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RBSA Advisors

Power Sector - In Desperate need for Revival & Resurrection

Valuation
Investment Banking
Restructuring
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Transaction Tax

JULY
2020

Content

RBSA Advisors

1 Executive Summary

Executive Summary

Power Sector Highlights

3rd largest producer and consumer

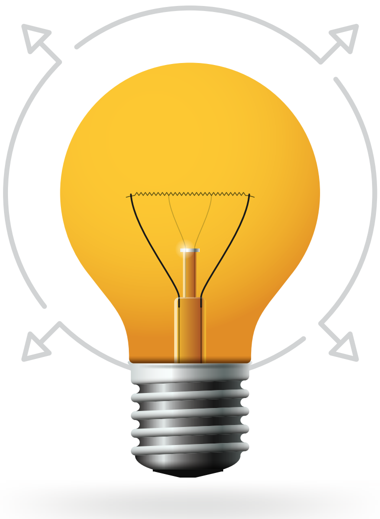
- India is the 3rd largest producer of electricity and consumer of energy, with
- the installed power capacity reaching **370 GW** as of May 2020

- In terms of capacity mix, Thermal Power still contributes **62% of the total installed capacity,** with Renewable energy sources rapidly increasing their
- energy share from 6% in 2007 to **24% in 2020**. Hydro and Nuclear sources constitute the remaining 14%

Capacity utilization of thermal plants has declined

- With the GOI's increased focus on Renewable energy, the capacity utilization for the thermal power plants have fallen drastically to **56% in FY 19-20 vis-à-vis 78% a decade back**

- Other major reasons that have led to ~22% decline in the utilization levels includes shortage of coal supply and coal-linkages, and unavailability of FSAs for GENCOs



Three strong pillars (Generation, Transmission, and Distribution), but subdued Energy demand on the anvil

- In FY 18-19 Electricity generation **grew at 5.2%** and, **22,437 CKMs** of transmission lines were added, Distribution segment is the cash register for the sector but is in stress for past few years

- The strong pillars have reduced the difference between power requirements and availability from 10%, a decade back, to **0.5% (FY 19-20)**. But, tremendous growth in generating capacity additions has led to lot of plants being underutilized, also resulting in subdued energy demand in the country

Regulatory environment in Power Sector

- **100% FDI** (Foreign Direct Investment) allowed in the power sector has boosted FDI inflows in this sector. FDI in the Power industry between April 2000 to March 2020 stood at INR 82,651 Cr

- To achieve **100% electrification** various schemes such as Deen Dayal Upadhyay Gram Jyoti Yojana (DDUGJY), Integrated Power Development Scheme (IPDS) and Saubhaya have been implemented

__CKMs__ – Circuit Kilometers, __GOI__ – Government of India, __GENCOs__ – Generating Companies
__FSAs__ - Future Supply Agreements
__Source__ – DIPP (Department of Industrial Policy and Promotion)

Executive Summary

Stress in the Power Sector

1

- Generation and Distribution are the major pillars that contribute to the overall stress in the Power sector, with Transmission remaining profitable
- A total of 34 Coal based Thermal Power Plants (~ 40,000 MW capacity) and 31 Gas based Power Plants (~14,000 MW capacity) are stressed as on date – roughly 15% of the installed capacity

2

- Major reasons that have aggravated the stress in the power sector are capacity addition without tied-up PPAs with DISCOMs, coal supply issues, inability of DISCOMs to pay to power generators, slow growth in power demand, and regulatory issues
- Issues for stress in Gas power plants include inadequate availability of domestic gas and absence of any policy measures for imported R-LNG with subsidy support

3

- Financial Health of DISCOMs is the major reason that has resulted in inability of these coal based power plants to service their debts. Outstanding Debt- INR 2,28,000 Cr (FY 19), with additional INR 92,700 Cr is owed to GENCOs (Feb 2020)
- Such high debt and outstanding amount to GENCOs have caused lot of stress resulting even in stranded capacity. This is primarily due to operational inefficiencies like AT&C losses, ACS-ARR gap, cross subsidization and unchecked theft

4

- Government of India constituted a High Level Empowered Committee (HLEC) in July 2018 to address the issues of stressed thermal power projects
- The Government had earlier taken many steps (Schemes) to resolve the issue of stress in power sector- SHAKTI Scheme (to control Fuel Supply Issues), Pilot Scheme (for PPAs), and UDAY Scheme (to revive the health of DISCOMs)

PPAs *– Power Purchase Agreement,* ***R-LNG*** *- Regasified Liquefied Natural Gas*
AT&C *- Aggregate Technical and Commercial Loss,* ***ACS****- Average Cost of Supply,*
ARR *- average revenue realized,*
SHAKTI *- Scheme for Harnessing and Allocating Koyala Transparently in India*
UDAY *- Ujjwal DISCOMs Assurance Yojana,* ***DISCOMs*** *– Distribution Companies*

Executive Summary

Status of Stressed Transactions in the Power Sector

- **Debt Pile up for Banks/NBFC's**
  The country's thermal power sector has significant number of stressed assets, with loans of ~ INR 1.86 Lakh Cr expected to turn bad or recast

- **Government support to revive the stress**
  Hon'able Supreme Court of India, in Apr 2019, squashed RBI circular (Feb 2018) that focused on taking stressed power companies to NCLT. RBI issued a revised Circular (June 2019), which excluded the mandatory reference of a stressed asset to the NCLT

- **Resolutions came at a cost**
  Due to the Hon'able Supreme Court verdict, 28 of the total 34 stressed assets are either resolved or are under to be resolved category. However, **substantial haircut (40% - 60%)** has been taken by the lenders to revive these projects

- **M&A vis-à-vis other measures**
  Many M&A transactions are completed / to be completed outside the purview of Insolvency, with other transactions being resolved through debt restructuring or one time settlement, but again lenders have to **presume a haircut** in the recovery of their loans

- **Financial and Strategic players**
  Apart from financial and strategic investors, the sector saw first ARC transaction where the promotors have retained control, and the project was funded by foreign Investors

- **The COVID impact**
  There is an uncertainty regarding the revival of stress assets amid COVID, considering the resolution of stress assets of Essar Power's Mahan and RKM Power-Gen is delayed

Deals done outside IBC

TATA

RESURGENT POWER
Acquired Jaypee's 1,980 MW plant at INR 6,000 Cr (3Cr/ MW),
Haircut - ~52%

鴻貿國際私人有限公司 AGRITRADE INTERNATIONAL PTE. LTD.

