Excerpt: Webinar on “Mastering ABT and Tariff Components in Indian Power Plants”

This excerpt encapsulates our June 21, 2025, webinar on "Mastering ABT and Tariff Components in Indian Power Plants." As a CEA-recognized institution, we arm professionals with regulatory mastery for optimal operations. Watch the full recording on our YouTube channel or join upcoming sessions to demystify power economics!

The ABT Revolution: Navigating Tariffs in India's Power-Deficit Landscape

Imagine a 500 MW coal plant facing Rs. 100 crores in annual losses due to misaligned tariffs and scheduling inefficiencies—common pitfalls in India's persistent peak deficit (240 GW met in 2023-24, yet 1.4% shortfall). Availability Based Tariff (ABT), introduced via EA-2003, shifts focus from energy-only to capacity availability, incentivizing reliability while penalizing deviations. In my 40 years, ABT has transformed operations, but mastering its components is key to profitability amid rising demands (4-5% annual growth) and environmental norms.

Our June 21, 2025, STEAG India webinar engaged participants on PAN India level. We traced evolution from the 1910 Electricity Act to EA-2003 (delicensing generation, promoting competition) and Tariff Regulations 2024-29. Power supply trends show deficits narrowing (from -10.1% energy in 2009-10 to -0.3% in 2023-24), but PLFs vary (66.34% for coal in 2023-24). Key agencies like Grid India, Power Exchanges (IEX, PXIL), and traders facilitate seamless operations. If tariff mismatches are eroding your margins, our session's breakdowns provide the blueprint.

Tariff Demystified: From AFC to Energy Charges and Norms

Tariffs under Section 62 (CERC determination) or 63 (bidding) comprise Capacity Charges (AFC: 70% debt-financed) and Energy Charges (ECR), with supplementary for extras like ECS. AFC recovers fixed costs: ROE (15.5% pre-tax, reducible by 1% for non-FGMO compliance), Depreciation (up to 90% over useful life: 25 years coal, 40 hydro), Interest on Loans (weighted avg. rate), O&M (norms: Rs. 35-40 lakh/MW coal), Interest on Working Capital (MCLR+200 bps), and Special Allowance (post-life R&M). Energy Charge covers fuel (landed cost, GCV), secondary oil, and reagents—recovered via scheduled generation.

We analyzed NTPC trends: AFC rose to Rs. 58,725 Cr in 2023-24 (1 Cr/MW avg.), with coal at 1.03 Cr/MW (28% ROE, 29% O&M). Station breakdowns (e.g., Singrauli: 65.10 p/kWh, heavy O&M; Khargone: 179.07 p/kWh, high ROE/Dep). Norms tightened in 2024-29: SHR (2,340 kcal/kWh subcritical), APC (5.25% coal), SOC (0.5 ml/kWh). IEGC-2023 mandates scheduling: DAM (10-11 AM D-1), RTM (every 30 min), with TRAS/URS integration. Power markets: Long-term PPAs (Case-1/2 bidding), short-term (DEEP, exchanges), with DAM/RTM for flexibility—MCP avg. Rs. 4.79 in 2021-22.

Ancillary services (primary/secondary/tertiary) ensure grid stability: TRAS at 10% MCP cap, DSM for deviations. Expert insight: Use tables for breakdowns:

Component	Basis (2024-29)	Recovery Link
ROE	15.5% pre-tax	Availability
Depreciation	5.28% (coal)	Loan Repay
O&M	Norms (lakh/MW)	Fixed
Energy Charge	SHR x Fuel Cost	Generation

Power Markets & Scheduling: Bilateral to Exchanges

Markets span long-term (PPAs via nomination/bidding) to short-term (bilateral, DEEP, exchanges). DAM: Bids 10-11 AM D-1, cleared by 1 PM, delivery T+1. RTM: 15-min auctions, gate closure 75 min pre-delivery. Contingency for urgencies. Cross-border/RE integration via GDAM. Scheduling per IEGC: NLDC validates, RLDCs finalize by 2 PM D-1. Participants: Generators (NTPC 70 GW, Adani 12 GW), DISCOMs (UPPCL, MSEDCL), traders. Liquidity: 65,143 MU in DAM 2021-22.

Buyers: State entities (TANGEDCO, PSPCL), integrated (KSEB), specials (Railways, SECI). Sellers: ISGS, IPPs (Reliance 6 GW, JSW 4.5 GW). ABT ensures discipline: Over-injection rewarded, under penalized via DSM.

Exclusive Expert Tips: 40 Years of Regulatory Wisdom

1. **ROE Maximization:** Achieve 85% availability for full recovery; integrate FGMO early to avoid 1% cut.
2. **Fuel Cost Control:** Optimize GCV 'as received' via third-party sampling; blend for SHR compliance.
3. **Market Play:** Prioritize DAM for URS (no consent needed); cap bids at Rs. 10-20/kWh for volatility.
4. **Norm Adherence:** Trend PLF (target 80%+); audit O&M for under-recovery risks.
5. **Deviation Management:** Use AGC for secondary reserves; monitor DSM charges quarterly.

These strategies have boosted revenues by 10-15% in regulated plants.

Why STEAG India? Your Gateway to Power Sector Expertise

As a Government of India-recognized training hub, STEAG India blends global expertise (from our German roots) with Indian realities. Our webinars attract participants across PAN India from prestigious organizations and Institutes.

Similar webinars with interactive Q&A sessions will be arranged in the future. Please participate—we'll also repeat some topics with the latest updates. We look forward to your overwhelming participation!