MR. PRAVEEN KULKARNI, CHAIRMAN, KK NESAR PROJECTS PRIVATE LIMITED

Use Viability Gap Funding to develop Rural India

Every taluka level administration can be made "Energy Security Aware" with distribution of wealth generated with a learned, transparent, sustainable business plan. The plan includes funding from the government with mentoring and controlling stakes to offer low cost renewable energy to the India's common man. This will also help reduce the current account deficit due to diesel subsidy or through accelerated depreciation (i.e present tax saving (avoidance) schemes only for corporate company).

The present draft policy for JNNSM Phase II on viability gap funding (VGF) will only allow the private companies to have 200% equity due to policy guidelines which support the early exit plan concept of many corporate companies i.e take advantage of accelerated depreciation & VGF and then sell the project. Later, the new acquirer will approach the Government to increase the tariff by breaking the PPA as has been done in case of many large coal based UMPP project development companies i.e large corporate companies by increasing the tariff too.

Instead the government can look at a different model where 10 MW per taluka will add around 4500 taluka x 10 = 45,000 MW of Solar PV; accompanied with job creation. The business plan looks at hiring experienced project directors of Solar Energy Corporation of India [SECI] and making them responsible for each plant. These project directors are also responsible to govern and mentor through locally hired MCA registered service provider companies for the sustainability.

Following are the points of this plan:

Government has decided to provide the grant up to 30% in the form of Viability Gap Funding for solar projects under JNNSM Phase II.

- It would be more appropriate to establish the projects through the government only with state nodal agencies in each taluka for a minimum capacity of 10 MW by hiring a qualified entrepreneur company which is listed with MCA. This company will be responsible to project management service and plant O&M for 25 years with service fee
- Government shall appoint a project director by hiring a world class EPC company with an energy generation guarantee with their supplied equipment with two years supervision and onsite training to the locally hired entrepreneur company which provides project management support
- Since the government will arrange both equity and debt, the cost of finance will be low and hence low cost energy can be generated and offered to the people.
- Local / rural entrepreneur with local low cost services and local job creation will be a great benefit in each taluka; thereby encouraging distributed generation without much problem in land acquisition. Here the land will be government land; so the cost of project and time to acquire the land will also be reduced
- The distribution lines can also be very well coordinated due to the involvement of state agencies and hence the time and costs will come down
- The plan also does not need to worry of solar irradiation or low kwh generation as the ENERGY ACCESS FOR ALL shall be the criteria even if the 8 to 10% less energy generation takes place in low irradiation area. This can be compensated by solar irrigation pumping through ponds etc by increasing the irrigation lands or such other allied benefits

Solar PV power project in Each taluka will ensure jobs in every taluka and the minimum power in the local grid and even in remote places.

Let SECI become a large project management company to develop 10 to 20 MW solar PV power project in each taluka with state nodal agencies by hiring local companies to outsource the service during project implementation and its operation and maintenance til the plant life with a service fee with cost escalations.

- Following are the suggested project financials with key assumptions with the expected advantages:
- Instead of 30% VGF, this business model envisages only 10% equity and the remaining 20% (i.e 0.2 x 7 cr/MW = Rs.1.4 Cr/MW) can be used for paying the interest subsidy as the total project interest rate assumed is 2% only.
- The Solar PV power tariff can be Rs. 4.5/ kwh with 5% escalation per year for the first 10 years only.
- The ROE for this 10% equity shall give the benefit to the government to cover the project development and project director's cost.
- Normal depreciation is assumed as per CERC guidelines.
- The service provider can be a local company (registered with MCA – Ministry of Corporate Affairs) trained by the EPC company so that local employees can be hired and local lads can get the profits with self employment, so that migration to urban cities can be eliminated and high purchasing power in their villages.
- The O & M charges can be paid to this service providing company with yearly escalations as indicated.
- Option: Irrigation / Agriculture below the solar PV panels through these hired companies can be a bonus to these companies (with necessary security deposit to recover any damages), thus, food Security too, by using the land below the PV panels and also to generate a minimum of 1.55 Million kwh. This kind of projects will use only 2.5 to 3 Acres/MW.
- In order to retain the service provider till the plant life, after debt recovery (i.e 15 years debt payment term), government can incentivize this service provider by transferring the 5% of depreciated asset value from 16th year of service and also pay 5% of Energy generation benefits.
- So, acquired asset can't be sold to any third party till the plant life. If this service provider severe the ties or service contract, then, that company will not be eligible for 5% project stake nor will be eligible to receive the 5% equivalent energy generation benefits. Thus, we can ensure good services with long term private contract without increasing the government head count.
- The financials can be improved with further low cost interest rates as few state government have provided loans around Rs.2100 to large corporate AUTO companies at 0.15% per year for a term period of 20 years.