INFRASTRUCTURE

Cabinet approves Central Sector Scheme of financing facility under “Agriculture Infrastructure Fund”

Brief Background

On July 8, 2020, the Union Cabinet approved a new pan India Central Sector Scheme-Agriculture Infrastructure Fund (Scheme). The Scheme was launched by the Prime Minister on August 9, 2020. Guidelines for implementation of the Scheme have been notified by the Ministry of Agriculture and Farmer’s Welfare.

What is the objective of the Scheme?

The Scheme is designed to provide a medium - long term debt financing facility for investment in viable projects for post-harvest management infrastructure and community farming assets through interest subvention and financial support.

What are the salient features of the Scheme?

- Banks and financial institutions will provide INR 1 lakh crore as loans to Primary Agricultural Credit Societies, Marketing Cooperative Societies, Farmer Producers Organizations (FPOs), self-help group, farmers, joint liability groups, multipurpose cooperative societies, agri-entrepreneurs, start-ups, aggregation infrastructure providers and Central/State agency or local body sponsored public private partnership project.
- Loans will be disbursed in 4 years starting with sanction of INR 10,000 crores in the current year and INR 30,000 crore each in next 3 financial years.
- Loans will have interest subvention of 3% per annum up to INR 2 crores which will be available for a maximum period of 7 years.
- Credit guarantee coverage will be available for eligible borrowers under Credit Guarantee Fund Trust for Micro and Small Enterprises scheme for a loan up to INR 2 crores. The fee for this coverage will be paid by the Government.
- In case of FPOs, the credit guarantee may be availed from the facility created under FPO promotion scheme of Department of Agriculture, Cooperation & Farmers Welfare.
- Moratorium for repayment may vary subject to minimum of 6 months and maximum of 2 years.
- Agri Infrastructure Fund (AIF) will be managed and monitored through an online Management Information System (MIS) platform which would offer the following benefits:
  - Enable all the qualified entities to apply for loan under the AIF.
  - Provide benefits such as transparency of interest rates offered by multiple banks, scheme details including interest subvention and credit guarantee offered, minimum documentation, faster approval process as also integration with other scheme benefits.
- The National, State and District level Monitoring Committees will be set up to ensure real-time monitoring and effective feed-back.
- The Scheme will be operational from 2020-21 to 2029-30.
ENERGY

Directions issued by MoP to protect the Power Supply System and Network in India

Background:
The Ministry of Power (MoP) passed an order dated July 2, 2020 (Order) in order to protect the security, integrity and reliability of the strategically important and critical Power Supply System (PSS) and network in India.

What was the purpose for passing the Order?

▪ The power sector is a sensitive and critical sector that supports our national defence, vital emergency services including health, disaster response, critical national infrastructure (including classified data & communication services). In addition to this, defence installations and manufacturing establishments, logistics services as well as the entire economy and the day-today life of the citizens of the country are dependent on this sector.

▪ Any danger or threat to power sector has the potential to cripple the entire country.

▪ The vulnerabilities in the PSS and Network mainly arise out of the possibilities of cyber-attacks through malware or trojans, etc. embedded in imported equipment. Hence, the need to protect the security, integrity and reliability of the PSS and Network in the country arises.

What directions were issued in the Order?
The directions issued are as follows:

▪ All equipment, components, and parts imported for use in the PSS and network must be tested in the country to check for any kind of embedded malware/trojans/cyber threat and must ensure that they adhere to Indian Standards.

▪ These tests are required to be done in certified laboratories designated by the MoP.

▪ Any import of equipment/components/parts from "prior reference" countries as specified or by persons owned by, controlled by, or subject to the jurisdiction or the directions of these "prior reference" countries will require prior permission from the Government of India.

▪ Where the equipment/components/parts are imported from "prior reference" countries, with special permission, the protocol for testing in certified and designated laboratories will be approved by the MoP.

