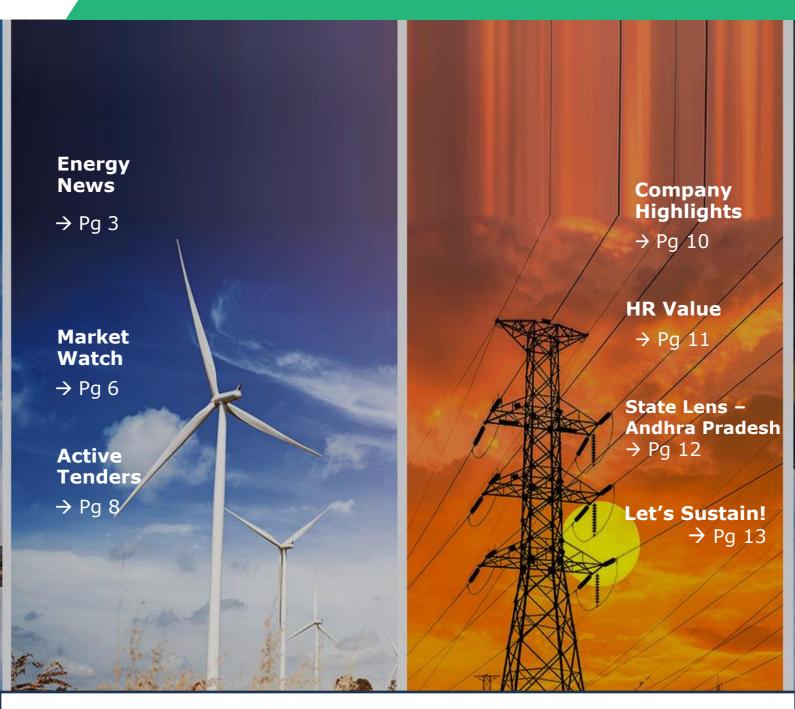




Edition- MMXXV-III | August 2024

TATA POWER TRADING COMPANY LIMITED



POWER MEETS INTELLIGENCE

FOREWORD BY OUR CFO

Dear Patrons

I am delighted to introduce this edition of our periodical – Energy Services Insights. As CFO, my role extends beyond financial oversight; it encompasses strategic leadership in our journey towards sustainability.

The global shift toward renewable energy is accelerating, and it's clear that adopting innovative models is crucial for meeting our environmental targets. Emerging technologies and strategic investments are reshaping the global approach to sustainability. From advancements in solar and wind power to cutting-edge energy storage solutions, the landscape of renewable energy is rich with opportunity.

As a nation, we are at a pivotal moment where embracing these trends not only aligns with our commitment to reducing our carbon footprint but also enhances our competitive edge. By integrating new models and practices, we can meet and even exceed our renewable energy targets.

I encourage each of you to explore how you can contribute to our sustainability goals. Whether through adopting energy-efficient practices, supporting green initiatives, or proposing new ideas, your involvement is vital. Together, we have the power to drive significant change and lead by example.

Thank you for your dedication and commitment in making our company a prominent player in crafting sustainable solutions. As we continue this journey, let's stay informed, stay innovative, and remain committed to building a sustainable future.

Lastly wishing everyone a happy Independence Day!

Happy Reading!

Vikas Gupta Chief Financial Officer



ENERGY NEWS





Tata and Welspun to move the GH2

With all the global buzz around green hydrogen, the commercial utilization of green hydrogen on large scale is yet to be seen. The major challenges hindering the use of green hydrogen is its higher cost, investment required by consumer in specific equipment and the cost & difficulty in transportation.

While the research on the production of cost-effective green hydrogen is under way and it is expected that in a few years the cost of production of green hydrogen shall come down to match the present range of prices of hydrogen. However, movement in developing and improving the transportation methods for green hydrogen are still to be seen.

