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HIGHER PENALTIES FOR MISSING RPOs: A STEP IN RIGHT DIRECTION

30 August 2022

INTRODUCTION

The Electricity Amendment Bill 2022 has proposed Renewable Purchase Obligation (RPO) for a state should not be below the minimum percentage prescribed by the central government. Failure to adhere to the minimum RPO target would lead to higher penalties. Infomerics Ratings believes that this is a step in the right direction as the increase in penalties for non-compliance of RPOs will force the power Distribution Companies (DISCOMs) to take the necessary steps to meet the annual RPO obligations else pay heavy penalties. This will be a strong deterrent considering their stressed finances. Strict RPO enforcement will ensure a positive trajectory in achieving the country's Renewable Energy (RE) target of 500 GW by 2030.

RE is the comprehensive solution for India to achieve energy security, energy access and reduce the carbon footprints of the national economy. India's sheer size with a population of 1.3 billion and a huge growth potential will lead to energy demand in the coming years unlike any other country in the world. India aims to reach net zero emissions by 2070, meet fifty percent of its electricity requirements from RE sources by 2030 and reduce emissions intensity of its GDP by 45 percent by 2030, from 2005 level. These targets are ambitious, but India is already well underway in transitioning towards clean energy in the future. India has a total installed generation capacity of 403.76 GW as on June 30, 2022.

Of this the total installed generation capacity, fuel wise still comprises 58.5% from fossil fuels. However, the RE capacity additions backed by government and policy initiatives, has seen a tremendous growth in the last few years and stands at quarter of the total installed generation capacity. Globally, India is fourth in overall installed RE capacity.

The Government of India has launched various schemes to encourage generation of solar power in the country like Solar Park Scheme, Grid Connected Solar Rooftop Scheme to name a few, and various policy measures like waiver of Inter State Transmission System charges and losses for inter-state sale of solar and wind power for projects that were commissioned by March 2022, a must run status, guidelines for procurement of solar power though tariff based competitive bidding process, guidelines for development of smart cities, amendments in building bye-laws for mandatory provision of roof top solar for new construction, infrastructure status for solar projects, raising tax free solar bonds, providing long tenor loans from multi-lateral agencies and declaration of trajectory for RPO including Solar and Non Solar RPOs to achieve international commitments.

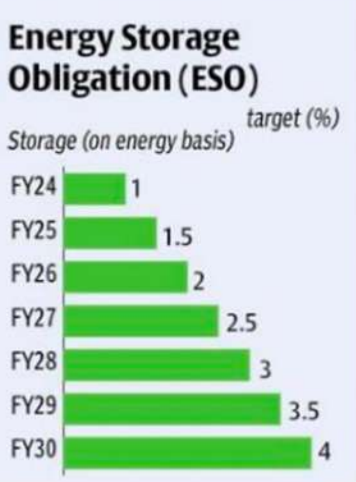
Electricity Act 2003 and the National Tariff Policy 2006 introduced RPO, a mechanism by which the obligated entities like DISCOMs and open access consumers are required to purchase certain percentage of electricity from RE sources. RPOs are categorized as Solar and Non-Solar RPO. The states which are deficit in RE generation can purchase Renewable Energy Certificates (RECs) from surplus states or through power trading platforms. With an objective to achieve the target of 175 GW of RE by 2022, including solar energy capacity of 100 GW, the government notified the target RPO trajectory up to year 2022 at 21%, of which solar being 10.50% (actual achievement till the end of July 2022 was 114.44 GW RE including 57.98 GW of solar power). However, compliance of obligated entities with RPO targets has been consistently poor across majority of the states.

In March 2021, the 17th Standing Committee on Energy report noted that RPO compliance across India varies from 3.7% in Manipur to 250% in Karnataka. The states which meet their RPO targets are the ones which are resource rich such as Karnataka, Rajasthan, Andhra Pradesh, Sikkim, Himachal Pradesh, and Tamil Nadu. Further low demand in the REC market and the lack of an effective mechanism to share RPOs of different states create a deterrent for RE resource-rich states to develop RE capacities beyond their state obligations. Many states also did not notify revised RPO targets aligned with 2022 capacity obligations. SERCs are also allowing carry forward or waiver of RPO which should not be permitted. There is a lack of clear regulation to enforce RPOs across states.

Recently the central government announced the new RPO trajectory from FY2023 to FY2030 whereby the states would need to meet a quarter of their energy demand from renewable energy sources and increase it to 43 per cent by end of FY2030. The new set of targets include solar, wind, hydro and also energy storage for the first time for states to mandatorily purchase. The stringent targets are in line with India's ambitious 500 GW of RE commitment by 2030 at the Glasgow COP26 climate summit.

Renewable Purchase Obligation (RPO) *target (%)*

Fiscal year	Wind	Hydel	Others	Total
FY23	0.81	0.35	23.44	24.61
FY24	1.6	0.66	24.81	27.08
FY25	2.46	1.08	26.37	29.91
FY26	3.36	1.48	28.17	33.01
FY27	4.29	1.8	29.86	35.95
FY28	5.23	2.15	31.43	38.81
FY29	6.16	2.51	32.69	41.36
FY30	6.94	2.82	33.57	43.33



Source: Ministry of Power

In view of the dismal compliance of RPO targets by different states appropriate penalties and enforcement mechanisms need to be first put in place. The Electricity Amendment Bill 2022 has proposed to incorporate penalties if the minimum RPO requirement is not adhered to. Also, SERCs can specify the minimum RPO above the central government laid RPO target but the minimum for a state cannot be below that.

For the states that do not adhere to the target, the penalty sum is to be calculated between twenty-five paise and thirty-five paise per kwh for the shortfall in purchase in the first year of default and between thirty-five paise and fifty paise per kwh for the shortfall in the subsequent years.
Enforcement of the proposed RPO trajectory by the states is critical to achieve India's RE vision. However, many factors ail capacity addition in India's RE sector. India has largely been import-dependent when it comes to solar modules, batteries for power storage and for manufacturing other renewable energy systems. This is despite imposition of safeguard duty from July 2018. With the government's policy shift towards 'Aatmanirbhar' domestic manufacturing has become primarily important. The government has introduced a 40% import duty on photovoltaic modules & 25% duty on photovoltaic cells from April 1, 2022, a move to protect domestic manufacturers from competing exports.

Also, solar rooftop is expected to be a laggard in achieving capacity addition target of the country. Financing of large capacity additions would require innovative financing options. Innovative concepts like solar-wind Hybrid projects, floating solar, manufacturing (module) linked projects are needed to boost the capacity addition in the RE sector. Another major problem is that the financially distressed DISCOMs are known to be delaying payments to RE generators.