Further, the directions are to apply to any item imported for end use or to be used as a component, or as a part in manufacturing, assembling of any equipment or to be used in PSS or any activity directly or indirectly related to PSS.

Our view: The Order assumes national significance and may also further incentivize the vision of an Atmanirbhar Bharat or ‘Self-Sufficient India’. It would be important to ensure that the Order is implemented properly so as to ensure the security, integrity and reliability of the PSS.
Guidelines for payment of compensation in regard to “Right of Way” for transmission lines in urban areas

Background:
▪ On October 15, 2015, the MoP issued guidelines for payment of compensation towards damages with regard to Right of Way (RoW) for transmission lines. Such guidelines had recommended compensation for 85% (eighty five percent) of the land value for tower footing and 15% (fifteen percent) of the land value for RoW of the line for transmission system of 66 kV and above voltage level.
▪ Thereafter, a committee was constituted under the chairmanship of Additional Secretary, MoP (Committee) to analyze the issues relating to RoW for laying of transmission lines in the urban area of the country and to suggest a methodology for payment of compensation on this account.
▪ On July 16, 2020, the Committee’s recommendations were formulated into guidelines (RoW Guidelines) for determining the compensation in “Urban Areas” towards “damages” as stipulated in Sections 67 and 68 of the Electricity Act, 2003 read with Sections 10 and 16 of Indian Telegraph Act, 1885, which is in addition to the compensation towards normal crop and tree damages.

What do the RoW Guidelines stipulate?
▪ Compensation will be at 85% of land value as determined by District Magistrate or any other authority based on circle rate/Guidelines value/Stamp Act rates for tower base area (area bounded by concrete s visible from outside of four legs of the towers) impacted severely due to installation of tower/pylon structure.
▪ Compensation towards diminution of land value in the width of RoW Corridor due to laying of transmission line and imposing certain restrictions would be decided by the States as per categorization/type of land in different places of States, subject to a maximum of 15% of land value as determined based on Circle rate/ Guidelines value/Stamp Act rates.
▪ Additional compensation in form of non-usability allowance up to 15% of the land value for the width of RoW corridor would be applicable in the notified urban areas. Further, no construction activity of any kind would be permitted under the RoW of the transmission line.
▪ For compensation purpose, the width of RoW corridor will not be more than that prescribed and for tower base, the compensation will be paid for actual base width of tower (area bounded by concrete as visible from outside of four legs of the towers). The indicative base width of tower has been stipulated in the RoW Guidelines.
▪ While deciding the technology to be used for laying of transmission lines in RoW constraint areas, various technological options need to be assessed keeping in view the reduction in RoW, feasibility of implementation as well as the overall cost of laying the line. A tentative cost matrix of the available technologies has been provided. The same can be referred by the implementation agencies keeping in view the cost benefit aspects.
▪ Payment of compensation is required to be done through various digital modes of payment such as AADHAR enabled payment system (AEPS), Unified Payment Interface (UPI), etc. wherever feasible.
▪ The payment towards compensation for RoW in urban areas would be one-time/upfront. In case of any other arrangement for payment of compensation, the same needs to be notified by the individual states.
▪ The compensation amount will be payable only for transmission lines supported by a tower base of 66 KV and above, and not for sub-transmission and distribution lines below 66 KV in notified Urban Areas.
▪ All the States/Union Territories must make suitable decisions regarding adoption of the RoW Guidelines since “Land" is a State subject.

Our view: The RoW Guidelines should facilitate an early resolution of RoW issues in urban areas. The clarity provided by the RoW Guidelines should also facilitate completion of the vital transmission lines in urban areas through active support of State/Union Territory administration. However, given it has been left to the States/Union Territories to decide on the adoption of the RoW Guidelines, one would need to wait for the guidelines prescribed by each State/Union Territory.
Guidelines for Tariff Based Competitive Bidding Process for Procurement of Round-The Clock Power from Grid Connected Renewable Energy Power Projects, complemented with Power from Coal Based Thermal Power Projects

Background:


What are the objectives of the Guidelines?