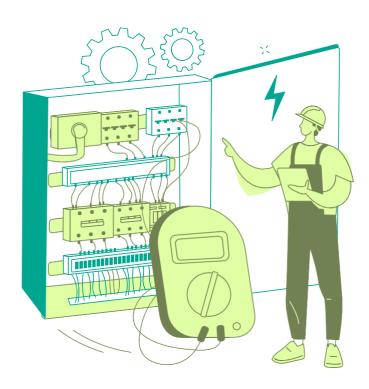
In a significant move in this scenario, Tata Steel and Welspun have come together to develop specialized steel pipes for transportation of green hydrogen. With this, Tata Steel and Welspun have become the first Indian companies to develop Electric Resistance Welded (ERW) pipes to enable safe transportation of 100% pure green hydrogen.

The production of hydrogen-compliant pipes marks a crucial step forward in the pursuit of clean energy solutions. By establishing this foundation, we are building a stronger infrastructure and ecosystem essential for the widespread adoption of green hydrogen, thus promoting the shift toward greener and more sustainable solution.



ENERGY NEWS





Tech to the Rescue

Paris agreement has set stringent targets for reduction of the greenhouse gases to limit the temperature rise to 1.5°C above pre-industrial levels. Consequently, the industries located within the binding nations have to report their carbon/GHG emissions within a specific time and in a given format.

How does one do that? Collating and calculating the numbers itself represents a huge challenge given the lack of awareness and resources. To top that, submitting all the data in given formats and within the given timelines is entirely another challenge.

UNFCC has adopted technology as a rescue mechanism to combat the challenge. A brand-new tool called the "Enhanced Transparency Framework (ETF)" was launched on 28-Jun-24 to enable smooth online reporting. This tool is supposed to assist the nations to track crucial data and information and to monitor the progress in achieving the pre-defined targets.

The ETF is expected to significantly enhance the evaluation of global climate progress. On a national scale, this will serve as a crucial tool, assisting countries in developing a solid evidence base that can inform the creation of more effective climate policies and national climate plans, commonly referred to as Nationally Determined Contributions (NDCs).

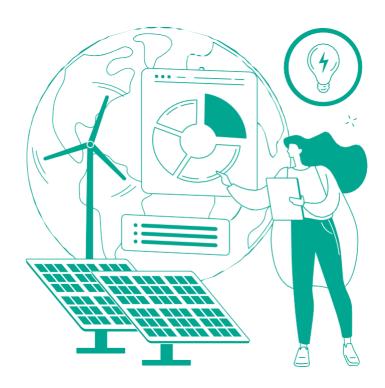
Aside that, support and resources are being made available to use the tool effectively, a capacity and confidence building workshop was already held in May'24 and specialized training sessions are planned to be organized during the upcoming COP29 from 04th to 06th September 2024.

Here's hoping that the efforts to use technology bears the desired fruits.









Waves of Wind

₹7,453 Crores - is the outlay of the Viability Gap Funding (VGF) scheme that is approved by the Central Government for offshore wind energy projects in India.

India, surrounded by water on three sides, has a huge coastline of about 7600 kms and thus provides good prospects of harnessing the offshore wind energy. Initial assessment through satellites suggests Gujrat and Tamil Nadu as the states having the highest potential for offshore wind. Accordingly, eight sites each in both states have been identified as offshore zones for exploitation of offshore wind energy. An assessment by NIWE suggested a potential of nearly 36GW and 35GW in these zones of Gujrat and Tamil Nadu respectively.

The VGF policy now approved aims to harness the extensive offshore wind energy potential within India's exclusive economic zone. Government support through the VGF scheme will lower the costs associated with offshore wind projects, making them financially viable for purchase by DISCOMs. Although private developers will construct the projects through a transparent bidding process, the associated infrastructure, including offshore substations, will be developed by Power Grid Corporation of India Ltd (PGCIL).

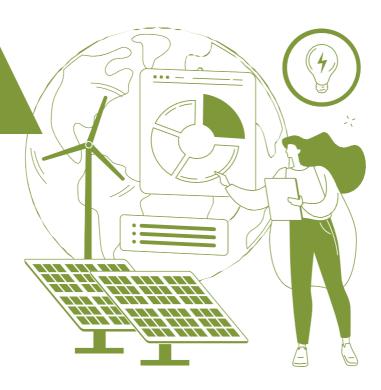
Construction of offshore wind also requires specific port infrastructure. ₹600 Crores out of the total scheme outlay have been assigned to upgrade two ports in the country for this purpose.

