AEQUITAS



For:

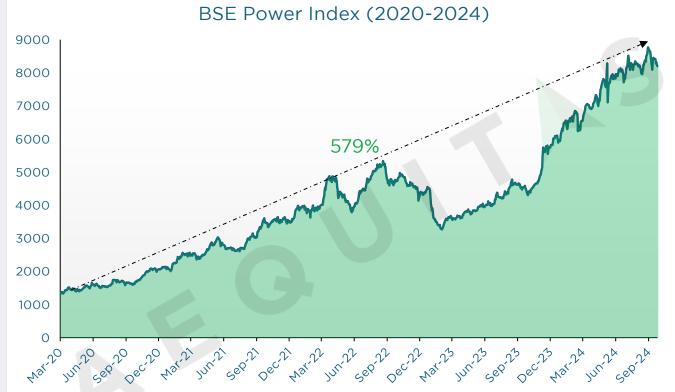
INDIAN POWER SECTOR: DÉJÀ VU 2008

Investors

Presented by:

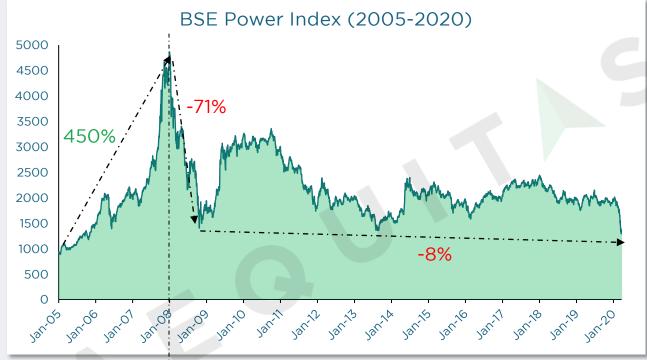
Aequitas Investments

THE POWER RALLY



- > The Power Index has rallied 579% in the past 4.5 years
- The index currently quotes at 32x P/E. In March 2020, it quoted at P/E multiple of 8x. The P/B which was at 0.9x has gone up 420x and now quotes at ~5x P/B
- > Over last 5 years, top power generation companies' revenue grew at a CAGR of ~11% but their MCap grew at a CAGR of ~41%
- > The energy sector is cyclical and stocks are quoting at high valuations on cyclically high earnings

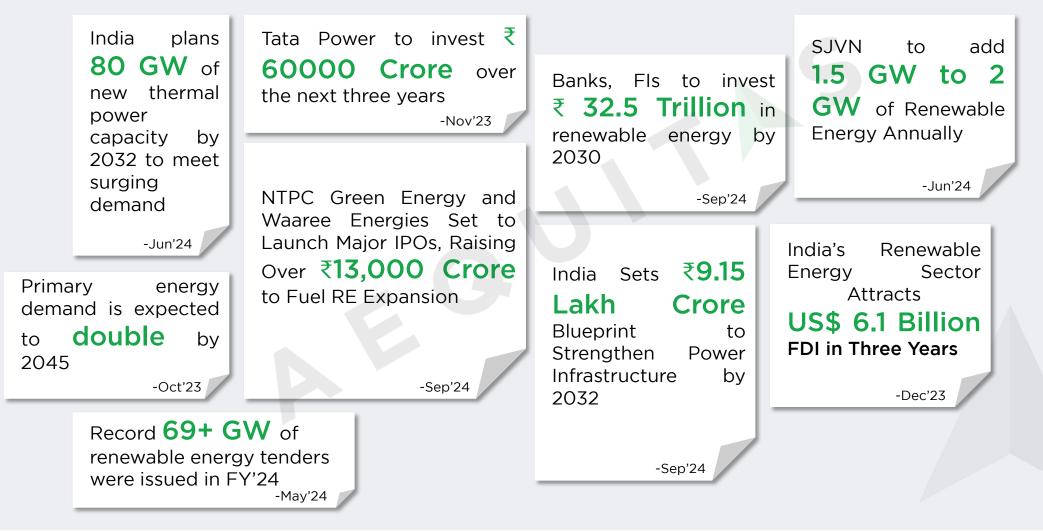
HISTORY REPEATING ITSELF?



