POLICY BARRIERS FOR RE DEPLOYMENT: STAKEHOLDERS' FEEDBACK

As part of WISE's Karnataka RE initiatives, WISE invited views of stakeholders from different RE sub-sectors regarding prevailing policy barriers to RE development in Karnataka. Here is a summary of their views.

1. GENERAL POLICY BARRIERS

a) Need for long-term perspective in policies: The Karnataka RE policy 2009–14, as well as Solar Policy 2011–16 notified by the Government of Karnataka need to be articulated with medium to long-term perspectives, in line with the 12th and 13th five-year plans, (FY 2012–17 and FY 2017–22). This will provide greater policy and regulatory certainty to the investors and will generally help in attracting more investment in the state.

b) Land identification and allotment for RE projects: Clause 7 (i) under the RE policy states that necessary amendments to Sections 79(a), 79(b), and 80 of the Karnataka Land Reform Act would be made to enable the RE project developer to purchase private land directly from the owners rather than through Karnataka Industrial Area Development Board (KIADB) which delays land acquisition and the project commissioning schedule. This needs to be expedited.

c) Issues with regard to first right of refusal in case of RE-based generation: Clause 10 (ii) in the RE policy stipulates that the state government reserves the first right of refusal in respect of purchase of power produced by renewable-based power projects, which is against the basic principle of the Electricity Act, 2003. The RE project owners should be allowed to sell electricity to any entity of their choice.

d) Akshaya Shakthi Nidhi (Green Energy Fund): The announcement made in the RE policy about the creation of this fund has not been operationalised till now. This should be done urgently and it should be ensured that the cess is fully passed on to the Karnataka Renewable Energy Development Ltd (KREDL) and proper norms are laid down to ensure its effective utilisation for RE development.

e) Evacuation arrangement and sharing of expenses: Clause 9 (iv) needs to be amended in line with the Central Electricity Regulatory Commission (CERC) guidelines for clarity on the interconnection point, and the scope for the developers and the Karnataka Power Transmission Corporation Ltd (KPTCL) needs to be re-assigned.

f) Assessment of the future of conventional power: A realistic and down-to-earth assessment of the problems confronting the conventional sector would be necessary as we plan for a transition to renewable power. The current business-as-usual policy needs to change.

g) Procedural aspects related to power purchase agreements (PPA): Clause 10 (viii) demands witnessing all PPAs by state regulators. It is understood that all PPAs to be signed with the developers go to the state regulator. There is a standard PPA authorised by the Karnataka Electricity Regulatory Commission (KERC) and hence the procedure of witnessing of each project PPA by KERC may be reconsidered and changed in line with the practice in other states.

2. SECTOR–SPECIFIC ISSUES

Wind Power

a) Removal of certain wind criteria: The KREDL notification (Ref no. KREDL:011WIN:2011 dated 2/Sept/2011) regarding the removal of wind power density criteria, accelerated depreciation withdrawal by MNRE, and removal of turbines if the capacity utilisation factor of a turbine is less than 20%, is not based on facts. This notification may be reconsidered.

b) Insisting that the developer must state whether he or she is opting for PPA or wheeling and banking at the time of execution of agreement: It must be noted that providing such details would be possible only at the time of capacity transfer.

c) Imposing a condition that developers should sell the generated power to the ESCOMs through PPAs: Of late, Government Orders for allotment and enhancement are issued subject to this condition. This should be done away with (both for captive or third-party sale) since it is for the investor to decide whether to sell power to the Electricity Supply Companies (ESCOMs) or to opt for wheeling and banking.

d) Insisting on providing the details of survey number, name of the village, area required, etc., at the time of agreement: As the exact location of the wind turbine can be determined only after wind study, it is not possible to give such details at the time of agreement. This can be provided at the time of capacity enhancement and capacity transfer.

e) Project location information: Information on whether the project is on forest, revenue or private land will be available only after the clarification is issued by the concerned department, i.e. Forest / Revenue. This clarification can be obtained only after the feasibility of the project is known, i.e. once the study is completed.

f) Wheeling and banking agreements: The KPTCL and the state load despatch centre (SLDC) refuse to sign the wheeling and banking agreements until the project gets an interconnection approval. The generation made between the period of signing the wheeling and banking agreement and commissioning is not considered for payment or even adjusted for power. This in turn creates a huge generation loss for the investor.

g) Relaxations required from forest department: The forest department demands "dual" lease rent for the same land; one already collected by the Govt. of India, and another demanded by the state forest department for the same land. Marginal shifts in the location of wind electric generator (difference between the location shown on the drawing and on site location) are treated as "Violations of Forest Conservation" Act. Exorbitant payments are charged towards medicinal plantation without any base.

h) Reform in capacity allotment: A large number of players are sitting on huge allotments for years without making any progress. No fresh allotments should be given to existing major allotees, and allotments older than the specified timelines should be cancelled.

i) Evacuation constraints: Evacuation infrastructure is a major constraint in some areas like Gadag and Chitradurga.