The huge amount approved by the Center under this scheme is a testament to the fact that the Center trusts that the development of offshore wind shall significantly transform the power sector in India. We remain highly hopeful about the benefits of the VGF scheme by the end of this decade.





MARKET WATCH



Day Ahead Market

When we look at the 12-month rolling basis data points for day ahead market, we see that the rates have recovered slightly in April to June this year as compared to previous months numbers and those of previous year same month. Volume increase remains consistent for the past 4-5 months this year indicating typical summer demand pattern.



Bars: Volume in MUs, Line: Rates in Rs/kWh



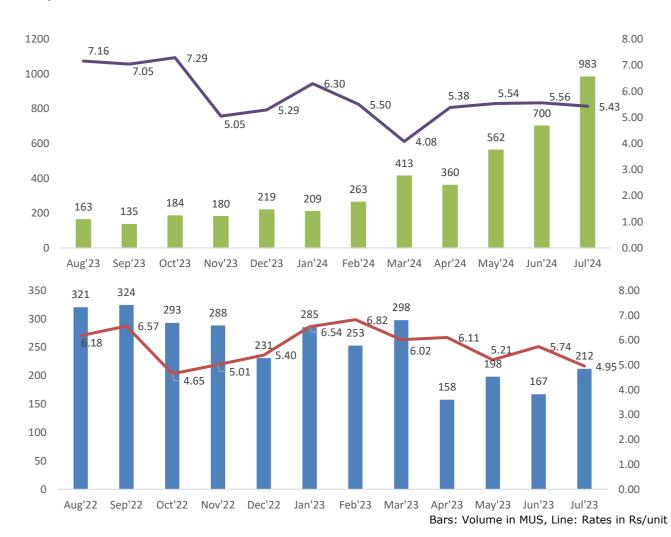


MARKET WATCH



Green Day Ahead Market

With only a brief look at the G-DAM graph below, no one can help but notice the strikingly rising pillars towards the end of the line, indicating the market is proving itself to be increasingly dependable for consumers to meet their green electricity targets. What is more surprising is that this trend in volumes is noticeably opposite for the same months previous year.







Renewable Tenders concluded

S. No.	Tender	Period & Type	MW
1.	SEZ Bio-Tech Services Pvt Ltd	01-July-2024 to 30-June-2025 (Solar & Wind)	Up to 15 MW
2.	Noida Power Company Limited	01-June-2024 to 31-March-2025 (Solar & Wind)	50 MW
3.	Adani Electricity Mumbai Limited	01-June-2024 to 31-March-2025 (Wind)	Up to 300 MW
4.	Adani Electricity Mumbai Limited	01-June-2024 to 31-March-2025 (Wind)	Up to 300 MW
5.	Punjab State Power Corporation Limited	18-May-2024 to 9th June 2024 (Non Solar)	Up to 500 MW
6.	Ircon Renewable Power Limited, KN	1 Year (Solar Power Sale Tender)	Up to 500 MW
7.	Indian Oil Corp. Ltd. (Gujarat)	1 Year (PX Tender)	Up to 10 MW
8.	Electricity Department, Goa	01-Aug-2024 to 31-March-2025 (Hydro/Bagasse)	Up to 40 MW
9.	Hindustan Coco Cola Beverages Ltd	2 Years (Wind / Hydro Power Purchase RFP)	20 Mus
10.	Noida Power Company Limited	01-Apr-2025 to 31-March-2026 (Solar & Wind)	100 MW



