



PROJECT: RAJASTHAN ENERGY SCENARIOS 2030 | 2050

OBJECTIVE

Enabling adoption of State-centric framework for medium term and long-term electricity demand forecasting and continued trajectory tracking in Rajasthan to facilitate better planning, electricity reliability and integration of renewables.

FUNCTIONAL FORECASTING AND ELECTRICITY DEMAND FORECASTING

- Modelling based on intrinsic (state-level) qualitative and quantitative indicators.
- Alignment with distribution investments and other key investment plans
- Sync with key and emerging sectors in the state
- Integrates development plans of the executive based on policy instruments

PRUDENT ENERGY PLANNING AND INVESTMENT GROWTH

- Optimization of Capacity Expansion
- Optimization of generation or fuel mix
- Tariff control to ensure competitiveness of local industry
- Investment security and better returns on investment

CLEAN ENERGY TRANSITION & GRID INTEGRATION OF RENEWABLE ENERGY

- Enable realistic and growth-based targets for renewable energy
- Enable planning for ancillary service markets and assets
- Enable policy pathways to achieve goals and trajectory corrections

ENERGY SECTOR JOBS

- Good understanding of possible investment quantum in Power Sector
- Planning and prioritizing skilling
- Planning for just transition – reskilling and upskilling priorities

IMPORTANCE FOR RAJASTHAN



- Rajasthan has ambitious plans for renewable energy generation, along with increasing Renewable Purchase Obligations. Improvement in electricity demand forecasting shall enable better planning for this transition.
- RRVUN reported an average plant load factor (PLF) of 47.92% for its thermal assets, for the year 2019-20. Such scenarios are detrimental to power sector and economy of Rajasthan and can be avoided planning based on sound long-term electricity demand forecasts.
- Better understanding of electricity demand scenarios shall enable planning for optimal fuel mix, ensuring grid reliability and tariff control.
- Understanding future electricity demand scenarios and corresponding investment priorities shall also enable skilling pathways and job growth in power sector.

PROJECT IMPLEMENTATION AGENCIES

Bask Research is a Jaipur based not-for-profit organization working towards governance reforms in power sector in pursuit of energy equity and climate action. It brings on board technical and modelling experience in domain of distributed renewable energy, microgrids, and non-wire alternatives, along with understanding of power sector operations.

Center for Energy Regulations (CER) is an initiative led by IIT Kanpur focused on institutional strengthening and research in power sector. CER has extensive experience in modelling exercises, including electricity demand forecasting. At the same time, it is an institution of international repute pioneering power sector reform, prudent planning and clean transition at the national level.

CUTS International is a Jaipur based public policy organization working across multiple domains and has presence across multiple states within India and six countries globally. It has extensive experience of working on policy and regulatory issues in Rajasthan.