



Haryana Electricity Regulatory Commission

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To

The Additional Chief Secretary
to Govt. Haryana
Power Department
Civil Secretariat, Chandigarh.

Memo No. 1684/HERC/Tariff/SV-2/2015

Dated: 14.09.2015

Subject: Advice under Section 86(2) of the Electricity Act, 2003.

The Electricity Act, 2003 provides that the State Commission shall advise the State Government on various matters including promotion of competition, efficiency and economy in activities of the electricity industry.

In pursuance of the above statutory obligation cast upon the State Commission, the HERC has analyzed in depth the issue of RE Subsidy and its impact on the functioning of the two State owned power distribution companies i.e. Uttar Haryana Bijli Vitran Nigam (UHBVN) and Dakshin Haryana Bijli Vitran Nigam (DHBVN). The observations of the Commission are as under:-

RE Subsidy: - The RE Subsidy has Increased from Rs. 531 Crore in the FY 1999-2000 to Rs. 6196.9 Crore, in the FY 2015-16 as estimated by the Commission. Additionally, as per information available in the Commission, RE Subsidy arrears (including holding cost as estimated by the Commission) are about Rs. 4054.37 Crore. Hence, the RE Subsidy, including arrears, payable by the State Government, in the FY 2015-16 adds up to Rs. 10,215.27 Crore. This is clearly not sustainable.

In case the aforesaid RE Subsidy is not paid, the Discoms are likely to face acute cash flow problems which in turn will undermine the very objective of FRP implemented in Haryana. Hence, there is a need to take a fresh look at the entire gamut of RE Subsidy including its delivery.

The National Electricity Policy provides as under:-

RECOVERY OF COST OF SERVICES & TARGETTED SUBSIDIES

5.5.1 *There is an urgent need for ensuring recovery of cost of service from consumers to make the power sector sustainable.*

- 5.5.2 *A minimum level of support may be required to make the electricity affordable for consumers of very poor category. Consumers below poverty line who consume below a specified level, say 30 units per month, may receive special support in terms of tariff which are cross-subsidized. Tariffs for such designated group of consumers will be at least 50 % of the average (overall) cost of supply. This provision will be further re-examined after five years.*
- 5.5.3 *Over the last few decades cross-subsidies have increased to unsustainable levels. Cross-subsidies hide inefficiencies and losses in operations. There is urgent need to correct this imbalance without giving tariff shock to consumers. The existing cross-subsidies for other categories of consumers would need to be reduced progressively and gradually.*
- 5.5.4 *The State Governments may give advance subsidy to the extent they consider appropriate in terms of section 65 of the Act in which case necessary budget provision would be required to be made in advance so that the utility does not suffer financial problems that may affect its operations. Efforts would be made to ensure that the subsidies reach the targeted beneficiaries in the most transparent and efficient way.*

Revenue from AP sales at current (subsidized) tariff

In Haryana (both UHBVN & DHBVN) as of May, 2015, there are about 6,05,088 AP connections i.e. 3,65,693 metered connections and 2,39,385 un-metered connections. The revenue at average tariff of 11 Paise / kWh to be realized from the AP tube-well consumers amounting to Rs. 97.79 Crore in the FY 2015-16. The balance Rs. 6196.914 Crore is to be paid by the State Government as RE Subsidy.

It is observed that the RE Subsidy has reached an unsustainable level which is also evident from the fact that the RE Subsidy arrears (including holding cost) is about Rs. 4054.37 Crore.

The above is not only a violation of Section 65 of the Act but also contrary to the National Electricity Policy and has serious repercussions on the cash flow of the Discoms.

Way Forward

At present, the State Government releases RE Subsidy, on a quarterly basis, for the power supplied by Discoms to the AP consumers. However, primarily due to the existence of 2,39,385 un-metered AP connections and the fact that even in the metered connections a large number of meters are dead/defective and not regularly read, lends little credence to the AP sales projected/estimated by the Discoms and subsidy thereto based on projected/estimated sales. Further, the benefit of such indirect subsidy goes more to big farmers with multiple tube-well connections. Hence, the solutions should be to change the method of subsidy administration and delivery from the existing tariff subsidies (as against Cost to Supply of Rs. 7.34/kWh the average tariff charged is just about 11 Paise/kWh i.e. about 1.5% cost coverage as against 50% stipulated by the National Electricity Policy for BPL consumers) to direct subsidies based on entitlement.

Any initiatives to reform the Discoms without the reforms in the AP tariff and subsidy delivery system are not likely to succeed. Such reform would also make private and public financing of electricity generation, transmission and distribution projects possible.

AP Solar PV Pumps to reduce Subsidy dependence

With depleting ground water level in Haryana, the average tube-well pump size in the State (especially those away from WYC), has increased thereby increasing the power consumption. Further, the electrical pump sets, because of poor maintenance practices/ageing including locally rewound sets, operate at much lower efficiency and hence consumption of such pump sets are very much on the higher side. The farm owners, due to negligible tariff (on an average they pay around 11 Paise / Unit against CoS of about Rs. 7.34 / Unit, are not much concerned with the quantum of energy consumed . More so, on a number of occasions the arrears are waived of.

