsets. The Andhra Pradesh Electricity Regulatory Commission (APERC) advisory of 16 June 2014 to the Telangana Government says there are 18.14 lakh electric-pump sets in use. APERC estimates the total power consumption these pumps at 9,771 MU per year. At Rs 5 per unit this cost is estimated to be Rs 4,874 crore per year. This power supply requires generating capacity of 1,133 MW, which at Rs 7 crore per MW means a capital cost of Rs 8,000 crore. APERC estimates that some Rs 860 crore a year can be saved if “Demand Side Management” measures are adopted - which has not been possible so far.

A better way is to carry out a onetime “Supply Side Management” project. That will require replacement of all existing pumps by solar_pumps which will be given free of cost to well_farmers by Telangana Discoms. In India, the cost of solar_pumps varies between Rs 3.5 to Rs 5 lakhs per unit. However, costs in the US average Rs 3 lakhs. These units are simple and come in kits which farmers can erect themselves. In bulk supply unit prices may fall further. Installing 18_lakh solarpumps would cost Discoms about Rs 54,000 crore. This is a huge amount but it makes economic sense. Till 2004, the Government of India (GoI) provided a subsidy of 80% of the cost of solar-pumps. Thereafter, this was reduced to 30%.

How can solar-pumps make sense as opposed to grid power?

1. There is acute shortage of grid power
2. The cost of a grid and its distribution losses are high, while solar-pump are located at well-site even where no grid is available
3. Solar power is available in day time unlike grid supply
4. Quality of grid power is low and results in motor burnt-out.
5. Farmers are without power in crucial crop phases when transformers burn due to overload.

6. Farmers are harassed by linemen and electricity officials for ensuring grid supply.

7. Solar-pumps need no maintenance and have no running cost.

8) Solar_pumps ensure farmer's control over water delivery and this enables them to extend their cultivated area by adopting non-rice crops and by using drip irrigation.

If all the 18_lakh wells are provided with solar_pumps free by the Telangana Discoms, the real cost to Discoms works out as follows:

a) The total grid power saved and sold to industry at Rs 9 per unit will earn Discoms an extra Rs 8,740 crores per year. An equal amount will be saved by industry as their captive generation is now costing them Rs 18 per unit. Industry will benefit, employment and tax revenues will increase and new industry will be attracted.

b) If the GoI's 80% subsidy is restored, the remaining 20% cost to Discoms will be a one-time cost of Rs 10,800 crores - a pay-back in 15 months.

c) If the GoI sticks to its 30% subsidy, the Discoms will have to fund a one_time amount of Rs 37,800 crore and will be made up in 4 years as before, by sale of saved power to industry.

d) Pollution and carbon emissions will be reduced when industry stops using diesel for captive generation.

e) Discoms will get internationally_ awarded carbon credits for reducing emissions which are encashable.

Given this possibility, the Telangana Discoms should put together a proposal through GoI to the World Bank (WB) for financing purchase/installation of 18_lakh solar_pumps with a long term loan.

First: The WB loan will help GoI and the State to spread their subsidy payment over the loan period.

Second: The WB welcomes power_saving projects and it fits into its agenda of reducing green house gas emissions.

Third: The WB will provide cheap loans on long tenure and it may also provide an IDA soft loan/grant component.

Fourth: Discoms would pay their share of subsidy through the sale of power saved to industry and sale of carbon credits.

Fifth: Farmers could be allowed to use grid power if necessary but with metered payment.

Sixth: Telangana Government will not have to continue to subsidise free power every year freeing these funds for development.

Seventh: Discoms can avoid depriving industry of power and also charging it high prices in order to cross subsidise free power.

Eighth: WB will tender the purchase internationally and get the best technical equipment at a lowest cost under its strict procurement procedures.

This scheme will make lakhs of Telangana farmers and their families free from the harassment of Discom officials as well from the uncertainties of power supply to their crops. Farmers will cease to be subjects of Discoms and become 'empowered' citizens of the State and make them more independent. It will reduce the need for farm_loan waivers. Telangana State will then usher in a real and permanent change in the lives and livelihoods of its farmers and their families and ensure their sustained prosperity.

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