- To provide round-the-clock (RTC) power to the DISCOMs from renewable energy (RE) sources complemented/balanced with coal based thermal power;
- To facilitate renewable capacity addition and fulfillment of renewable purchase obligation (RPO) requirement of DISCOMs;
- To provide a transparent, fair, standardized procurement framework based on open competitive bidding with appropriate risk-sharing between various stakeholders to enable procurement of power at competitive prices in consumer interest, improve bankability of projects and ensure reasonable returns to the investors; and
- To provide for a framework for an Intermediary Procurer as an Aggregator/Trader for the inter-state/intra-state, long-term, sale-purchase of power.

What is the scope of the Guidelines?

The Guidelines have been issued for long term procurement of electricity by the ‘Procurers’, on RTC basis, from ISTS-connected renewable power (RE Power) projects, complemented/balanced with power from coal based ISTS-connected thermal power projects, through competitive bidding.

What are the key highlights of the guidelines?

- Deviation from guidelines: The Procurer would need prior approval of the Appropriate Commission for deviations in the draft bid documents from the Guidelines.
- Agreements related to the site: If the Procurer does not specify a site for RE Project and the RE Project site is selected by the RTC Power Generator, to ensure timely completion and commencement of supply of power, the bidder would be required to submit specified documents, as per the time schedule specified in the bidding documents.
- Energy Mix: The Generator is required to supply power, in RTC manner, keeping at least 85% availability annually and also at least 85% availability during the peak hours. Peak hours would be 4 hours specified in the bidding documents.

The Generator has to offer power such that at least 51% of the annual energy offered corresponds to RE Power, and the balance is offered from thermal sources. The Generator can combine storage for ensuring that it achieves the required minimum annual availability of 85%. However, annually minimum 51% of energy is to be offered from renewable energy sources. This 51% would also include offer from the storage system, provided renewable sources were used to store energy in the storage system.

- Tariff: A composite single tariff for renewable energy, complemented with thermal energy is to be quoted by the bidders.
In order to accommodate the variations in cost of thermal power in the entire energy mix, 25% of the composite tariff would be indexed and adjusted, with the index of domestic coal or the imported coal, as the case may be, as notified by Central Electricity Regulatory Commission (CERC) from time to time.

After adjusting for indexation, the RE supplied would be paid at indexed composite tariff based on the offered RE Power capacity. For thermal component of power, 50% of the indexed composite tariff would be deemed to be the ‘Thermal Fixed Charge Tariff’ and 50% of the indexed composite tariff would be deemed to be the ‘Thermal Variable Charge Tariff’.

- **Bid Structure**: The Procurer is required to invite the bids in power capacity (MW) terms, specifying the total quantum to be contracted by the procurer. A bidder can quote for a part of the total quantum to be procured by the procurer. The minimum quantum of power that can be offered by the bidder should be 250 MW. The bidding parameter would be the composite tariff for per unit supply of RTC power quoted by the bidder. The bidder would be selected on the basis of least quoted composite tariff.

- **PPA Period**: The PPA period cannot be not less than 25 (twenty-five) years from the date of the ‘Scheduled Commencement-of-Supply Date’. The PPA can also be fixed for a higher period such as 35 (thirty-five) years, but in any case, the duration of the PPA is required to be mentioned upfront in the PPA document.

- **Power Procurement**: The Generator is allowed to supply power from the thermal power plant in excess of contracted capacity, to any third party or power exchange without requiring any no objection certificate (NOC) from the Procurer. The Generator can also sell the power which was offered to the Procurer (within contracted capacity) but not scheduled by Procurer, to any third party or power exchange without requiring NOC from the Procurer on day ahead basis.

Penalties have also been prescribed if the Generator fails to achieve the project availability of 85% on an annual basis/during peak hours or if the Generator fails to offer a minimum 51% RE Power.