AGRITRADE RESOURCES
Acquired SKS 1,200 MW plant at INR 2,170 Cr (1.8Cr/ MW),
Haircut - ~60%

adani Power

ADANI POWER
Acquired GMR's 1,370 MW plant at INR 3,530 Cr (2.58Cr/ MW),
Haircut - ~40%

ADITYA BIRLA

ADITYA BIRLA:
RattanIndia's 1,350 MW plant at INR 4,050 Cr (3Cr/ MW),
Haircut - ~38%

Resolutions outside IBC – In progress

GVK

In talks with Deutsche Bank to transfer outstanding loans of INR 3,510 Cr from existing lenders. **Haircut of ~70%**

C&O GROUP

Deutsche Bank AG and SSG Capital have made a joint bid of ~INR 6,500 Cr. **Haircut of ~50%**

ESSAR

Essar Power has submitted a debt resolution proposal to the banks, an upfront cash payment of 70% and the balance to be a mix of debt and equity

Source – *Media Reports, RBSA Analysis*

Executive Summary

Where is Power Sector placed right now ?

COVID Impact on the Power Sector

COVID lockdown has led to a sharp fall in electricity demand especially from the industrial consumers, and also collections of DISCOMs has reduced drastically as consumers are inclined towards conserving cash during these uncertain times

Tariff reduction to further impair the ability to pay pending dues of the GENCOs. 1/3rd of the DISCOMs have invoked force majeure clause against IPPs, some States have asked IPPs to pull the shutters and not expect payment for some interval

GENCOs are paying for coal procurement in advance and stocking these up by paying higher railway freight rates despite falling demand, to further dent their cash position

Measures to revive and reduce the COVID impact

DISCOMs have been provided with 3 months moratorium to pay GENCOs

GOI has announced INR 90,000 Cr bailout package for the fund crunched DISCOMs, to clear their dues with GENCOs. It has also resolved to privatise DISCOMs in all the eight Union Territories and explore PPP for power distribution in some states

New proposed tariff policy to limit cross-subsidies, penalise DISCOMs for unnecessary power cuts, and preventing them from passing their losses to the consumers

Union Government to take measures to allow the State and Central GENCOs on deferred payment to Coal India (CIL)

Way forward in the Sector

The improvement in DISCOMs financial position remained lower than expected, hampering the sustainability of demand growth and signing of new long-term PPAs

Coal India is mulling to divert the fuel supply to other sectors such as cement and sponge iron on account of subdued demand of coal by the power sector

There has been a substantial haircut in the resolved 14 projects, and with COVID threat other thermal stressed assets and 14 GW Gas Power plants are unlikely to find reasonable buyers

Given the lesser benefits of SHAKTI, UDAY Schemes, large haircuts in the resolutions and the COVID impact have collectively magnified the already present stress in power sector, and the sector revival is expected to be delayed by few more years

IPP – Independent Power Producers, PPP - Public-Private Partnerships
Source – Media Reports, RBSA Analysis

2

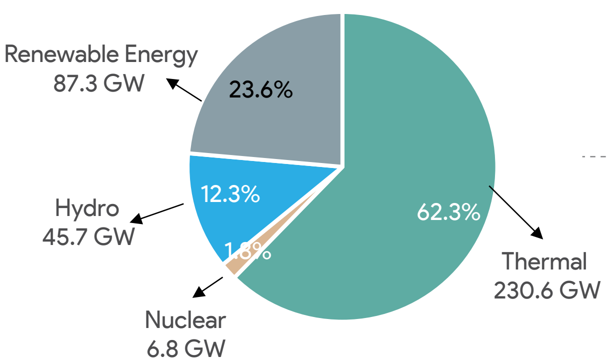
Overview of Power Sector

Overview Of Power Sector

A Look at Generating Capacity

- The installed generating capacity of the Indian Power industry as on 31st May 2020, was about 370 Giga Watts (GW), with Thermal and Renewable sources contributing about ~86% of total power requirement. Hydro and Nuclear sources constitute the remaining 14%
- 89% of Thermal Power is generated from coal, while Wind and Solar power contribute 83% of the total renewable energy

Total installed capacity as on 31st May 2020



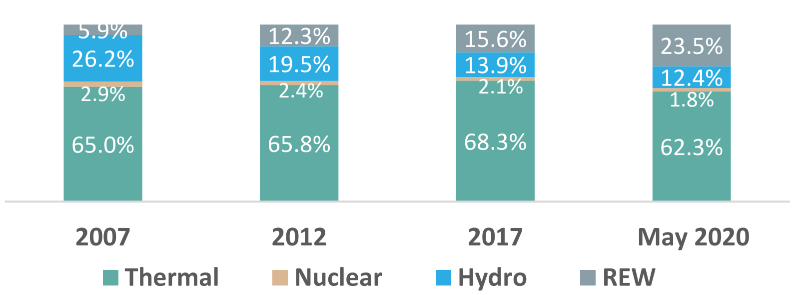
Breakup of Thermal Power Capacity

Coal 205 GW + Gas 25 GW + Diesel 0.6 GW = Total 230.6 GW

Breakup of Renewable Power Capacity

Wind Power 37.8 GW + Solar Power 34.9 GW + Bio Power 10 GW + Small Hydro 4.7 GW = Total 87.4 GW

Evolution of Capacity Mix

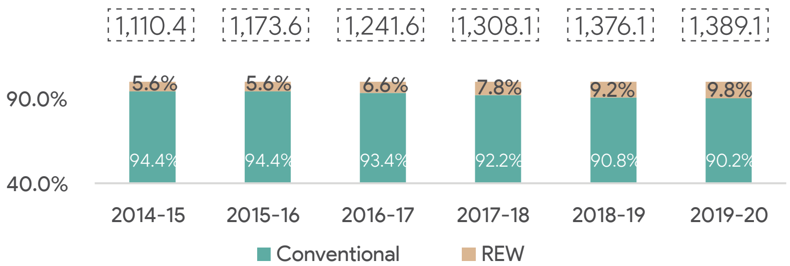


The share of renewable energy has increased immensely from **~6% to ~24%** whereas share of all other resources of power have come down, depicting governments focus on the renewable sector

Source – CEA (Central Electricity Authority)

Overview Of Power Sector

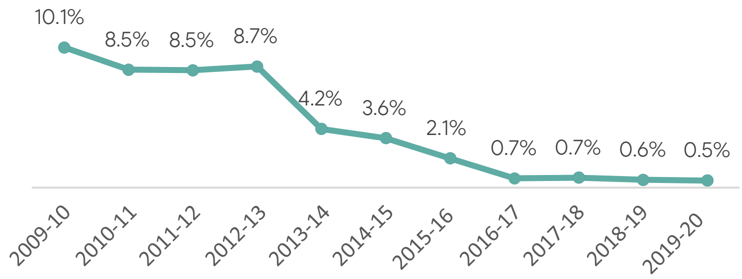
Electricity generation from conventional and Renewable resources (BU's)



