



State Wise Regulatory and Policy Interface Dynamics and Implications Track for Power Sector in India – 2019

July 2019

Why eninrac's report upon "State Wise Regulatory and Policy Interface Dynamics & Implications Track"

REFORMATION IN THE EXISTING STRUCTURE OF POWER SECTOR, COUPLED WITH NEW POLICY INITIATIVES TAKEN UP ALL ACROSS GENERATION, DISTRIBUTION & TRANSMISSION OVER A SHORT SPAN OF FIVE YEARS – SIGNIFIES FORMATION OF A MORE COMPETITIVE SET UP IS ON ITS WAY

WITH REGULATORY & POLICY ENVIRONMENT INTACT, THE RENEWABLE ENERGY SEGMENT IN INDIA IS FASTLY BECOMING A MAINSTAY FOR POWER SEGMENT THAN ERSTWHILE BEING A FRINGE



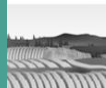



The power sector in India has witnessed a transformation with progressive policy-level & effective implementation of directives. These changes have offered significant opportunities and have generated faith enough of various industry stakeholders and market players to invest in India's power segment. Not only on the central front but at the state level too, the policy and regulatory environment have played a vital role in attracting investments. The renewable energy policies of the states are implemented on such similar grounds and have been very much responsible in shaping the RE market of the states. In this aspect, southern region states in India have been quite successful in creating an "Ease of doing business" environment through their regulatory regimes especially for wind and solar power segments. Right from the resource availability to land availability, power evacuation infra to power sale security, getting exemption from certain charges & duties to getting incentives, the southern region states have topped the list of many power developers for investing into the renewable power segment. It is pertinent to note that Andhra Pradesh hold an investment potential of close to USD 2.12 Billion & USD 4.62 Billion in the solar and wind power generation till FY2022, of which safely 40% is the contribution of policy & regulatory environment. Further, the state of Karnataka holds about USD 3.6 Billion of investment opportunity in the small hydro segment to which the contribution of policies is the maximum.

However, deep thinking on various aspects of policy and regulatory interventions and their long-term implications will help in taking informed decisions and contribute in developing the sector. Hence, for enabling the stakeholders to better understand the existing policy offering of the states for solar, wind, small hydro, biomass and thermal power segment, eninrac has attempted to come with a fact pack on regulatory regime. The report is framed to study the power sector policies of major states in the northern, southern, western & eastern regions and to determine their impact on state's overall power sector growth till FY 2022. The report also aims to find out the underlying investment opportunity & business potential in the states from conventional & RE power generation till FY 2022.


Exhibit 1

Overall Ease of Doing Business Assessment in Andhra Pradesh w.r.t Wind Power Generation – Examining Key Policy Parameters




<p>Resource Availability</p>  <p>Good</p> <p>~15 GW @ 100 mt. hub height</p>	<p>Transmission Corridor</p>  <p>Good</p> <p>The evacuation infrastructure has to build from developer's pocket. However, STU/DISCOM are liable to construct the corridor if asked by developer with no supervision charges.</p>	<p>Land Availability</p>  <p>Good</p> <p>State will provide Govt, revenue and forest land for the establishment of wind power project to supply power within the state.</p>	<p>Subsidy</p>  <p>Good</p> <p>Exemption in cross subsidy surcharge, electricity duty, transmission and distribution charges.</p>	<p>Incentives</p>  <p>Good</p> <p>Project will receive Incentives applicable to other industrial units. Projects under the policy will be applicable for REC benefit .</p>	<p>Financial Assistance</p>  <p>Poor</p> <p>No financial assistance is provided.</p>
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Power Sale Security