- **Generation Compensation**: The Generator is entitled to generation compensation in case of grid unavailability or reduced off take by the Procurer. The compensation would be calculated in accordance with the formulae prescribed under the Guidelines.

- **Bidding Process**: The Guidelines have prescribed a single stage, two part (technical bid & financial bid), bidding process. The technical bid would be opened first and the financial bids of only those bidders who qualify in the technical bid would be opened.

Our view: Over the years, renewable energy has been given a boost by the various Governments. However, the intermittent and unpredictable nature of renewable energy and low capacity utilization of the transmission system remains a concern. The Guidelines aim to address this problem by bundling coal based thermal power with renewable energy. Enabling the utilization of thermal power to balance renewable energy and provide round the clock (RTC) power to the DISCOM will obviate the need for DISCOMs to balance power.
RENEWABLE ENERGY

Guidelines for Implementation of Off-Grid Solar Power Packs/Plants in RESCO Mode

Background:


▪ The MNRE had passed an order dated April 24, 2020, whereby they extended the “Off-grid and Decentralized Solar PV Applications Programme – Phase III” up to March 31, 2021. As per the order it was stated that under the extended Scheme, off-grid solar power packs will be installed only in Renewable Energy Service Company (RESCO) mode for which MNRE would issue separate guidelines.

▪ The MNRE issued an Office Memorandum dated July 22, 2020 pertaining to “Guidelines for implementation of off-grid solar power packs/plants in RESCO mode” (RESCO Guidelines) and has attached a model power purchase agreement for the same.

What are the important aspects of the Guidelines?

▪ With an objective to ensure proper repair and maintenance of the off-grid solar power plants to be installed under the Programme and promote efficiencies in operation, it has been decided to introduce RESCO model for such systems. The plants would be eligible for central financial assistance (CFA) at 90% of the benchmark cost. This CFA provided by the MNRE would reduce the financial burden to a significant level, which otherwise results in very high tariff in per unit terms due to smaller size of plants and requirement of storage batteries.

▪ Under the Programme, off-grid solar power plants can be installed in areas where the grid power is not available and areas where grid power though available but not reliable.

▪ The design aspects for isolated off-grid solar plants and for grid connected solar plants have been specified in the RESCO Guidelines.

▪ Under the RESCO model, it is proposed that the vendor will install and operate the solar power plant of capacity up to 10 kWp for at least 10 years and solar PV plants of capacity above 10 kWp for at least 15 years.

▪ The solar power plants will be installed by the RESCO on BOOT basis. After completion of this time period the plant will be handed over to the beneficiary in operating condition. The vendor is required to train at least 2 persons identified by the beneficiary for day-to-day O&M of the solar power plant.

▪ The CFA of 90% of the benchmark cost will be paid upfront on successful commissioning of plant. The MNRE benchmark cost covers cost of complete system, transportation of material at site, installation, commissioning, insurance and AMC for 5 years.

▪ The solar power plant is to be designed to supply Daily Minimum Guaranteed Energy (DMGE) to the beneficiary at the delivery point. The RESCO selected through competitive bidding would install the plant and operate the plant to supply DMGE to the beneficiary organization at the discovered tariff for the aforementioned period. The beneficiary is to make payment to the RESCO according to the DMGE.

▪ The RESCO will undertake to provide the services for the specified period and submit bank guarantee for an amount equivalent to 40% of the eligible MNRE’s CFA.
The RESCO will be selected through open competitive bidding to be conducted by implementing agency. The bidder quoting the lowest tariff for supply of power to the beneficiary organization, will be eligible for award of project.

A representative system of 4 kWp has been considered for estimation of tariff. Average daily solar power generation per kWp of solar panel is considered 2.5 kWh as NE Region has lesser sunny days and low solar radiation levels. Therefore, the daily minimum guaranteed solar power would be 10 kWh. With battery back-up of 7.2 VAh per Wp total battery requirement would be 28.8 kWh. It is assumed tubular-gel batteries having life of 4-5 years would be used and required to be replaced only once (at power producer’s cost) during the contract period of 10 years. The MNRE benchmark cost has been considered for arriving total cost of project.