Electricity Generation from Conventional and Renewable resources

- India, the third largest producer of electricity and consumer of energy, is producing power at an average growth rate of ~5%, from 1,110 BUs in FY 15 to 1,389.1 BUs in FY 20
- Generation from renewable sectors too have increased steadily from 5.6% in FY 15 to 9.8% in FY 20

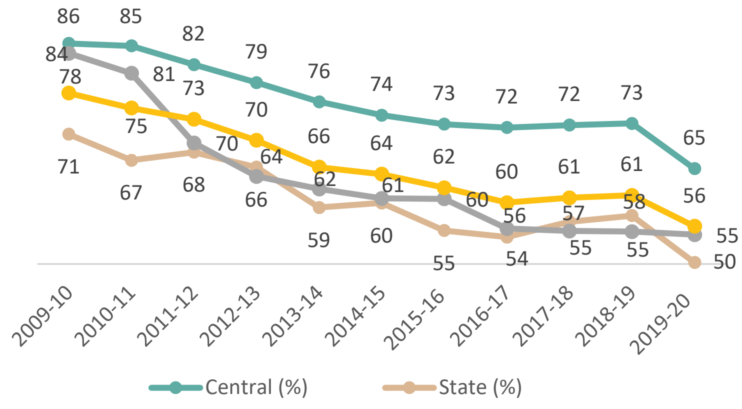
Power Demand and Supply Deficit



Power Demand and Supply Deficit

- India, once a power deficit country, have now come to break-even w.r.t to Energy requirement and availability
- At 10% energy deficit (Requirement ~830 BUs, Availability ~746 BUs) in FY 2009-10, the same has come down to 0.5% (Requirement ~1,290 BUs, Availability ~1,283 BUs) in FY 19-20, owing to government's focus towards making India a Surplus power country

Sector wise Coal – based Thermal Power PLF(%) Trend



Declining Thermal Power Plant Load Factors (PLF)

- Shortage of Coal supply and Lack of coal-linkages
- Unavailability of PPAs and future supply agreements for power generation companies
- Excess installed generation capacity vis-vis demand
- Growth in share of Renewable Energy sources have led to decrease in PLFs of thermal generation units

Source – Ministry of Power

3

Stress in Power Sector

Stress in Power Sector

Stress segments in Power Sector

Generator

34 Coal based Thermal Power Plants and 31 Gas- based Power Plants are stressed as on date

DISCOMs

Outstanding Debt- INR 2,28,000 Cr (FY 19), with additional 92,700 Cr owed to generation companies (Feb 2020)

Snapshot of Coal Based Stressed Thermal Power Assets

Overview of Stressed Assets

Total number of projects	34
Total stressed capacity	40,130 MW
Commissioned capacity	26,265 MW (65%)
Under construction capacity	13,865 MW (35%)
PPAs tied up	19,005 MW
FSAs tied up	25,702 MW
Debt Outstanding*	INR Cr 1,85,935

Major Reasons for 34 Power Plants Stressed Assets

- Non-availability of Fuel:
  - Cancellation of coal block
  - Projects set up without Linkage
- Lack of PPAs
- Inability of the Promoter to infuse the equity and working capital
- Contractual/Tariff related disputes
- Issues related to Banks/Financial Institutions (FIs)
- Delay in project implementations leading to cost overrun

Source – Standing Committee on Energy Report dated March 2020, Ministry of Power
** Outstanding debt compiled by lead banks and SBICAPs*

Stress in Power Sector

A Snapshot of 31 Gas Based Stressed Power Assets – Jan 2019

- Private Sector holds the most 2/3rd of installed capacity in total 31 stranded gas projects. Projects covered by Central and State are fully operational, however in private sector still 32% capacity is non-operational
- 14,305 MW Gas based capacity (~56% of total gas capacity) is stranded due to non availability of domestic gas and un-affordability of imported gas
- Investments of INR 4 - 5 Crs per MW have been made to these stranded projects, of which 70% - 80% been financed by banks, showing INR 65,000 Crs have been invested of which INR 50,000 Crs have been funded by the banks
- An additional cost escalation ranging 50%-75% of the original project cost on account of delays primarily due to non-availability of gas
- These plants are on verge of becoming NPAs. Moreover, these plants are unlikely to find buyers till the status of gas availability is improved
- In fact, Reliance Power has already announced to relocate one module of its gas-based power plant at Samalkot, Andhra Pradesh (which was stranded for number of years due to non-availability of gas) to Bangladesh, signifying that owners are looking for alternative ways to monetise their assets

Sector	No of Assets	Installed Capacity (MW)	Operational Capacity (MW)
Central	1	1,967	1,967
State	6	2,665	2,665
Private	24	9,673	6,572
Total	**31**	**14,305**	**11,204**

- **5,194 MW** capacity, which has KG (Krishna Godavari) D6 gas allocation. Gas supply to these power plants from KGD6 is NIL since 2013
- **3,762 MW** capacity has been commissioned without any gas allocation
- **5,349 MW** capacity was in the category of ready for commissioning, of which **2,348 MW** has been commissioned without gas allocation

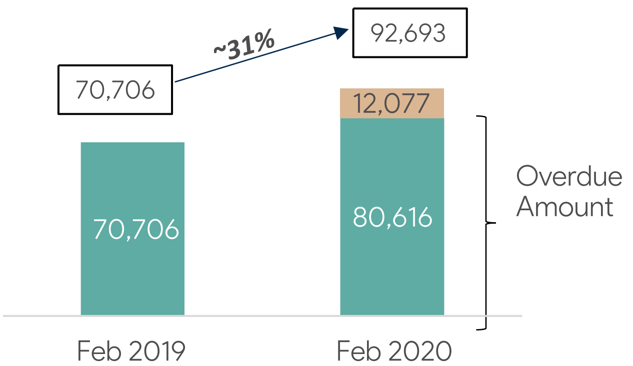
Source – Standing Committee on Energy, Ministry of Power

Stress in Power Sector

Snapshot of Stressed DISCOMs of the Power Sector

- Distribution sector, is considered to be the **weakest link** in the entire value chain of the Indian power sector
- Long outstanding payments by the DISCOMs to power generators has risen **31% Y-O-Y** in Feb 2020 as depicted in the graph.
- DISCOMs total outstanding debt to FIs is recorded at **INR 2,28,000 Cr (FY 18-19)**
- DISCOMs in Rajasthan, Uttar Pradesh, Jammu & Kashmir, Telangana, Andhra Pradesh, Karnataka and Tamil Nadu account for the major portion of dues to power GENCOs
- The total **overdue amount of INR 80,616 Cr in Feb 2020**, was segmented as ~25% to independent power producers and 39% to PSU GENCOs