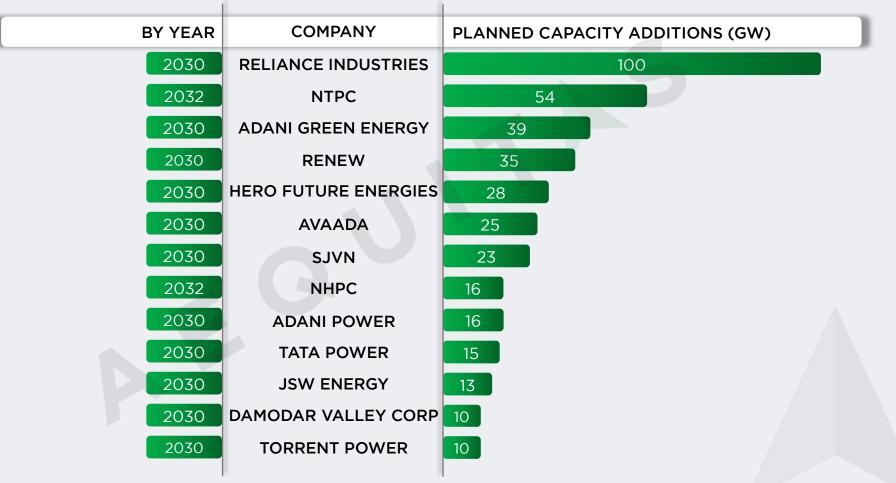
>The last time we saw these kind of valuations, the index corrected by 70% within 10 months

- Even from the lows of 2008, the index delivered negative 8% returns over the next 12 years, an absolute decline of 72% from the peak. Adjusted for time value of money, the index lost ~89% from peak to trough
- >All the capacity additions announced from 2007-2009 got commissioned from 2014 when India's power capacity increased by 31% in just 3 years from 2014-2017
- >With massive capacity additions, India's power deficit which peaked at 15 GW in 2009 plunged by 95% in 2020-21

ARE WE OVERINVESTING IN POWER?

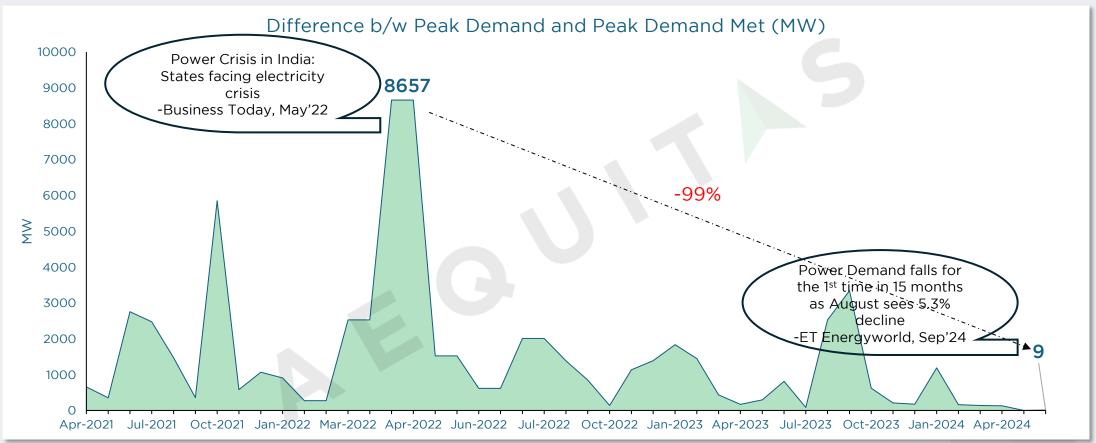


PLANNED CAPACITY ADDITIONS



India plans to nearly double its power capacity to about 900 GW by 2030, a whopping 12% CAGR, where as, power demand historically has grown at 6-7% which might lead to demand-supply mismatch

REALITY: ARE WE IN POWER DEFICIT?



> Over the last year, peak power deficit which was at ~9 GW has already come down to 0.009 GW

- Electricity demand in August was down 5% Y-o-Y
- > Capacity addition in power generation has risen significantly over the last couple of years

PEAK POWER DEFICIT Peak Surplus/deficit 2009:10 2012-13 2014:15 2016-17 2017-18 2018-19 2011-12 2015-14 2015:16 2010-11 2019-20 -1,500 After a spike in 2023-24 -3,500 we are already close to power surplus, still capex -5.500 announcements continue ≩ -7,500 -9.500 -11.500 -13,500