The developer is to arrange for a loan at the rate of 12% for investment in the project.

Bidders are expected to make all necessary efforts to bring down the tariff by using prudent technical and financial efficiencies.

The Power Producer i.e. RESCO and Power Purchaser i.e. beneficiary organization are to sign a PPA. The power producer would be responsible to design, install, operate and maintain the solar power plant to supply DMGE to the beneficiary and beneficiary will make payment for the DMGE at tariff decided through bidding process on monthly basis.

The project is to be installed and commissioned by the successful RESCO within 3 months from placement of award by implementing agency. A maximum extension of 3 months can be provided to RESCO, provided the reasons for delay are beyond the control of the RESCO. Any delay beyond 3 months will result in cancellation of award.

All solar power plants sanctioned under the Programme would be provided with a remote monitoring system. The access of the remote monitoring system would be provided to implementing agency and the MNRE.

The systems installed under the Programme are to meet the technical specifications and construction standards as specified by BIS and the MNRE from time to time.

Only indigenously manufactured PV modules can be used.

Our view: There are certain rural areas in the country where conventional grid is yet to reach or reliability of grid supply is not up to the desired level. Off grid solar systems, working independently or in tandem with the grid will be a viable solution for increasing energy access in these areas.
MERC’s order on commissioning of solar projects for open access

Background:

▪ On July 5, 2020, the Maharashtra Electricity Regulatory Commission (MERC) passed an order in a petition (Petition) filed by Navalakha Translines (Petitioner 1) and Mahindra CIE Automotive Limited (Petitioner 2) seeking redressal of wrongful rejection of their request of open access permission (OA Permission) for November 2019.

▪ Petitioner 1, a solar generator had set up a 10 MW solar generation plant at Osmanabad District of Maharashtra in 2013 and applied for permission to commissioning (PTC) for 2 solar generating plants on September 25, 2019. Maharashtra State Electricity Distribution Co. Ltd (MSEDCL) granted PTC to the solar project on October 22, 2019 stating that Petitioner 1 should get OA Permission within 30 days.

▪ Petitioner 2, an open access consumer executed an agreement for purchase of electricity with Petitioner 1 and applied for short term OA Permissions in respect of its 2 units at Bhosari and Chakan with effect from November 1, 2019. The application made by Petitioner 2 for sourcing power from solar power plant of Petitioner 1 was rejected by MSEDCL on the ground that the generating metering location was commissioned after October 10, 2019 (Cut Off Date), being the last date of application for short term open access for November 2019.

What were the submissions of Petitioner 1 and Petitioner 2 (collectively, Petitioners)?

The Petitioners challenged denial by MSEDCL of OA Permissions by contending as follows:

▪ The project was commissioned on October 25, 2019 (later than the Cut Off Date) due to the delay on the part of MSEDCL in issuing PTC.

▪ Commissioning of solar plants and Special Energy Meters (SEMs) was done prior to the period for which OA Permissions was asked for.

Additionally, the Petitioners relied upon the judgment of the Hon’ble Supreme Court in Ashok Kumar Kalra v/s. Wing CDR. Surendra Agnihotri which held that procedural rules should not be interpreted so as to defeat justice.

What was the decision of the MERC?

▪ Whilst adjudicating on the issue whether the rejection of OA Applications by MSEDCL was justified, the MERC noted that the Maharashtra Electricity Regulatory Commission (Distribution Open Access) Regulations, 2016 (DOA Regulations) do not require the submission of the commissioning certificate for an open access application. However, the MERC noted that the procedure formulated by MSEDCL requires the submission of commissioning certificate at the time of filing the open access application.

▪ The MERC concluded that the project had been commissioned well before the commencement of open access. Accordingly, the MERC directed MSEDCL to grant short term open access to Petitioner 2 and allowed a period of 1 month from July 5, 2020 for adjusting the credit units in the energy bills of Petitioner 2.