Outstanding amount due to GENCOs (INR Cr)



Major Amount due to Generators ~INR Cr (Feb 20)

एनटीपीसी NTPC	11,600	एनएचपीसी NHPC	2,840
CREATING WEALTH FOR WELLBEING	5,200	bajaj ENERGY	2,213
दामोवि DVC	4,900	THDC INDIA LIMITED	2,188
R.K.M PowerGen	3,422	GMR	1,930
adani Power	3,201		

INR 7,096 Cr amount is due to **Renewable Energy producers**

Major Reasons for Stress in Distribution Sector

- Average AT&C losses stand at 19.16% (9M FY20), with most states failing to meet the target
- Gap between the average cost of supply (ACS) and the average revenue realized (ARR) for most DISCOMs still persists with ACS>ARR
- On an average, the DISCOMs loose INR 0.37 per unit of electricity supplied
- Low achievements by UDAY - Delayeddisbursement of subsidies by State Governments, revenue deficits due to low tariffs, and unchecked theft
- Cross subsidization of some classes of consumers especially in industrial and agricultural sectors

Source – *Media Reports*

Stress in Power Sector - Current Status

Status of Stressed Power Sector – GENCOs

- Ministry of Power is monitoring 34 stressed assets in thermal power sector, as per list provided by Department of Financial Services
- Out of the total installed capacity of these 3**4 projects i.e. 40,130 MW, 26,265 MW (65%) is commissioned, 19,005 MW (47%) capacity** has PPAs and **25,702 MW (64%)** has fuel linkage
- Current classification of 34 stressed assets is as follows

Category I

Projects which are mostly commissioned (~96%) and have been resolved and/or serving their debt and/or are not in NCLT. A total of 14 projects come under this category

Category II

Projects which are only partly commissioned (~59%) & have been referred to or admitted under NCLT waiting for resolution. A total of 14 projects come under this category

Category III

Projects which are at very initial stage of construction and are totally stalled. Such projects have either been ordered to be liquidated or are heading towards liquidation. A total of 6 projects come under this category

Status of Resolution	No of Assets	Capacity (MW)	Commissioned Capacity (MW)	PPAs Tied (MW)	FSA Tied (MW)	O/S Debt (INR Cr)
Resolved	14	16,450	15,850	10,946	13,272	68,668
Partly Resolved	16	17,320	10,280	6,920	11,770	90,323
Stalled	6	6,360	135	1,139	660	26,944
Total	**34**	**40,130**	**26,265**	**19,005**	**25,702**	**1,85,935**

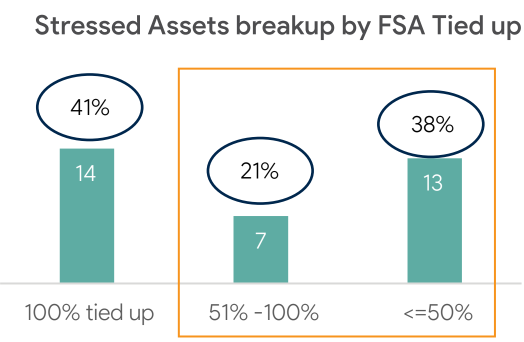
Source – Standing Committee on Energy, Ministry of Power

4 Reasons for Stress in Power Sector

Reasons for Stress in Power Sector

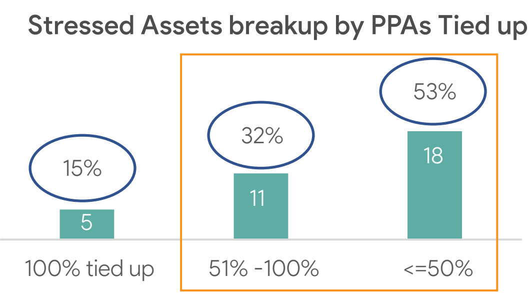
Fuel Supply Challenges

- After cancellation of 204 coal mines by the Hon'able Supreme Court of India in 2014, many power projects became stranded without arrangements of adequate fuel supply
- Many projects were setup without firm coal linkages from Coal India Limited (CIL) leading to high cost of generation and lower PLFs, which impacted the debt servicing ability
- Post coal mine bidding, few coal mine allottees raised transparency issues to bidding in courts, that led to such projects being entangled in legal issues causing stress in the linked power projects
- Shortage of gas had led to many gas based thermal generation units to become unviable



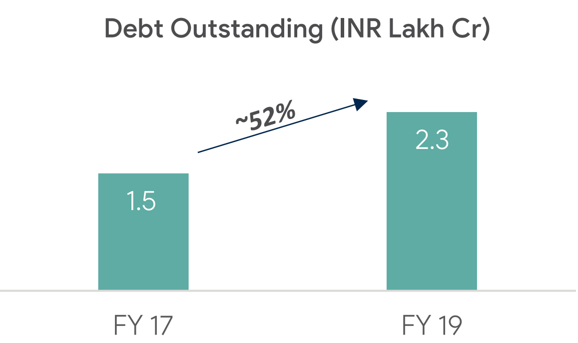
Lack of PPAs in the market

- Several coal-based power plants have FSAs, but do not have medium term/long term PPAs. As shown in the graph 53% of the total stressed assets have less than 50% (of total capacity) of PPAs tied up
- DISCOMs are refraining from signing fresh thermal PPAs due to subdued demand growth, which has affected the health of these power plants



Financial Health of DISCOMs

- Delay in realization of receivables from DISCOMs impairs the ability of project developers to service debt, which leads to exhaustion of working capital
- In some cases, the DISCOMs have pressed for renegotiating terms of PPAs. This, coupled with non-payment of penalties / Late Payment Surcharges (LPS) is causing Financial stress for such projects
- Long outstanding payments by the DISCOMs to power generators has risen 31% Y-O-Y in Feb 2020 to INR ~92,700 Cr. Debt outstanding in the books have risen to INR 2.28 Lakh Cr in FY 19



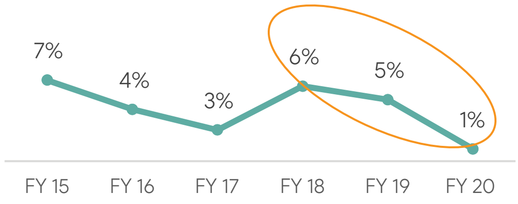
Source – HLEC (High Level Empowered Committee) Report, Media Reports