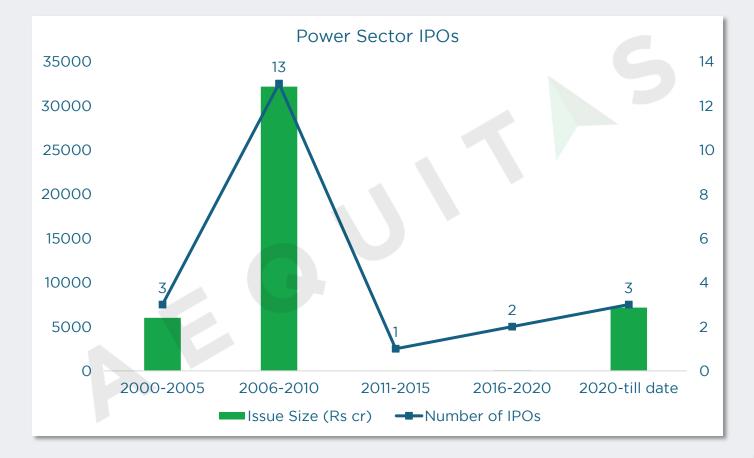
Electricity shortage in India went from 4.2% (of demand) in 2014 to 0.7% in 2017 & Capacity added between 2006-2010 took over a decade to get absorbed

-15.500

- With demand-supply mismatch again in 2022-23, we have started seeing investments, however, the peak demand has already started reducing as of 2023-24
- As observed in the last frenzy, all the companies & banks are going gung-ho towards Power sector which is also visible in record high fund-raising happening in the sector.



FRENZY OF YESTERYEARS



> A dream IPO, Reliance Power IPO (2008): Raised \$190B, Oversubscribed **73x**, Largest Global Subscription.

> 'Power On, India On' Era: Power Giants Like Reliance, Power Grid, Adani, RattanIndia, and NHPC Oversubscribed 41x average

EXPECTATIONS VS REALITY

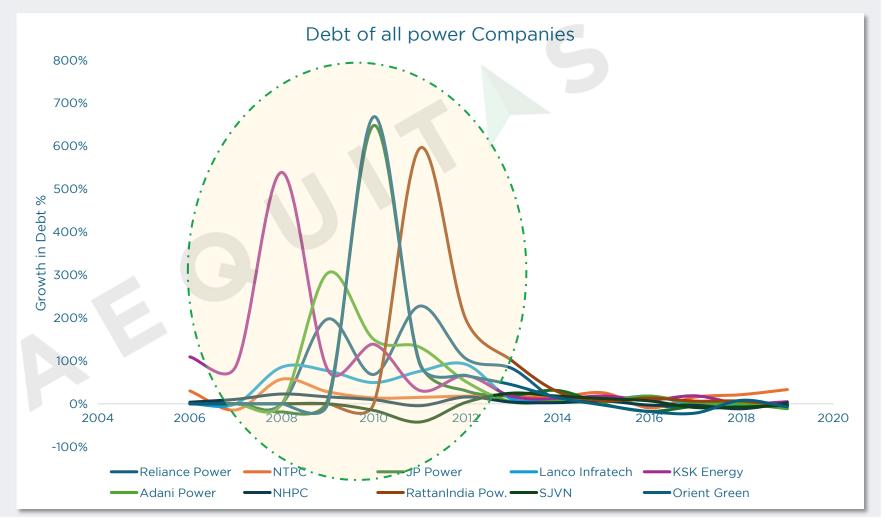
	GUIDANCE	DELIVERY	WEALTH EROSION
ReLIANCe Power	•In 2008-09: aimed to add 30GW in 7-8 yrs	•Current capacity only ~6GW. •Saddled with ~INR 33,000 Cr Debt •Signed one of the lowest PPAs in Sasan: Rs 1.19/unit for 25 years	250 200 150 100 50 0 Feb-08 Feb-10 Feb-12 Feb-14 Feb-16 Feb-18 Feb-20 Feb-22 Feb-24
TATA TATA POWER	•In 2010 - Invest INR 70,000 Cr to increase capacity to 25GW by 2017	 Wealth drain - Mundhra UMPP faced heavy losses of ~ Rs 12,000cr due to rising imported coal prices. By FY19, the company had a net debt of ₹47,552 crore, with a debt-to- EBITDA ratio of 7. 	-78% 100 80 60 40 20 Jan-08 Jan-10 Jan-12 Jan-14 Jan-16 Jan-18 Jan-20
JAIPRAKASH POWER VENTURES LIMITED	•In 2010 aimed to add ~14GW by 2019	 •2020 -Current capacity only ~2.2 GW. •Promoters have pledged 83.3% of their holding •Monetized major hydro and thermal assets, issued equity to debt holders to reduce debt. 	160 140 120 100 80 60 40 20 0 Jan-08 Jan-10 Jan-12 Jan-14 Jan-16 Jan-18 Jan-20