Our view: The aforesaid order resolves the alleged contradiction between the DOA Regulations and the procedure formulated by MSEDCL. Thus, it may be inferred that solar projects in Maharashtra need not be commissioned at the time of filing the open access application.
Government of Andhra Pradesh Modifies Scheme for Providing Nine Hours of Day Time Free Power Supply to the Agricultural Sector

Background:
On June 15, 2020, the Government of Andhra Pradesh (AP Government) notified the Scheme for providing 9 hours day time free power supply to the agricultural sector on a sustainable basis (Scheme). The AP Government has already been providing farmers in the state with 9 hours of continuous power. However, due to the increasing number of pump-sets that are being used, and the increasing cost of supply of power, the cost of subsidizing the power provided to the farmers is expected to rise substantially. In order to address the needs of reducing the cost of providing this power and service, the AP Government initiated the Scheme aimed at harnessing solar energy as the cost of production of solar energy is less than the average power purchase cost of distribution companies (DISCOMS). The Scheme was modified by the AP Government on July 17, 2020 (Amendment).

What are the key features of the Scheme?
The AP Government determines the agriculture subsidy based on the average costs of purchasing power, transmission, and distribution. The Scheme is designed to replace the average power purchase cost with solar power so as to provide 9 hours of free day time power to agricultural consumers. The AP Government will continue to pay the average cost of transmission and distribution in addition to any balancing costs, back-down costs after adjusting the revenue from Renewable Energy Certificates (REC) in order to integrate more renewable energy into the grid.

- The Andhra Pradesh Green Energy Corporation Limited (APGECL) is to be the executing agency that will overlook the setting up of 10,000 MW of solar energy required by the Scheme in a phased manner. The power is to be procured through competitive bidding; procurement of decentralized solar power when feasible; through viability gap funding-based bidding for up to 2,500 MW; and through the development of Ultra Mega Renewable Energy Power Parks (UMREPP) under the UMREPP scheme of issued by the Ministry of New and Renewable Energy.

- Bids for the projects are to be invited under the Build – Operate – Transfer Model with a flat tariff for the first 15 years and prefixed reduced tariff thereafter to meet the O&M expenses for the balance contract period of 15 years. The solar project developer would be required to maintain a plant load factor of 18% during each year of the contract period. The project is to be transferred to APGECL at the end of its useful life. However, this provision has been amended in the manner discussed below.

- The Government of AP, through APGECL, will pay monthly energy charges to solar power developers. Energy charges were to be paid to the projects for a period of 30 years from the date of commissioning, however, the time period of the tariff model has now been reduced to 25 years via the Amendment.

- The land required is to be made available to the project developers on a lease basis and is likely to be a mix of government lands, assigned lands¹, and patta lands². The government lands are to be made available on a long-term lease basis. The assigned/patta lands are to be leased/purchased by the developers. All deeds pertaining to lease/purchase are to be exempted from payment of any stamp duty and the registration fee is to be fixed at INR 1 for every INR 1,000 of the value of the document.

---

¹ Assigned lands are defined to mean lands or house sites assigned by the AP Government to the landless or homeless poor persons under the Andhra Pradesh Assigned Lands (Prohibition of Transfers) Act, 1977.

² A ‘patta’ is a legal document that is issued by the AP Government which is sufficient to identify the ownership of a particular plot of land. Usually patta lands are empty plots that have had no development.
The DISCOMs are to hold the rights to the RECs generated from potential projects implemented. The AP Government will pay any applicable charges (network, balancing etc.) to the DISCOMs after netting off the revenue generated from the sale of RECs.

Free banking of energy is to be provided to the solar projects for their entire life. The settlement of the energy charges is to only be done at the end of the year with any surplus power to be treated as free power to the DISCOMs. Additionally, the projects under the Scheme are to be exempted from any village or panchayat approvals.

What amendments have been brought in?