Solar Power

a) Identification of land: The Government of Karnataka may identify lands solely for solar projects, similar to the solar park policy of Gujarat and a suitable agency may be entrusted with the responsibility of building a solar-land bank in the state.

b) Power evacuation issues: Under the NTPC Vidyut Vyapar Nigam (NVVN) scheme of the Jawaharlal Nehru National Solar Mission (JNNSM), solar power projects are to be connected to minimum 33 kV. Further, CERC mandates connection to minimum 33 kV for inter-state sale of solar generation. However, Karnataka mostly has 11 kV substations. Although the state solar policy allows power evacuation through lines of 11 kV and above, developers will be the losers in the case of NVVN scheme and inter-state sales.

c) Bundling of conventional power: As per the concept of NVVN, bundling of conventional power with solar power at the state level may be allowed to utilities so that the burden of costly power can be reduced and the utilities will get firm power. A separate methodology may be formulated with defined norms for bundling of power. KREDL needs to file a petition in this regard.

d) Reliability of satellite-based solar radiation data: This is a major concern for developers. The state government needs to set up its own solar radiation data collection stations in order to facilitate accelerated development of solar projects in the state.

e) Working plan for tapping of rooftop solar: The state government should formulate a working plan for tapping rooftop solar potential (assessed around 8,460 MW).

f) For developing rooftop SPV plant, the following policy measures should be taken by the state government:

- A grid-standard should be formulated by a technical committee of the state government.
- Net metering should be promoted.
- Imported inverters which are being used for net metering (since there are no local manufacturers) should be tested and certified for system islanding.
- Karnataka government can promote a model solar city where grid is reliable (e.g. Bengaluru) by implementing PV grid-connected rooftop systems wherein a house owner could lease the rooftop system or shall be given a green incentive on the basis of generation from the rooftop PV system installed.

g) Training of local people: The Government of Karnataka should train local people, especially ITI and diploma holders, in system installation through the solar training facility installed at KPTCL. More training programmes need to be conducted in the regional language.

Bio-Energy

a) Increasing cost of biomass: In Karnataka, rice husk is the major biomass used for power generation along with other agro-residues and fuelwood. The cropping pattern and variation in production mainly affect the residue generation. Further, increased usage by other industrial activities is increasing the demand for agro residues. The price also depends on the opportunity cost, as biomass is normally available for a limited span of time. Also, increasing cost of petroleum fuel and low bulk densities of biomass further increase the cost of transporting biomass and in turn make the operation unviable.

b) Policy development for energy plantations: If biomass-based power generation is to survive in Karnataka, a policy of dedicated energy plantations will have to be evolved.

c) Coal linkage and related issues: Biomass-based power projects are allowed to use only 15% of coal for meeting the shortages in supplies of biomass for continuous operations. As the quantity of biomass available is less, these projects have to meet their requirement through open market at higher costs as compared to the availability through long-term linkages and contracts. The MNRE norms for coal usage may be allowed.

d) Availability of sugarcane and consequently bagasse for co-generation projects: This is completely dependent on the monsoon pattern and the cropping patterns. As this industry is heavily dependent on the cane cycle, its availability is decided on the crushing season of sugar factories. Availability of cane for crushing, increasing cane prices and transportation costs are affecting the project operations. Further, for extended days of operation of co-gen projects, biomass is also used, and due to this multiple usage, its availability for co-gen projects and linkage of coal for such projects create problems.

e) Urban Waste Handling: Municipal Solid Waste (MSW) handling rules have clearly defined the responsibilities of Urban Local Bodies (ULBs) in scientific processing of MSW. However, there is lack of proactive measures and initiatives from many of these ULBs. Further, waste-to-energy (WTE) projects depend on governmental approvals for many aspects. Low awareness and inadequate information of ULBs about MSW projects, the approval process, and absence of standard bidding documents are some of the barriers to the development of waste-to-energy projects.

f) Delays in land acquisition for WTE projects: Not-in-my-backyard (NIMBY) syndrome, environmental clearance issues, increasing cost of lands in urban suburbs, and social opposition by neighbouring residents to such projects, are some of the issues which delay the land acquisition process and increase project costs.

g) Free of cost waste at the project site: Although the disposal of waste is the responsibility of ULBs, it has been observed that they expect royalties from project developers for delivering the MSW to the project site. This further adds to the project cost and affects the project's viability. Also, getting the required quality and quantity of waste on a regular basis is an issue because of changes in waste generation pattern; intervention of ULBs, waste collecting agents/contractors and project developers/operators; and affects the project operation. Further, waste received at the project site is un-segregated and the project operator is required to segregate the waste as per requirements, which adds to the project's operational costs.

h) Issues and delays in financial closure of WTE projects: Low energy content of the waste, higher project costs, higher operation and maintenance costs, non-availability of indigenised technologies and equipment, lack of expertise in assessing such proposals at financial institutions, and few success stories, are some of the issues that delay the loan approval process. Investment in such projects is considered unsafe because of the short-term returns; therefore, financial institutions expect more equity from the project developer in most of the cases, which limits the investment capacity of the project developer.

Small Hydro

a) Water Royalty: Water royalty charge is a state subject in India and varies from year to year. The issues that need to be addressed are, whether it is appropriate to consider water royalty in the tariff determination process; whether water royalty is to be treated as a pass-through thereby ensuring that consumers will pay the actual amount of water royalty notified by the government, and that developers are protected from the risk of lower pass-through of water royalty.

b) The GIS database could be further strengthened by including the technical specifications and operational performance data of the commissioned small hydro stations in the state.

c) Land allotment and project clearance procedures should be simplified to speed up small hydro power development.