EXPECTATIONS VS REALITY

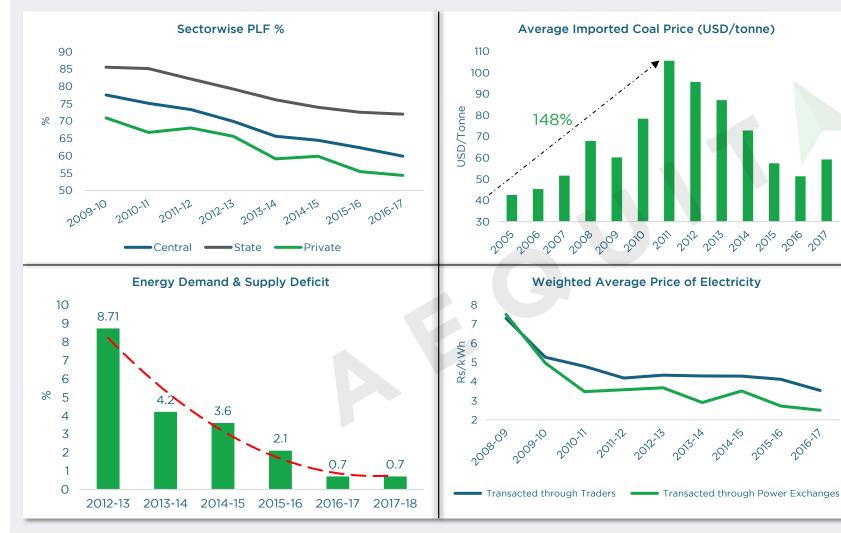
	GUIDANCE	DELIVERY	WEALTH EROSION
J SW	 In 2008, Aimed to achieve 15 GW by 2020 IPO generated 2700 Cr with 1.7x subscription 	 Coal price surge backfired on dependence on coal-based power Plant shutdown; led to PLF <50% Carried a debt of INR 14000 Cr by 2017 	150 100 50 0 Jan-10 Jan-12 Jan-14 Jan-16 Jan-18 Jan-20
LANCO	•In 2008, aimed to achieve 15GW by 2015 from 0.5 GW	 By 2017, the company posted losses of ₹2,260 crore on revenues of ₹7,343 crore, with a debt of ₹49,960 crore, leading to bankruptcy. SC cancelled 2 coal blocks out of 3 allocated. 	90 80 70 60 50 40 30 20 0 0ct-07 Oct-09 Oct-11 Oct-13 Oct-15 Oct-17 Oct-19
RattanIndia POWER	•Aimed to reach 5.4GW capacity	 New power project at Bhaiyathan saw an unprecedented and aggressive bid of ₹0.81 per unit. REC Ltd filed an insolvency application; debt restructuring occurred from 2019- 2021. 	45 40 35 30 25 20 15 10 5 0 Oct-09 Oct-11 Oct-13 Oct-15 Oct-17 Oct-19 Oct-21 Oct-23

DEBT FINANCED CAPEX

- Increase in borrowings -Substantial borrowing by all segments has underpinned the dramatic expansion of the power sector
- In 2018, ~34 stressed power projects, representing 40 GW capacity, were earmarked to be admitted under NCLT with an Outstanding loan of 1.77 Lac crores - Few of these stressed assets haven't been resolved yet
- Almost all capacity additions undertaken by private sector power producers from FY 2010 onwards have faced significant cost overruns, which were close to 70-80% of the originally appraised project cost. This happened due to time delays exceeding 3 years



WHAT WENT WRONG?



> Cost Run-up: Projects were launched without coal linkages. the SC and of cancellations 214 coal blocks forced reliance on expensive imported coal. This led to lower PLF levels.

- Double whammy: Aggressive Bidding without firm PPAs and cost run-ups made operations financially unsustainable. In the stressed assets, more than 50% did not have PPAs
- Supply outpaced Demand: India became a net exporter of power, selling 5.8b units. Electricity shortage went down to 0.7% (of demand) in 2018 from 9% in 2013.

- India had a massive power capex boom from 2007 to 2009
- There was an over-allocation of capital to the energy sector which led to massive capacity coming up from 2014 to 2017
- > India from a situation of massive **power deficit in 2010** went to being **power-sufficient in 2020**
- Post-Covid, there was a significant increase in power demand led by rise in the middle class & government focus on providing electricity to all
- > This led to power shortages in 2021-22 & a revival of investments in power sector
- The big question mark is, with massive capacity additions outstripping demand, are we looking at a scenario similar to yesteryears?
- > WHILE HISTORY MAY NOT REPEAT ITSELF, IT OFTEN RHYMES!



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