The AP Government received recommendations regarding the tariff model proposed in the Scheme, in consideration of the likelihood of increase in basic customs duties levied on solar cells/modules and the consequent increase in the tariff rates. It was projected that this increase would result in higher cash outflows from the exchequer by INR 300 crore to INR 400 crore per annum in the initial 15-year full tariff period. As a result, the AP Government, via the Amendment has changed the tariff structure to a levelized tariff (tariff rates based on the lifetime costs of the projects divided by the expected energy production) for a period of 25 years as opposed to 30 years (divided into a full tariff period for 15 years and O&M tariff period of 15 years).

The Scheme initially envisaged a lease rental of INR 31,000 per acre per annum (with an escalation of 5% for every 2 years) to be paid by developers to the AP Government for government lands. As the high rentals would then be built into the tariff rates quoted by the developers, the outlay in tariff by the AP Government would be significantly high. In response, the Amendment has reduced the rental amount to a nominal value of INR 5 per acre per annum.

The Andhra Pradesh Transmission Company Limited (APTRANSCO) has been directed to execute transmission lines from the pooling station to the grid substation/switching station and all other required system strengthening to evacuate power from the solar projects, at its own cost. APTRANSCO is to then recover this cost from the transmission tariffs (paid by the AP Government as subsidy).

Our view: The State of Andhra Pradesh continues to capitalize on its high solar power potential and the Scheme is a robust effort in this direction. The changes made in the Scheme through the Amendment point to a timely recognition of likely increase in costs and taxes which would have been cause for disputes regarding tariff rates between project developers and the AP Government. In the recent past, renewable energy projects in Andhra Pradesh have been plagued with such disputes and efforts to revise tariffs at various points in the contract period. Hopefully, the change in the tariff structure and timely intervention with respect to the projected increase in costs will result in fewer disruptions.
**AP Government notifies the Andhra Pradesh Renewable Energy Export Policy 2020 for setting up solar/wind/wind-solar hybrid projects in the state for export of energy to other states.**

**Background:**

On July 17, 2020, the Energy Department of Andhra Pradesh, Government of Andhra Pradesh took cognizance of the fact that Andhra Pradesh has idyllic conditions for setting up renewable energy projects for solar, wind and wind-solar hybrid generation. By tapping into the significant potential that the state holds and the huge extents of land available for use, the state has the potential to export renewable energy to other states. In order to attract private investments in the state, improve the local economy, promote setting up of renewable energy equipment manufacturing facilities in the state and generate additional revenue for the itself, the Government of Andhra Pradesh (AP Government) has notified “Andhra Pradesh Renewable Energy Export Policy 2020” (RE Export Policy).

The RE Export Policy will remain in effect for 5 years. The New and Renewable Energy Development Corporation of A.P. Ltd. (NREDCAP), shall act as a nodal agency under the RE Export Policy (Nodal Agency). The objective of the RE Export Policy is to facilitate 120 GW of renewable energy projects in the state and to set aside at least 500,000 acres of land for lease to potential renewable energy export project developers, and to develop renewable energy equipment manufacturing facilities in the state.

**What are the key directives?**

- All registered companies, private or public, are eligible to develop a renewable energy plant for the purpose of selling resultant energy (Project Developer(s)). The allocation of renewable energy resource potential in any area to Project Developers is to be carried out on a “first come first serve” basis by the Nodal Agency by seeking online applications. Project Developers intending to set up the energy export projects along with manufacturing facilities are to be given priority.

- With respect to the facilitation of land for Project Developers, the AP Government, through a land aggregating agency (NREDCAP or any other agency), is to procure and aggregate government and private lands as potential locations for allotment on a lease basis. The lease period will be for a period of 30 years for variable renewable energy projects. The land aggregating agency will remit the entire amount of lease rentals to the government treasury as miscellaneous receipts. In respect of private lands, the land aggregating agency shall remit INR 6,000 per acre per year with 5% escalation every 2 years. The agency will pay INR 25,000 per acre per year for the aggregated private lands to private land owners from the date of taking possession till the completion of lease period, subject to an escalation of 5% every 2 years.