Reasons for Stress in Power Sector

Slow growth in power demand

- Lower than anticipated growth in power demand coupled with a scenario of surplus supply has resulted in under-utilization of thermal power capacity
- As shown in the graph energy demand has been subdued over the years resulting in a delay of revival of the power Sector

Passive Growth in Energy Demand



Regulatory and contractual disputes

- Due to the delay in approval of tariff petitions and approval of additional tariff under 'Change in Law' provision in PPAs, projects are unable to recover cost of generation which adversely impacted financial viability
- Environmental cess and stricter emission also impacted cost of production of thermal power plants. Since Low Carbon Growth Strategy has to be followed as per the Paris Agreement entered by India, other generation options have to be harnessed in the optimum manner

The regulatory reasons for shortfall in supply of coal has been assigned by the Ministry of Coal to the followings:

- Delay in environment and forestry clearance in some mines of CIL
- Land acquisition and resettlement and rehabilitation (R&R) problem in some mines of CIL
- Law and order problem mainly in MCL (Mahanadi Coalfields Limited), CCL (Central Coalfields Limited) & BCCL (Bharat Coking Coal Limited)

Banks/ Financial Institutions (FI's) related Issues

- Delay in disbursement regarding sanction of additional term loan for various reasons such as provisioning requirements by RBI for the earlier loans which are being struck in various power project have led to further stalling of projects
- Delays in approval of working capital loans by lenders has adversely impacted project viability which generally happens due to exhaustion of sectoral exposure limit of individual banks
- Working capital limit is set based on a cover period of 2-3 months which is insufficient considering the delays involved in payment by DISCOMs

Source – HLEC (High Level Empowered Committee) Report, Standing Committee on Energy, Ministry of Power

5

Government Initiatives to Control Stress

Government Initiatives To Control Stress

Initiatives to Control Fuel Supply Challenges - SHAKTI SCHEME

- After cancellation of 204 blocks, GOI reallocated 51 blocks of supporting capacity ~62,000 MW through auction/ allotment
- Ministry of Coal has started e-auction window for power sector in which CIL was to offer adequate quantity of coal at regular intervals
- Bridge Linkage of coal to 29 thermal Projects in Government sector (~34,620 MW capacity)

Linkages Granted under **SHAKTI scheme –**

- Linkages have been granted to State/ Central GENCOs of 8,870 MW for 10 projects
- Linkages on Auction basis for IPPs with PPAs- Linkages have been granted to 11,549 MW capacity for 10 projects

Amendments under **SHAKTI scheme (Mar 2019)** – Subject to certain conditions:

- All power plants (incl. private generators) which do not have PPAs, shall be allowed Coal linkage for 3 months to 1 year period
- Continued usage of linkage coal in case of termination of PPAs due to payment default by DISCOMs
- Projects with long term PPAs, who could not participate in first round of linkage auctions, allowed to participate in subsequent rounds

Initiatives for Power Purchase Agreements – PILOT SCHEME

- **Pilot Scheme** - Ministry of Power had notified a scheme for procurement of 2,500 MW for a period of 3 years from the generators with commissioned projects having untied capacity
- Bids received from 7 projects (~1900 MW), with Letter of Award (LOA) issued to all the successful bidders (~1,900 MW)
- **Pilot Scheme II** - 15 Bidders declared qualified for bidding matching the tariff of Rs. 4.41/kWh for aggregated power of 2,500 MW
- NHPC has been appointed the aggregator under Pilot Scheme II for procurement of aggregated power of 2,500 MW for 3 years

Steps to Revive Health of DISCOMs – UDAY SCHEME

- Under the scheme, States are to take over 75% of debt of DISCOMs as on 30 Sep 2015, and balance 25% are to be restructured/replaced by DISCOMs Bonds at lower rates
- INR 2.69 Lakh Cr is to be restructured through issuance of bond, of which 87%, ~INR 2.09 Lakh Cr have been issued
- Reduction of the interest cost on the debt taken over by the States to around 8-9%, from 14-15%
- States to take over and fund at least 50% of the future losses (if any) of DISCOMs in a graded manner
- PFC and REC to lend to DISCOMs (state-government guarantee backed), with 2 years moratorium to clear DISCOMs dues

PFC - Power Finance Corporation, REC - Rural Electrification Corporation Limited
Source - HLEC (High Level Empowered Committee) Report, Ministry of Power

Government Initiatives To Control Stress

Steps to Revive Health of DISCOMs – UDAY SCHEME Key Metrics

Financial losses of UDAY states have reduced from INR 32,150 Cr in 9MFY17 to INR 25,305 Cr in 9MFY19 (9M FY 20 – INR 18,316 Cr)

ACS- ARR Gap of UDAY states has reduced from INR 0.50/unit in 9MFY17 to INR 0.35/unit in 9MFY19. At present it is at INR 0.37/ unit

AT&C Loss of UDAY states have reduced from 22.11% in 9MFY17 to 20.14% in 9MFY19 (9M FY 20 - 19.16%)

Billing efficiency has improved from **81.57% in FY 16** to **84.31% in FY19**

Other Schemes to boost the Power Sector

Financial initiatives

FDI – Automatic approval of 100% foreign equity is permitted in generation, transmission, and distribution sectors

National Electricity fund – Set up in 2012 by to provide interest subsidy on loans disbursed to state power utilities, DISCOMs, both in public and private sector

Operational initiatives – Till March 2019

Rural

DDUGJY – To enable rural electrification to un-electrified parts of the country through development of infrastructure relating to distribution of electricity

- **Status** – 2,910 new Sub-Stations have been established/ augmented; 94,380 km feeder separation completed 2,88,852 new DT installed and 1,97,267 km LT and 1,16,792 km HT new line erected.

Total Outlay – INR 75,893 Cr, GOI grant – INR 63,027 Cr

Urban

IPDS – To provide 24×7 power supply in Urban Areas, and reduction of AT&C losses to 15%.

- **Status** - Distribution system strengthening projects worth INR 28,260 Cr for 546 circles covering 3,634 town sanctioned, 63,000+ transformers have been installed

Total outlay - INR 32,612 Cr, GOI grant – INR 25,354 Cr

Saubhagya – To achieve universal household electrification by providing last mile connectivity and electricity connections to all remaining un-electrified households in rural and urban areas

- **Status** - All States declared electrification of all households on Saubhagya portal (31 Mar 2019), except few households in LWE (Left - Wing Extremism) affected areas of Chhattisgarh

Total outlay – INR 16,320 Cr, GOI Grant - INR 12,320 Cr

Source – HLEC (High Level Empowered Committee) Report, Ministry of Power

6

Valuation of Stress Power Assets

Valuation of Stress Power Assets

Dates

Project Start Date, Development period, Construction Days, Prior Delays, PCOD (Proposed commercial operation date)

Project Cost

Mechanical Equipment and Land Cost, Technical Due Diligence, Upfront Insurance Payment etc.