Active Renewable Tenders

Name of the Entity	Tender Type	Duration	Tender Submission Date	Requirement (MW)
CESC	RE Power Purchase	01-Sep-2024 to 31-	22-Aug-24	300
Limited	(Wind)	Mar-2025	(17:00 hrs.)	
CESC	RE Power Purchase	01-Apr-2025 to 31-	22-Aug-24	300
Limited	(Wind)	Mar-2026	(17:00 hrs.)	
CESC	RE Power Purchase	01-Apr-2026 to 31-	22-Aug-24	300
Limited	(Wind)	Mar-2027	(17:00 hrs.)	
CESC	RE Power Purchase	01-Apr-2027 to 31-	22-Aug-24	300
Limited	(Wind)	Mar-2028	(17:00 hrs.)	
CESC	RE Power Purchase	01-Sep-2024 to 31-	24-Aug-24	300
Limited	(Solar)	Mar-2025	(17:00 hrs.)	
CESC	RE Power Purchase	01-Apr-2025 to 31-	24-Aug-24	300
Limited	(Solar)	Mar-2026	(17:00 hrs.)	
CESC	RE Power Purchase	01-Apr-2026 to 31-	24-Aug-24	300
Limited	(Solar)	Mar-2027	(17:00 hrs.)	
CESC	RE Power Purchase	01-Apr-2027 to 31-	24-Aug-24	300
Limited	(Solar)	Mar-2028	(17:00 hrs.)	





At TPTCL, we are constantly churning out new ideas, offering new solutions to meet the evolving needs of our customers. With a good start in Q1, we have already tied up several new contracts for Renewable power on Medium Term/Long Term basis.

To enable the sustainability agenda, our team has supplied both Renewable Energy and iRECs to several Tata group companies across India. We have recently tied up with Govt. PSU in Gujarat for 70MW RE supply, helping them go green.

At TPTCL, we are steadfast on our path to develop complete energy services portfolio.

To know more about our services, click on the link <u>Corporate Brochure</u>, or drop a mail to TPTCLMarketing@tatapower.com!





HUMAN RESOURCE VALUE



Employee Learning

TPTCL believes that Employee engagement is a cornerstone of a thriving company, driving both individual satisfaction and organizational success. By fostering an environment where employees feel valued, supported, and motivated, a company enhances productivity, reduces turnover, and encourages innovation.

In line with this philosophy, we recently celebrated completion of our executive learning batch from SP Jain Institute of Management and Research, Mumbai and XLRI, Jamshedpur. These young leaders are being groomed to pitch into leadership positions in the times to come.

Underscoring the sustainability resolution, we celebrated *Globey*, our earth mascot for saving the planet. Tata employees are the frontrunners in the Climate Crew campaign.

We also celebrated the International Yoga Day in our office, helping our people relearn the importance of meditation and exercises for a fit and healthy life.













Regulatory overview: Andhra Pradesh

Eligibility Criterion for Open Access

- Contract Demand of 1 MW and Above (100 kW & above for GEOA)
- Connection 33 kV and Above
- ABT Meters & 0.2S class CT, 0.2 class PT to record 15 mins drawl energy
- No Pending arbitration/ outstanding dues with DISCOMs/Transmission Licensee

Cross Subsidy Surcharge for Industrial Tariff (Rs/kWh)

(125) (127)				
	33KV	132 KV		
APEPDCL	1.46	1.37		
APCPDCL	1.53	1.50		
APSPDCL	1.49	1.24		

Additional Surcharge is not applicable on OA consumers

Steps for Open Access transaction:

- Signing of Power Purchase Agreement
- Installation of ABT meters
- Getting Format A [Technical Feasibility] & Format B [No dues] from Discom
- Registration on NOAR portal
- Approval from SLDC and SRLDC
- Start of Power flow transaction

Breakeven rates (Rs/unit)

• Peak: 6-10AM & 6-10PM

 Off peak:0000-6AM & 10AM-3PM

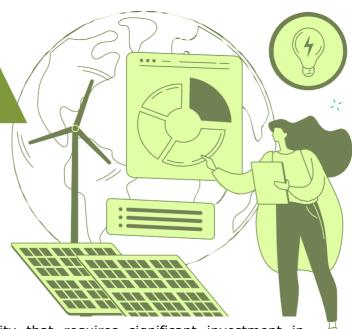
 Normal: 3-6PM & 10PM-0000

Discom	Voltage	Peak	Off peak	Normal	RTC
APEPDCL	33KV	4.58	2.75	3.44	3.50
APEPDCL	132 KV	4.49	2.61	3.31	3.38
APCPDCL	33KV	4.48	2.66	3.34	3.40
APCPDCL	132 KV	4.37	2.49	3.19	3.26
APSPDCL	33KV	4.52	2.70	3.38	3.45
APSPDCL	132 KV	4.61	2.73	3.44	3.50

Losses (%)	33KV (APEPDCL)	33KV (APCPDCL)	33KV (APSPDCL)	132 KV
Transmission	2.59	2.59	2.59	2.59
Distribution	2.75	3	3	0
Total	5.34	5.59	5.59	2.59



LET'S SUSTAIN!