- The RE Export Policy prescribes annual charges, the one-time charges, and electricity duty to be paid by the Project Developers. The Project Developers are to pay to the land aggregating agency lease rentals of INR 31,000 per acre per year from the date of taking possession till the completion of the lease period. The lease charges for the land taken for common purposes (roads, substations, etc.) and for unusable land (high tension lines passing through the energy park etc.) will be levied on a pro-rata basis, Project Developer wise. Such charges are subject to an escalation of 5% every 2 years. The Project Developers are to also pay green energy developmental charges to the AP Government amounting to INR 1 lakh/MW of installed capacity/year for the entire life of the project starting from the date of commissioning of 1st phase of the project. The Project Developers are required to pay a one-time local area development fee to the park developers amounting to INR 0.5 lakh per acre and park infrastructure developmental charges as prescribed.
- The infrastructure at the identified potential locations, land development, roads, and water supply etc., is to be developed by the park developer along with any internal evacuation infrastructure. Operation and maintenance charges are to be collected on per MW basis from the Project Developers by the park developer. If the project is implemented without the development of a renewable energy park, the internal evacuation infrastructure is to be developed by the Project Developer.

- There are 2 options for the external evacuation infrastructure for connection to the State Transmission Utility (STU) network. The first option states that the Project Developer may connect to STU, by laying connecting line to the STU grid substation at their cost, and transferring the line asset to the Andhra Pradesh Transmission Company Limited (APTRANSCO) prior to commissioning. Alternatively, the connecting line may be built by APTRANSCO at the cost of the developer if the developer so chooses. The second option is that the Project Developer may bear the entire cost of existing or new external evacuation infrastructure including connecting line, grid substations and upstream network up to the Central Transmission Utility (CTU). The Project Developers opting for the second option will pay only the operating and management charges as decided by APTRANSCO and the transmission charges shall be exempted for entire life of the project.

- The power generated by projects under the RE Export Policy is to be exported outside the state. In case of supply of this power within the state under open access, all charges levied by Andhra Pradesh Electricity Regulatory Commission (APERC) are to be paid and all the connected regulations have to be complied with. No energy banking and drawal is to be allowed. Any injection of energy between synchronization and declaration of the commercial operations date is to be treated as inadvertent power and no cost it to be paid by any DISCOM in the state.

- Other incentives include the conversion of ‘agricultural’ land to ‘non-agricultural’ before the transfer of government and private land to the land aggregating agency, with a conversion fee to be paid to the Nodal Agency. Projects under the RE Export Policy are to be exempted from obtaining any NOC/consent for establishment under pollution control laws from State Pollution Control Board. Further incentives for new manufacturing facilities, equipment and ancillaries related to renewable energy setup in the state are also to be provided. These facilities will receive priority for allotment of land on long term lease basis and will be exempted from the payment of electricity duty for a period of 10 years from date of commencement of manufacturing activities.

Our view: The AP Government aims to incentivize private participation and investment in the already growing renewable energy sector in Andhra Pradesh. It appears that the RE Export Policy is aimed at simultaneously tackling two pressing concerns in Andhra Pradesh. The first being that the state’s DISCOMs have already complied with their renewable purchase obligation, given the abundance of renewable energy projects commissioned in the state. The export of renewable energy provides the project developers with greater opportunities than all the power being purchased by the DISCOMs (which are already debt ridden). The export of renewable energy will be beneficial to other purchasing states which might not have the capacity to generate renewable energy on the same scale. Second, these projects ought to generate additional revenue for the state from lease rentals, green energy development charges, taxes, and finally local employment and development of skilled labor for this purpose. Andhra Pradesh has been proactive in developing initiatives to capitalize on its high renewable energy potential, and the RE Export Policy is the latest in this list of schemes.