Capex

Current Capacity of the plant needs to be studied; Proposed capex planned to achieve the capacity

Cost of generation

Trend for cost of energy generation and Other O&M expenses needs to be studied

Funding

Proposed funding for the revival, along with study of Debt and Equity mix

FSAs

FSAs tied up with the plant, Coal linkages with CIL, Coal (MTPA) available, tenure of PPAs

Capacity Utilization

Station Heat Rate & **plant load factor (PLF)** to be analysed, to check the trend of capacity utilization of the plant

PPAs

PPAs tied up with the plant, No. of PPAs, PPAs Tariff, any escalation clause, tenure of PPAs

Regulatory Roadblock and Judicial Delays

Pending Regulatory/ Environment clearances to be kept track of, that can deeply impact the value of the plant

Source – RBSA Analysis

7

Case Studies

RBSA Advisors

Case Study 1 - Prayagraj Power Generation Co. (PPGCL)

Renascent Power Acquisition of PPGCL

PRAYAGRAJ POWER GENERATION COMPANY LTD. TATA

Asset Overview

- Jaypee Power's subsidiary, PPGCL, owned and operated 1,980 MW Prayagraj Thermal Power Plant at Tehsil Bara, District Allahabad, UP
- The power plant's three supercritical units were commissioned during 2016 and 2017
- 25 year PPAs with the five distribution utilities of UP for sale of 90% of the power generated from the COD
- The original project cost estimated at INR 10,780 Cr but a 33 months delay has increased the project cost by ~44% to INR 15,537 Cr.
- Delays in land transfer by UPPCL & equity infusion by promoter; increases in forex rate variations, rate of interest etc. were the main reasons for 33 month delay
- The asset was declared stressed in 2018, with outstanding debt of INR11,493 Cr (74% of total outlays) and equity infusion of INR 4,043 Cr (26%)
- Only 40% utilization levels (PPAs and FSA tied up for 90%) achieved over the last two fiscal years due to the non-availability of coal (only 4.97Mt of coal was received (~64% of required) and a lack of working capital
- **To sum up the reasons for stranded power plant were low coal supply, lack of working capital, and cost overruns, while subsequent operational issues occurred as a result of the low plant load factor**

Transaction Rationale

- The acquisition is in line with Resurgent's Power (Parent company of Renascent Power Ventures Pvt Ltd) objective of investing in Power Companies in India
- Tata Power may invest around Rs. 500 Cr over 2-3 years in Prayagraj plant to upgrade it

Transaction Statistics

Financial creditors: 52% haircut

Loan exposure: INR 12,500 Cr

Deal value: INR 6,000 Cr

Enterprise Value	~INR 8,000 Cr
EV by Capacity (MW) multiple	4.04 x

Transaction Overview / Asset Revival

- **Announced on** 28th August 2018 & **Completed on** 4th December 2019
- Renascent Power, signed a SPA with a consortium of lenders led by the SBI to acquire PPGCL **(75.01% Equity stake** and **100% preference shares** i.e. 27 Cr preference shares of Rs 10/- each)
- Deal Multiple is INR 3Cr/ MW Capacity

  Banks to get INR 1,300 Cr in equity investments and INR 4,700 Cr in the shape of borrowings and other sources
- This transaction is the result of stressed asset resolution process initiated by the lenders through a competitive bidding process (Outside IBC)
- **Buyer:** Renascent Power, Subsidiary of Resurgent Power (JV set up by Tata Power, ICICI Bank & Global investors). This venture was set up to acquire assets in the Indian power sector

Analysis

- Post acquisition, 2 units are under operation. Availability of 70% has been achieved (50% availability on take over)
- It is expected that by FY2021, full availability of the plant at 80% will be achieved. The plant parameters (operational) are being stabilized, the coal linkage is also being tied up to ensure enough coal for all 3 units

PPGCL - Prayagraj Power Generation Company Ltd, UPPCL - Uttar Pradesh Power Corporation Ltd.
COD - Commercial Operation Date, SPA - Share Price Agreement
Source – Media Reports, Company filings

Case Study 2 - SKS Power Generation Ltd. (SKS Power)

Agritrade Resources Ltd Acquisition of SKS Power

SKS ISPAT & POWER LTD

AGRITRADE RESOURCES LIMITED

Asset Overview

- SKS Power (Chhattisgarh) implemented a 1200 MW (4 x 300 MW) Independent Power Project at Villages Binjkote & Daramurra, Raigarh District, Chhattisgarh
- Unit I of phase I of the project (300 MW), began commercial operation on October 6, 2017, while unit II of phase I (300 MW) became operational on April 1, 2018
- The SKS Power Plant is strategically located in the coal belt wherein all the major SECL Mines are within the range of 20 - 100 KMs
- The Company signed a Fuel Supply Agreement with South Eastern Coalfields Ltd.
- The company entered into a PPAs with Chhattisgarh State Power Trading Company in 2011 (latter would buy 5% of the net energy generated)
- It had also secured short-term PPAs with DISCOMs of 4 states and a medium-term PPAs with Noida Power Company
- **Reasons for stress** - In the absence of a long-term PPAs, the plant was unable to source linkage of coal. It sourced coal through e-auction and from the open market

Transaction Rationale

- For Agritrade having presence mainly in mining, shipping and energy, this acquisition presented a diversification opportunity to expand into thermal power
- The acquisition was expected to help Agritrade become an integrated energy solutions provider, vertically integrate with its existing coal business
- Acquirer considers that there is a strong demand and potential for thermal power in India

Transaction Statistics

Financial creditors: 60% haircut

Loan exposure: INR 5,391 Cr

Deal value: INR 2,170 Cr

Enterprise Value	INR 2,170 Cr
EV by Capacity (MW) multiple	1.81 x

Transaction Overview / Asset Revival

- **Announced on** 27th July 2018 **& Completed on** 18th March 2019
- Agritrade Resources purchased 100% SKS Power's Binjkote power plant for INR 2,170 Cr
  Agritrade funded the acquisition through internal resources and a loan from a third party. Certain Group's assets with carrying value of approximately HK$ 3,710 million were pledged to secure certain banking facilities and borrowings of the Group
- **Buyer:** Agritrade Resources Limited, Singapore-head-quartered and Hong Kong-listed company present mainly in mining, shipping and energy