Poor

Ease of Doing Business




POLICY Yes

Andhra Pradesh Wind Power Policy

Policy Rating - ★★★★★

Opportunity Rating – High

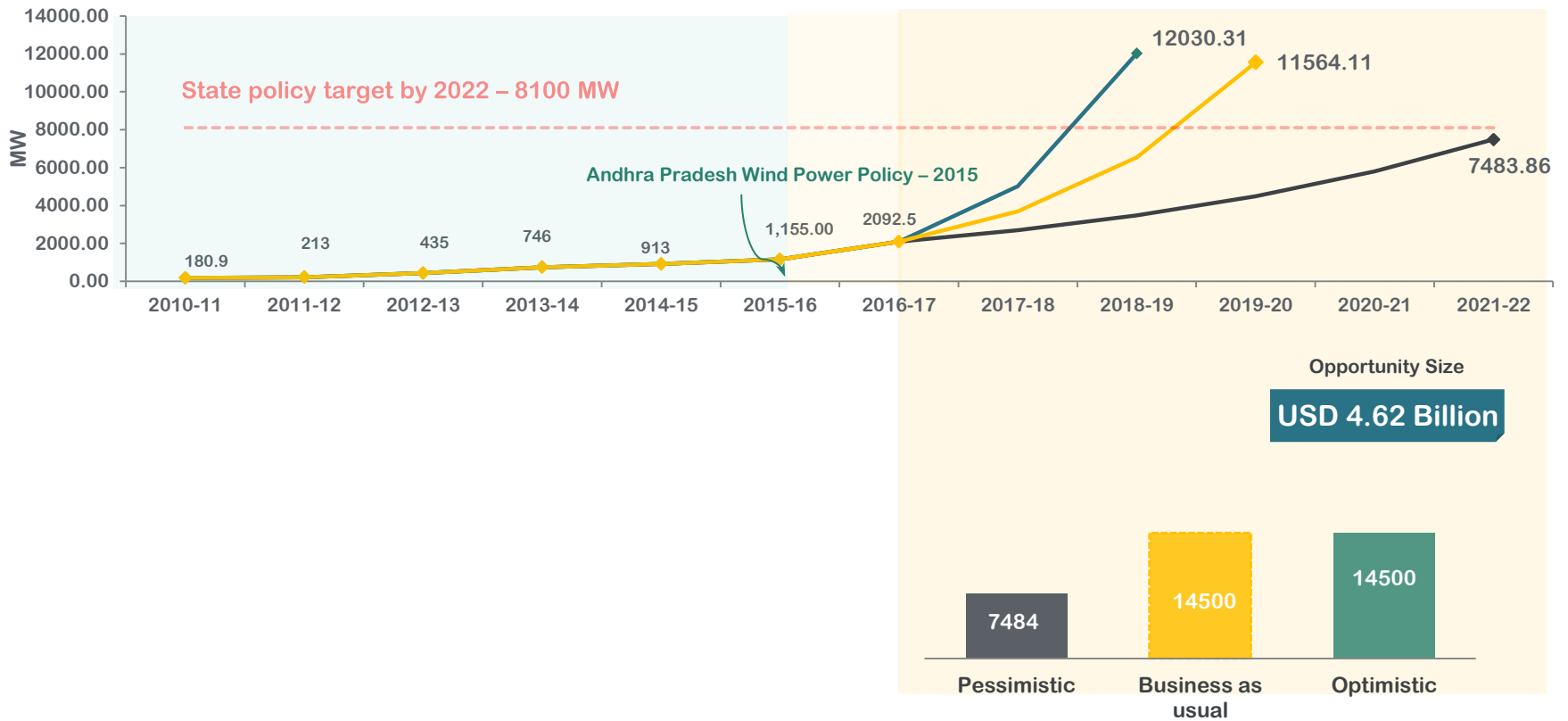
Clearance System



Good

Andhra Pradesh has a Single Desk Policy. Under with all clearances required for starting and operating an industry will be provided within 21 working days at Single Point.

Exhibit 02: Opportunity Sizing for Andhra Pradesh in Wind Power Generation vis-à-vis Policy Regimes



Source: AP State Wind Policy, MNRE, eninrac research

BUSINESS CASE OFFERED BY POLICIES & REGULATIONS TO VALUE CHAIN PLAYERS

- North Eastern Region Power System Improvement Project (NERPSIP)- The project aims to strengthen the Intra-State transmission & Distribution infrastructure of six states of North Eastern Region. These projects shall get commissioned by November 2020 and investment of INR 1040.17 Crores has been raised for the same
- Measures such as – declaring LHPs (>25 MW) as renewable energy source, introducing hydro purchase obligation as separate entity, bringing down hydro power tariff, budgetary support for flood moderation/storage hydro electric projects and enabling infra support has been approved by the Indian government to promote hydro
- Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) is being implemented well across the country. Under DDUGJY, 4505 new projects of INR 42676.67 crore have been sanctioned
- CERC announces regulations for implementation of interstate transmission system in the country

REPORT INSIGHTS

- Examining the final and draft solar energy policy for all regions in India – assessing major initiatives, targets and offerings of the policy w.r.t creating competitive business environment by major solar intensive states
- Examining the final and draft wind & hydro energy policy for all regions in India – assessing major initiatives, targets and offerings of the policy w.r.t creating competitive business environment by major wind and hydro intensive states
- Competition landscaping of states w.r.t to the policy and regulatory environment for ease of doing business
- State wise comparison of current applicable power tariff in the country