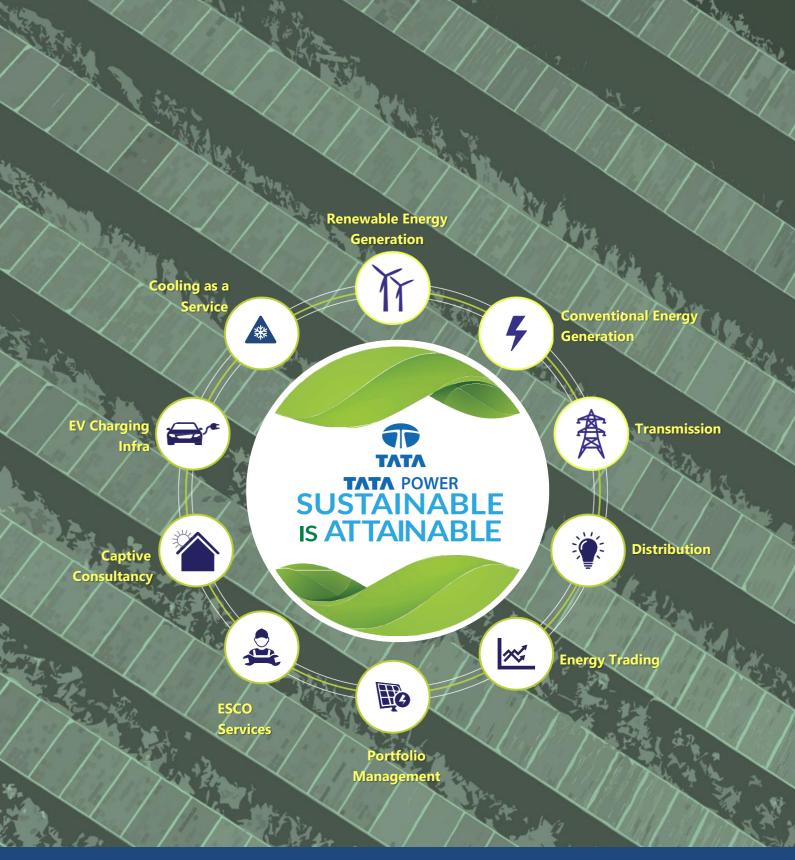
Energy as a Service

Energy is no longer just a commodity that requires significant investment in equipment, navigating PPAs, understanding dynamic market scenarios, or adapting to changing regulations. Challenges such as exploring energy-efficient processes, deploying low-carbon projects, or meeting renewable energy demands at competitive prices have now been simplified by TPTCL.

The Energy-as-a-Service (EaaS) model handles all these complexities for consumers. EaaS is revolutionizing the market by benefiting customers and accelerating the adoption of low-carbon technologies. Whether for a large industry, commercial establishments, or residential communities, EaaS is a promising solution that simplifies the challenges consumers face due to the evolving power market influenced by technology, regulations, consumer behavior, and sustainability trends. Key offerings include:

- 1. **Simplified Contracts**: Offering flexible contracts ensuring cost-effective power purchase.
- 2. **O&M and Network Management**: Handling the installation and maintenance of key equipment at consumer premises, along with realtime monitoring and dashboarding.
- 3. **Technological Integration**: Assist in integrating various technological advancements for power management, energy efficiency, and emission reduction.
- 4. **Sustainability Solutions**: Ensuring compliance to sustainability targets.

TPTCL has facilitated over 1 million iREC trades till date, and are in talks with global giants in facilitating iREC trades and other sustainability solutions.



Contact Us at: 0120-6102000

www.tatapowertrading.com
Check out our Corporate Brochure!



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