Analysis

- Post acquisition, the overall turnover of Agritrade increased by 20.6% to HKD1,504.5 Mn (2019)
- 70% PLF was achieved for Phase I , with a total of 1,603 million units of power generated and 1,436 million units of power exported by the SKS Power Plant, which contributed a revenue of HK$642.3 million and an operating profit of HK$88.8 million to the Group's energy segment
- The Group's finance costs increased significantly to HKD242.1 Mn (due to the acquisition)

Source – Media Reports, Company filings

Case Study 3 - Rattanindia Power Limited

RBSA Advisors

Amravati Plant acquisition and Nashik Plant Revival

RattanIndia Goldman Sachs VÄRDE

Asset Overview (Amravati & Nashik)

- RattanIndia Power has 2 coal-based thermal power projects at Amravati and Nasik (2,700MW each). Phase I of Amravati plant (1,350MW) is fully operational, while Phase I of Nasik power plant (1,350 MW) has been commissioned
- Amravtai has a fuel supply agreement with South Eastern Coalfields of CIL for 5.5 million tonne supply. Nashik plant - Coal allocation agreements are done with South Eastern Coalfields and Mahanadi Coalfields
- Amravati Plant is supplying power to MSEDCL through a long term PPAs (1,200 MW). The PPAs did not have any provision for change in tariff
- Reason for stress - Delays in the project due to shortage of coal from CIL, cost overruns and delayed payments from states
- Nashik plant became stranded due to outdated technology, no PPAs, and land acquisition issues resulting in the absence of a rail link

Deal Rationale*

- In 2018 ABCL and Värde Partners, formed an exclusive strategic partnership to pursue investments in distressed assets in India
- Both have decided to evaluate investments across sectors, focusing on the acquisition, restructuring and resolution of the substantial supply of non-performing assets in India

Transaction Statistics*

Financial creditors:	Loan exposure:	Deal value:
38% haircut	~INR6,575 Cr	INR4,050 Cr

Deal value by Capacity (MW) multiple	3.0 x

Transaction Overview/ Asset Revival *

- **Announced on** 11th Jan 2019 **& Completed on**: 31st December 2019
- Amount owed to lenders is INR 6,575 Cr, most of which were used to finance the first phase of Amravati.
- In **December 2019,** Amravati project became the largest settlement outside the NCLT framework without a change in management. The deal went through the platform of Aditya Birla Asset Reconstruction Company
- This is the first scheme where foreign investors have replaced Indian lenders for resolution of stressed assets outside the NCLT
- INR 4,050 Cr debt was taken over by new investors, including **Goldman Sachs** and **Varde Partners** (15% equity each).
- RattanIndia issued securities to Aditya Birla ARC ~80 Cr shares (Issue price 10/- per share), and ~66 K NCDs (issue Price 1,00,000 per NCD). The issuance is towards reduction of outstanding debt of the company

Analysis

- Post closure of the deal, RattanIndia reported a PBT of INR 2,106 Cr (Q3 FY 21), from a loss of INR 188 Cr (Q3 FY 20)
- The company has decided not to construct 2nd phase of the project, owing to lack of long-term PPAs in the market
- RattanIndia is looking to raise INR 500 Cr working capital from its existing lenders to resume the **Nashik plant**. Loan Exposure is ~7,000 Cr
- Nashik plant which was shut for the past two years, the company is looking at resuming operations (at least two units) as it has received an LOI from MSEDCL for a 25-year PPAs to supply 507 MW
- The company is looking at One Time Settlement model for Nashik plant, for which it plans to make the plant operational

MSEDCL – Maharashtra State Electricity Distribution Company Ltd., ABCL – Aditya Birla Capital Ltd.
Source – Media Reports, Company filings
** For Amravati Plant*

Case Study 4 - GMR Kamalanga Energy Ltd (GKEL)

JSW Energy Ltd Acquisition of 100% stake in GKEL

Asset Overview

- GKEL, subsidiary of GMR Energy Limited (GEL), has developed 1,050 MW (3×350) coal fired power plant at Kamalanga Village, Odisha
- The CoD of Unit 1 was achieved in March 2013, for Unit 2 in November 2013 and for Unit 3 in March 2014
- The plant has fuel linkages with MCL, subsidiary of CIL, and a long term PPAs with GRIDCO (Odisha), UHBVNL & Bihar State Electricity Board
- About 85% of the power plant's capacity supplies electricity to Odisha, Haryana and Bihar under long-term power purchase agreements
- GKEL plant operated at 63% PLF (9M FY 20), from 73% in FY 19
- The plant operations were not viable for GEL because the competitive rates, INR2.89/unit - INR3.39/unit, at which it sold power were insufficient to recover the costs incurred from operating the plant

Transaction Rationale

- Through this acquisition, JSW Energy Ltd, expects to enhance the company's presence in the eastern region of the country and diversify its fuel mix and offtake arrangements

Transaction Statistics*

Financial creditors: (haircut): undecided

Loan exposure: INR4,141 Cr

Deal value: INR5,321 Cr

Enterprise Value	INR5,321 Cr
EV by Capacity (MW) multiple	5.07 x

Transaction Overview/ Asset Revival

- **Announced on** 17th February 2020 **(to be completed)**
- JSW Energy has signed a SPA with GMR, to acquire **100% stake** in latter's subsidiary GKEL. The transaction is subject to working capital and other adjustments
- GEL to procure balance stake in GKEL from IIF and IDFC First Bank
- The deal is yet to receive approvals from the CCI, lenders of GKEL and IDCO (Industrial Development Corporation of Odisha)
- Clearances from PPAs beneficiaries, Haryana – UHBVNL, Dakshin Haryana Bijli Vitran Nigam Ltd and PTC India Ltd are pending
- GMR had infused equity of INR 2,250 Cr into this power plant. It is not immediately known how much haircut has been borne by the lenders
- **Seller:** GMR Energy Limited - a subsidiary of GMR Infrastructure Limited (GIL). It owns and operates power generating facilities in India
- **Buyer:** JSW Energy Ltd - An integrated power company that generates and sells power in India

Analysis

- Post acquisition, the total installed power generation capacity of JSW Energy will increase to 5,609 MW
- JSW Energy, with its strong balance sheet, will be able to reduce borrowing costs and improve the cost economics of GKEL
- JSW Energy, as part of its strategy for expansion and consolidation in the power sector, is actively evaluating various strategic assets for acquisition

UHBVNL - Uttar Haryana Bijli Vitran Nigam, CCI - Competition Commission of India
IDCO - Industrial Development Corporation of Odisha
Source - Media Reports, Company filings
** Expected*

Case Study 5 - Jhabua Power Limited (JPL)

