

EXECUTIVE SUMMARY

1. INTRODUCTION

Power is a critical element of infrastructure for economic development and for improving the quality of life, therefore the reach of electricity should be to all the citizens of the country particularly to the poor. Accelerated development of Renewable Energy sources such as sunlight, wind, water and biomass will have a vital role in the development of power infrastructure, for sustainable development.

Government of India has decided to provide 24 x 7 power to all the citizens of the country. The Government has a great mission of exploiting the Renewable Energy Sources in the country to an optimum level. In line with this mission it has multifaceted plans to tap the huge potential of unharnessed Renewable Energy Resources in an effort not only to supply 24 x 7 power to all but also to reduce the GHG emissions. These plans include about 100 GW of solar power, 60 MW of Wind power, 5 MW of power from small hydro plants and 10 MW from Biomass and Bagasse cogeneration plants in order to achieve 175 GW target for installed Renewable Energy capacity by 2022 .

2. RENEWABLE ENERGY SCENARIO IN INDIA (OVERVIEW)

Power generation from renewable sources is on the rise in India, with the share of renewable energy in the country's total energy mix rising from 13% as on 31.12.2014 to 20.8% as on 31st Oct., 2018. India has about 72GW of grid connected installed renewable energy capacity as on 31 October, 2018. Wind accounts for about 48% of the capacity, with 34.6 GW of installed capacity, small hydro power (4.5 GW), bio-energy (8.8 GW) and solar energy (24.0 GW).

3. STRATEGY IN PREPARATION OF COMPENDIUM

All the State Governments in the country have notified their respective policies on Renewable Energy Sector and all the State Regulatory Commissions have announced specific Regulatory and Tariff orders for renewable energy projects taking into account availability of various renewable resources. With the increasing importance of Renewable Energy, these provide as the basic enabling framework and guidance in the respective territory / locations. IREDA had brought out a Compendium of Regulatory and Tariff orders issued by CERC and State Regulatory Commissions on Renewable Energy Sector in India in the year 2015, which was compiled by the expert team of Central Board of Irrigation & Power. Since then, a lot of new Regulations and Tariff orders as well as amendments to the existing regulations and tariff orders have been issued by CERC and SERCs in respect of renewable energy sources and more in particular for solar after the Government of India launched Jawaharlal Nehru National Solar Mission (JNNSM). Even a few of states have for the first time brought out their Regulations on RE generation. The need for a comprehensive and authenticated compilation of the relevant information was observed by MNRE and IREDA. CBIP offered its services for preparation of a Compendium of Regulatory and Tariff orders issued by CERC and State Electricity Regulatory Commissions on Renewable Energy Sector in India to act as an aid to Investment Promotion in the area of Renewable Energy Sector.

The compendium has been prepared by CBIP experts having rich experience in the field. The experts worked out the following strategy for the preparation of Compendium:

- ***Collection of Information/ Data***

The data/information in respect of Regulatory and Tariff orders issued by CERC and State Regulatory Commissions on various Renewable Energy sub-sectors, e.g. Solar Energy, Wind Power, SHP, Bagasse Cogeneration, Bio-mass Power, Waste to power etc for their respective jurisdiction was collected by visiting the websites, by personal contact, phone calls, multiple emails, follow-ups, personal visits etc., to have authenticated information.

- ***Compilation***

The collected Information/ data was available in different forms and formats. Many orders were re-typed and edited for corrections and completeness to make them suitable for inclusion in the Compendium. This data is then edited and consolidated with the latest amendments after careful analysis to bring a complete consolidated order. More than 4000 pages of these orders were involved.

- ***Summary of Individual Regulations / Comparative Summary of Regulations and Tariff Orders for each Sub-sector***

Summary of each individual order in 3-4 pages has been prepared in a standard format for easy understanding.

Further a combined comparative summary for each type of technology, e.g., Solar, Wind, Small Hydro, Biomass/ Co-generation etc. has been prepared for easy understanding and comparison. This combined summary will enable stakeholders to make fast assessment of the various Regulatory & Tariff Orders.

- ***Updation***

Central Board of Irrigation and Power (CBIP) had brought this compendium in the year 2015 on behalf of IREDA. The present compendium is the Revision of this compendium. As the process of declaration of Regulatory and Tariff orders by CERC and SERCs is an on-going process, this Compendium will require to be updated on a regular basis.

4. USEFULNESS OF THE COMPENDIUM

The compendium intends to provide basic knowledge to a developer about the various aspects to be kept in view while formulating a project report for generation from renewable energy sources. The eligibility criteria and qualifying criteria as laid down by regulations and tariff orders issued by CERC and SERCs in regard to renewable purchase obligation (RPO), tariff structure prevailing in various states, the framework for grid connectivity, power evacuation facilities, wheeling and banking charges, incentives for different RE technologies, financial aspects etc. and all those features which a developer should know have all been brought out in this compendium.

For compilation of this compendium, all out efforts have been made to collect all the Regulatory/Tariff orders, consolidate them with the latest amendments, prepare summary of individual order and then formulate a comparative summary for Solar, Wind, Small Hydro, Biomass / Co-generation etc. It was a challenge to make summary of these techno-legal documents in 10% space. Although utmost care has been taken by CBIP experts but there may still be some short comings due to complex and challenging task. In case of any doubt original orders may be referred to. Feedback and suggestions are welcome for further improvement of this document. It is expected that all the stakeholders shall find this document to be useful and handy.