There are about 6,05,088 tube-wells connections in Haryana (3,65,693 metered and 2,39,385 un-metered). For these pumps the annual electricity consumption in the FY 2015-16 is estimated at 857.1 Crore Units i.e. 14160 kWh per pump per annum or 1180 kWh per

pump per month. For such consumption the farmers should have paid Rs. 8660 per month. Where as they actually pay a meager Rs. 128 and the balance about Rs. 8435 per month per pump is being paid by the State as RE Subsidy. Hence, on an annual basis each farmer pays about Rs.1536 and the State pays Rs. 1,01,220/pump. The total subsidy in the FY 2015-16 adds up to Rs. 6196.9 Crore. Given the track record of RE Subsidy being released by the State Government i.e. unpaid subsidy arrears including holding cost is about Rs. 4000 Crore as on 31.03.2015. Hence, it appears that payable subsidy has reached un-sustainable levels.

As the use of water for irrigation is driven by area under cultivation and the cropping pattern. Both these factors are not subject to change in the short to medium-term (there could be some year to year variations due to behaviour of monsoon. However, this gets evened out in the long-term trend). Hence, we can reasonably assume that the electricity consumption per tube-well shall continue to remain about 14,160 kWh per pump per annum. Further, almost all land available for cultivation in Haryana is under use, hence scope for increase in the cultivated area is minimal. However, to account for release of pending AP connections and some additionalities due to continuous division of land holdings about 5% increase in AP sales can also be factored in.

Assuming that a farmer installs a 20 kVp solar pump – at a CUF of 17% he will be able to generate about 29,784 units per annum. Consequently, he would be having a surplus of about 15,624 kWh per annum and at an Average Pooled Power Purchase Cost (APPC) of say Rs. 4.0/ kWh it will be generating additional revenue of Rs.62,484 in case the farmer avails capital subsidy. Additional revenue generated would be higher in case of self financing as the surplus generation shall be payable at FIT which is higher than APPC. To safeguard against drawl of electricity by the farmer from the Grid, the drawl from the Grid can be charged at a tariff higher than FIT.

To begin with, the upfront cost of Solar PV Irrigation pumps (new connections) can be met by support from the Haryana Government Green Fund and by making available some funds by shifting

expenditure towards RE Subsidy from the Revenue Account of the State Government to the Capital Account for providing one time Capital Subsidy to the farmers opting for solar irrigation pumps. Besides MNRE subsidy is also available for pump sets upto 10 BHP and the same can also be clubbed.

In order to encourage farmers who have applied or may apply for new AP connections, project cost of atleast 70 to 80% ought to be funded by way of Capital Subsidy and the balance 20 to 30% by the applicant. The soft loan, available under priority sector lending, shall also cushion the cost of installing Solar PV Irrigation pumps. Alternatively, such scheme can also be implemented through RESCO.

BENEFITS

- The above scheme can be self financing and the upfront investment made by a farmer will have a shorter payback period. On successful pilot implementation the scheme can be implemented in Haryana and also extended to the existing AP consumers at a later stage. As solar has been brought under priority sector soft loans shall be made available. Further, a part of the RE Subsidy saved can be shifted from Revenue Account of the State to Capital Account (one time Capital Subsidy) to hasten the payback period to make the scheme attractive.
- As the farmers shall be paid for the surplus power injected by them in the State Grid, they will have incentive to adopt modern method of cultivation i.e. drip irrigation system, Green Houses and thereby reduce their electricity consumption from the assumed levels of 14,160 kWh per annum.
- Ensure continuous 5 to 6 hours of supply for irrigation during the day time.
- Efficient Solar pumps that would replace the electrical pumps shall save electricity consumption.
- The above dispensation shall take away the AP tube-wells off the Grid, hence a lot of problems related to Distribution System / Discoms tariff including non – payment of subsidy, shall be resolved and would assist in turnaround of the Discoms.

In view of the above, the Commission feels that the entire gamut of RE Subsidy including its administration needs to be looked into for improving efficiency in delivery of electricity and ensuring quality supply of electricity to the consumers in Haryana at a reasonable rate.

Director (Tariff)
HERC

No. HERC/ Tariff/ SV-2/2015/1685-1686

Date: 14.09.2015

A copy of the above is forwarded to the following for information please:-

1. The Managing Director, Uttar Haryana Bijli Vitran Nigam Limited, Vidyut Sadan, Plot No. C-16, Sector-6, Panchkula
2. The Managing Director, Dakshin Haryana Bijli Vitran Nigam Limited, C-Block, Vidyut Sadan Vidyut Nagar, Hisar- 125005