RE-booting the Power Sector

* Radhika Jha, IAS



The world order is witnessing the most unprecedented times since its existence. Never before has it happened that the entire human race of around seven billion is only thinking of one issue - the Covid-19! This single five-letter word is dominating the thought process of every individual these days. Cutting across countries, class, age, professions, sectors and all the barriers that were ever thought of, the Coronavirus has penetrated every living space on our planet. Everyone is suffering in one way or the other and is trying to strategise ways to save their physical, mental and financial health in the wake of this pandemic that has enveloped the entire globe. The mighty

The Department of Energy and Renewable Energy should be merged at all levels so that the policies and their implementation is better managed."

nations are crumbling under the health and economic duress without any clear understanding or road map. It started as a health pandemic but has now become the worst economic pandemic of the human survival. Everyday there are new researches, protocols and economic strategies increasing the confusion and gloom but maybe we can find some silver lining in this as well! The economic ramifications have cast a dark shadow on all the sectors, including the Power sector, but the old adage of 'Light after darkness' indicates that we have to reinvent and recreate the sector to ensure the 'light' (power) in a sustainable manner for the entire populace.

Power sector is the backbone of all activities and is also the most acknowledged barometer of development across countries. In the wake of Corona virus killing most of the industrial and commercial activity, the power demand has nose dived to the lowest ebb. The global energy demand has declined by 5-6%, whereas in India, the power demand has dropped by around 20-25% in the last two months.

Renewable Energy (RE) has been the cornerstone of power sector growth in

the last decade. Global renewable generation capacity was about 2537 GW till the end of 2019 and India's RE potential was around 87 GW, accounting for about 23% of India's total installed capacity. Challenges in conventional sources of power leads to gigantic opportunities for expansion in this space like, flexibility in responding to load variation, long term pricing, availability of fuel, impact on environment etc. Solar, Wind, Small Hydro etc. are also installed successfully without any fixed costs within a reduced time frame of 9-10 months catering to local needs with minimum distribution costs. This actually should become the fulcrum of rebooting our RE strategy.

Establishment of floating solar power plants is surely the next breakthrough as it saves precious land. The need of the hour is to encourage Hydro-Solar Hybrid models as they compliment each other effectively. Pump storage hydro plants should be made wherever possible. Solar could be made mandatory for all new buildings and the new scheme of Rooftop solar can be extended to Government Institutes as well on account of their default payments.

Director Today, February 2021

Biomass is an area that is not fully exploited and in this direction, Uttarakhand has formulated the "Policy for Power Generation from Pine needles and Other Biomass, 2018", a pioneering initiative internationally. With the installation of these decentralized green power projects, huge employment opportunities shall be created in the upper Himalayas involving an investment of about INR 1500 crores in times to come. Invaluable forest resources will be saved as devastating forest fires shall be arrested by collection of these combustible pine needles. This initiative shall also prevent migration from the remote regions by promoting livelihood enhancement. As of now, total 38 plants of 1060 kW have been allocated to the local developers and 4 plants of 25 kW have been installed as well. Similar policy innovations can also be adopted by other States for development of 'Green Energy" paving way for establishment of 'Green local economies.

As per IRENA report, growth in hydro worldwide was unusually low in 2019, possibly because some large projects missed their expected completion

dates. A Ministerial Group (IMG) comprising of Ministry of Power, Environment and Forests, Water Resources, and some State Governments can be constituted. They can create a fresh blueprint which can also include model Detail Project Reports, indicating timelines for completion of projects, measures to control undue cost escalations etc to make hydro sector viable. This IMG may suggest ways to provide VGF to Discoms for purchasing power from RE sources that utilize indigenously manufactured solar PV panels, use battery for storage, have more pump storage hydro plants and likewise. Incentives or price preference should also be given to manufacturer of solar panels, battery etc. under the 'Make in India' mandate. Government of India's Hydro Policy of 2019 is a momentous step to propel the Hydro sector but the follow-up measures of granting viability gap fund etc needs to be reviewed regularly.

The Department of Energy and Renewable Energy should be merged at all levels so that the policies and their implementation is better managed. Livelihood opportunities can be increased in post pandemic times by promoting manufacturing of small LED lights, equipments by Self Help Groups. Uttarakhand State has started such production under the aegis of "Ujala Mitra" and "Gram Light" programmes thus promoting employment through green power.

In these times, when the key words of all conversations revolve only around focusing on good health, protecting the environment, rejuvenating and reforming ourselves, the power sector can also take a cue and RE-boot itself in a holistic manner around the cornerstone of RE-newable Energy and RE-forms.

*Mrs. Radhika Jha, IAS serves as the Secretary, Department of Energy & Renewable Energy, and also as the Secretary to Hon'ble Chief Minister, Government of Uttarakhand State, India. She is also Chairperson of Power Generation, Transmission & Distribution Corporations of the State of Uttarakhand.

The author wrote this article during the pandemic, in June 2020. Please refer to the data quoted in the article accordingly

