## NITI AAYOG AND IEA LAUNCH 'RENEWABLES INTEGRATION IN INDIA 2021'

Relevant for: Environment | Topic: Environmental Conservation, Sustainable Development, and EIA

A report on "Renewables Integration in India 2021" was jointly launched by Dr. Rakesh Sarwal, Additional Secretary, NITI Aayog & Mr. Keisuke Sadamori, Director of Energy Markets and Security, IEA on 22nd July, 2021. The report is based on the outcome of three states workshops held with the Governments of Maharashtra, Karnataka and Gujarat to understand the specific energy transition challenges faced by these renewable-rich states. The report uses IEA modelling results to show the effects of different flexibility options on the power system.

The report highlights that India's power system can efficiently integrate renewables (175 GW by 2022 and 450 GW by 2030), but it would require identification of resources and proper planning, regulatory, policy and institutional support, energy storage and advance technology initiatives.

Indian states need to employ a wide range of flexibility options – such as demand response, more flexible operation of coal based power plants, storage, and grid improvements – to transition to cleaner electricity systems. Larger shares of renewables can be better managed by shifting time of use in agriculture. Time of Use (ToU) tariffs will be an effective tool to incentivise demand side management and encourage flexible consumption.

Mr. Keisuke Sadamori, the IEA Director of Energy Markets and Security, indicated that the joint report underscores IEA's commitment to provide support to India with its clean energy transition agenda.

Launching the report, Dr. Rakesh Sarwal, Additional Secretary, NITI Aayog, said that the joint report provides useful suggestions for the states to consider to best manage their integration challenge.

Mr. Amitesh Kumar Sinha mentioned that after 2023-24, RE integration will become an issue and could be addressed through supply and demand side measures. He also emphasized the role of distributed solar which will play a major role in reducing integration challenges. Mr. Vivek Kumar Dewangan, Additional Secretary, Ministry of Power said that the report on renewables integration will serve as repository of vast knowledge for stakeholders in India. He highlighted Government's policies on thermal power plant flexibility and strengthening of transmission network through green corridors and stressed on the need for cost effective solutions for storage technologies.

Mr. Dinesh Waghmare, Principal Secretary (Energy), Government of Maharashtra, stated that Ministry of Power proposed Market Based Economic Dispatch (MBED) model for better optimization of scheduling and economic dispatch of generation capacities purely on economic principles which will replace the current practice of Self Scheduling by Discom.

Dr. N Manjula, Managing Director, Karnataka Power Transmission Corporation Limited emphasized that to absorb maximum RE power, State has shifted 70% -80% agriculture load to the day time, providing incentives to industrial consumers for consuming more electricity and increasing State share in the Green Energy Trading (now, approx. 50%). All these measures have helped to reduce the curtailments, which is almost zero now. Government of Karnataka is in the process of bringing in new RE policy. Mr. K V S Baba, Chairman and Managing Director, POSOCO stated that RE integration can start with proper resources planning and better implementation of technologies, such as Artificial Intelligence, base power system management and smart grid intervention.

Mr. Anand Kumar, Former Chairman, Gujarat Electricity Regulatory Commission was of the view that old regulations needs to be revised and regulatory commissions need to play more proactive role to implement the revised regulations. Smart meters, Time of the Day tariff and overall demand response program would be useful for RE load management.

Sh. Rajnath Ram, Adviser (Energy) concluded the meeting with remarks that the NITI Aayog looks forward to giving continuous support to the state governments in order to support their development plan for affordable, secure and clean power systems of the future.

\*\*\*\*\*

DS/AKJ

A report on "Renewables Integration in India 2021" was jointly launched by Dr. Rakesh Sarwal, Additional Secretary, NITI Aayog & Mr. Keisuke Sadamori, Director of Energy Markets and Security, IEA on 22nd July, 2021. The report is based on the outcome of three states workshops held with the Governments of Maharashtra, Karnataka and Gujarat to understand the specific energy transition challenges faced by these renewable-rich states. The report uses IEA modelling results to show the effects of different flexibility options on the power system.

The report highlights that India's power system can efficiently integrate renewables (175 GW by 2022 and 450 GW by 2030), but it would require identification of resources and proper planning, regulatory, policy and institutional support, energy storage and advance technology initiatives.

Indian states need to employ a wide range of flexibility options – such as demand response, more flexible operation of coal based power plants, storage, and grid improvements – to transition to cleaner electricity systems. Larger shares of renewables can be better managed by shifting time of use in agriculture. Time of Use (ToU) tariffs will be an effective tool to incentivise demand side management and encourage flexible consumption.

Mr. Keisuke Sadamori, the IEA Director of Energy Markets and Security, indicated that the joint report underscores IEA's commitment to provide support to India with its clean energy transition agenda.

Launching the report, Dr. Rakesh Sarwal, Additional Secretary, NITI Aayog, said that the joint report provides useful suggestions for the states to consider to best manage their integration challenge.

Mr. Amitesh Kumar Sinha mentioned that after 2023-24, RE integration will become an issue and could be addressed through supply and demand side measures. He also emphasized the role of distributed solar which will play a major role in reducing integration challenges. Mr. Vivek Kumar Dewangan, Additional Secretary, Ministry of Power said that the report on renewables integration will serve as repository of vast knowledge for stakeholders in India. He highlighted Government's policies on thermal power plant flexibility and strengthening of transmission network through green corridors and stressed on the need for cost effective solutions for storage technologies.

Mr. Dinesh Waghmare, Principal Secretary (Energy), Government of Maharashtra, stated that Ministry of Power proposed Market Based Economic Dispatch (MBED) model for better optimization of scheduling and economic dispatch of generation capacities purely on economic principles which will replace the current practice of Self Scheduling by Discom.

Dr. N Manjula, Managing Director, Karnataka Power Transmission Corporation Limited emphasized that to absorb maximum RE power, State has shifted 70% -80% agriculture load to the day time, providing incentives to industrial consumers for consuming more electricity and increasing State share in the Green Energy Trading (now, approx. 50%). All these measures have helped to reduce the curtailments, which is almost zero now. Government of Karnataka is in the process of bringing in new RE policy.

Mr. K V S Baba, Chairman and Managing Director, POSOCO stated that RE integration can start with proper resources planning and better implementation of technologies, such as Artificial Intelligence, base power system management and smart grid intervention.

Mr. Anand Kumar, Former Chairman, Gujarat Electricity Regulatory Commission was of the view that old regulations needs to be revised and regulatory commissions need to play more proactive role to implement the revised regulations. Smart meters, Time of the Day tariff and overall demand response program would be useful for RE load management.

Sh. Rajnath Ram, Adviser (Energy) concluded the meeting with remarks that the NITI Aayog looks forward to giving continuous support to the state governments in order to support their development plan for affordable, secure and clean power systems of the future.

\*\*\*\*

DS/AKJ

## END

Downloaded from crackIAS.com © Zuccess App by crackIAS.com