KEY HIGHLIGHTS

- Examining the performance review and understanding dynamics of Indian power sector regime & regulations
- Examining the business opportunity for private players under the policy environment in power generation , distribution and transmission
- Examining state wise business environment offered to players for developing the renewable energy sources
- Examining the state wise revision in the open access charges and the feasibility of the same in creating high business zone
- Examining the major regulations / rules passed by dedicated state electricity boards/ commissions and their implications on a large value chain
- Evaluating the Gaps in the Key Regulations and paving ways for business case

PRESS EXCERPTS

- With a total outlay of INR 16,320 crore including budgetary support of INR 12,320 crore, the Saubhagya scheme mandated all willing households in rural areas and poor households in urban areas being given free electricity connections
ET Energy
- With an average load of 1 KW per household and average use for eight hours a day, an additional 28,000 MW would be needed every year to meet the demand created under Saubhagya
ET Energy
- The government has set a target to install 40,000 megawatt (MW) of rooftop solar power capacity by 2022
ET Energy

KEY QUERIES ADDRESSED

- What are the impacts of regulations and policies on value chain players of India's power sector ?
- What the amendments/ announcements by each respective DISCOM of all distinctive states in India with respect to change in electricity tariff for different category of consumers from 2018 to 2019 ?
- What are the changes witnessed in the open access charges of each state from 2018 to 2019 ?
- What are the major regulations passed by respective electricity regulatory commissions of each states in India form 2017 to 2019 till date ?
- What are the major regulations passed by central electricity regulatory commission in India form 2017 to 2019 till date ?
- What are the major policies / schemes / initiatives taken by respective renewable energy development agency of each state in India from 2017 to 2019 ?
- What are the gaps in major regulations passed by CERC and SERCs in India from 2017 to 2019 in India ?
- What is the opportunity for value chain players vis-à-vis major initiatives such as **Decommissioning, Renovation & Modernization, Developing Green Corridors, DDUGY etc.** taken by the Indian government for power sector from 2017 to 2019 ?
- What is the opportunity for value chain players vis-à-vis major schemes such as **-SHAKTI, SAUBHAGYA, UDAY, URJA etc.?**

MUST BUY FOR

- Power Distribution Utilities
- State Electricity Boards
- State Electricity Regulatory Commissions
- Central Power Generation Utilities
- State Power Generation Utilities
- Independent Power Producers
- Solar Power Developers
- Wind Power Developers
- Hydro Power Developers & Other RE Players
- Power Transmission Utilities
- Research Institutes / Industry Associations
- Government Institutes

WHAT YOU CAN LEARN ? A SNAPSHOT

- Examining the Major Policies / Initiatives – Power Generation
- Examining the Major Policies / Initiatives – Power Transmission
- Examining the Major Policies / Initiatives – Power Distribution
- Critically Identifying the Gaps in the Regulations - For Major Regulations Passed by CERC from 2017 to 2019
- Critically Identifying the Gaps in the Regulations - For Major Regulations Passed by electricity regulatory commissions of all distinctive states in India from 2018-19
- Tracking the Major Regulations Passed by Uttar Pradesh Electricity Regulatory Commission – From 2017 till 2019
- Evaluating the Gaps in the Key Regulations and Opportunity Assessment
- Track of Major Policies/ Schemes/ Initiatives by Himachal Pradesh New and Renewable Energy Development Agency - From 2017 till 2019
- Track of Major Policies/ Schemes/ Initiatives by Madhya Pradesh New and Renewable Energy Development Agency - From 2017 till 2019
- Tracking the Major Regulations Passed by Karnataka Electricity Regulatory Commission – From 2017 till 2019
- Track on the Current Tariff Trends and Open Access Charges in the Indian States as on date
- Scenario Wise Opportunity Sizing in Solar, Wind & Small Hydro Segment for Northern Region States
- Scenario Wise Opportunity Sizing in Solar, Wind & Small Hydro Segment for Southern Region States
- Scenario Wise Opportunity Sizing in Solar, Wind & Small Hydro Segment for Western Region States
- Scenario Wise Opportunity Sizing in Solar, Wind & Small Hydro Segment for Eastern Region States
- Track of Initiatives / Amendments/ Announcements by all the DISCOMS in Jharkhand
- Track of Major Policies/ Schemes/ Initiatives by Andhra Pradesh New and Renewable Energy Development Agency - From 2017 till 2019



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THANK YOU!

Happiness does not come from doing easy
work but from the afterglow of satisfaction
that comes after the achievement of a
difficult task that demanded our best

- Theodore Isaac Rubin