Adani Power and NTPC Ltd in the race to acquire JPL

Asset Overview

- Jhabua Power Limited (JPL), a subsidiary of Avantha Power, is a power generation company based at Seoni district, Madhya Pradesh
- It currently has 600MW thermal capacity fully operational and 660MW is under implementation
- JPL has a tied up capacity (PPAs) to the tune of 71% with the state of Madhya Pradesh (35%) & with the state of Kerala (36%)
- The plant has full fuel linkage (100%) for tied up capacity with SECL & MCL (Subsidiaries of Coal India Limited)
- The lenders have 61% stake, with balance held by Avantha Power
- **Reason for Stress** - The plant faced land acquisition and funding issues leading to time and cost overruns and lack of PPAs added to the problem

Transaction Rationale

- The potential acquisition is in line with the Acquirer's vision of achieving **130 GW** generation capacity by 2032
- NTPC has decided on expansion of its capacity through acquisition of stressed power assets, and brown-field projects
- They want to bid for projects that are operational and nearer to sources of coal
- Power ministry has also asked NTPC to bid for potentially viable projects that are being resolved under IBC and acquire them if valuations of the stressed assets are attractive

Transaction Statistics*

Financial creditors:	Loan exposure:	Deal value:
62% haircut	~INR 5,000 Cr	INR 1,900 Cr

Transaction Overview/ Asset Revival

- **April 2018** - Edelweiss Asset Reconstruction Co. and Kotak group company Phoenix ARC were the first contenders to bid for the project from lenders seeking a 50% 'haircut' on the transaction
- **Aug 2018** New Delhi-based industrial gases producer Goyal MG Gases Pvt. Ltd emerged as the highest bidder (INR 2,350 Cr in EV) for a controlling stake. Bid rejected on the grounds of not meeting certain requirements
- **Aug 2018** - Noida-based firm Worlds Window, backed by Exim Industries, also bid for the Project which fall out, as the company could not arrange the requisite funding and the project got entangled in a legal battle over forfeiture of bank guarantees
- **Nov 2018** Avantha Group offered to pay INR 2,430 Cr to lenders to escape insolvency proceedings, however the same could not go through
- **Dec 2019** Adani Power and NTPC Ltd were in the race to acquire JPL, undergoing resolution as per the IBC
- NTPC outbid the Adani Group, with a **INR 1,900 Cr (INR 3.2 Cr /MW)** offer that was 2.5 times more than the rival bid INR 750 Cr (INR 1.25 Cr /MW)
- It's the first time NTPC, the country's largest power producer, has bid for any stressed project, while Adani Power has been aggressively buying in this sector

Analysis

- It is analyzed that JPL received a good bid as it was an operational project built with equipment from Bharat Heavy Electricals, but stressed due to lack of working capital

SECL - South Eastern Coalfields Limited
Source – Media Reports, Company filings
** Expected*

Case Study 6 - GMR Chhattisgarh Energy Limited (GCEL)

Adani Power Acquisition of GCEL

adani | Power GMR

Asset Overview

- GMR Chhattisgarh Energy Limited (GCEL), subsidiary of GMR Infrastructure Ltd. developed of 1,370MW (2 X 685 MW) domestic coal-based power plant
- The plant is located in Raipur, Chhattisgarh, and commenced operations in April 2016 (Unit 1 in June 2015 and Unit 2 in April 2016)
- It presently supplies power to Gujarat under a short term, 1000 MW Case 4 PPAs with the Gujarat Urja Vikas Nigam Ltd.
- Absence of any long-term / medium term PPAs led to subdued PLF which resulted in cash losses and stretched liquidity and continues delays in irregularities in the debt servicing
- It also witnessed delays of two years in project execution, which resulted in significant project cost overrun of INR 3,353 Cr (INR 11,643 Cr from budgeted cost of INR 8,290 Cr.
- In February 2017, the lenders implemented the SDR Scheme, post which debt of INR 2,992 Cr (out of the total outstanding debt of INR8,842 Cr), was converted into equity giving lenders ~52% equity shareholding in the company

Transaction Rationale

- Locational advantage of GCEL to help Adani Power source domestic coal with lower logistics cost, and make it more competitive while bidding for long term PPAs
- The acquisition will cement Adani Power's position as India's largest private sector thermal power producer with aggregate operating capacities of 12,450 MW and gives it a strong presence in India's leading power generating as well as power consuming regions

Transaction Statistics

Financial creditors: 40% haircut

Loan exposure: INR 5,926 Cr

Deal value: INR 3,530Cr

Enterprise Value	INR 3,530 Cr
EV by Capacity (MW) multiple	2.58 x

Transaction Overview/ Asset Revival

- **Announced on:** 25^{th} June 2019 & **Completed on:** 2^{nd} August 2019
- Adani Power acquired 100% stake in GCEL (52.4% equity stake was acquired from the consortium of lenders, balance 47.6% stake was acquired from the GMR Group)

  The consortium of lenders of GCEL adopted the "change in management" as a resolution plan in accordance with the guidelines issued by the RBI.
- **Buyer:** Adani Power Limited - Largest private thermal power producer in India (Capacity – 12,450 MW)

Analysis

- GIL's GMR Infrastructure Ltd) profitability is expected to improve significantly considering GIL consolidated profit for FY2019 was adversely impacted by INR 516 Cr on account of Chhattisgarh Power Plant
- Inclusion of Raipur plant helped improve sales volumes of Adani Power. The contribution of Raipur and another plant in Raigarh to consolidated revenues of Q3 FY2019-20 was INR 482 Cr. (~7% of total consolidated revenue)
- Adani Power has bid for a few power assets under the Samadhan scheme for resolution of stressed power projects

__SDR__ - Strategic Debt Restructuring, __GUVNL__ - Gujarat Urja Vikas Nigam Ltd.
__Source__ – Media Reports, Company filings

Selected Stressed Assets - Potential Acquisitions

Description of the Project	Company/ Project	Resolution Proposed/ Status as on date
• Lanco's Anpara thermal power plant is located in Uttar Pradesh and consists of 2 units of 600 MW, commissioned in Dec 2011 and Jan 2012 • The company is in financial distress due to troubles of the parent company (liquidation proceedings) and counter party risk from DISCOMs	LANCO **Project - Anpara C** **Capacity - 1,200 MW** **O/s Debt - INR 2,457 Cr**	• **Acquisition** - Lenders holding 71% stake in the company, are looking for prospective buyers to sell their stake • JSW Group, Adani, Srei Infrastructure and the Piramal Group have submitted (EoIs) to acquire the stake in the company
• Lanco's Amarkantak thermal power plant is located in Chhattisgarh and consists of 2 operational units of 300 MW each & 2 under construction units units of 660 MW each • Financial distress was due to liquidation proceeding of Lanco Group and regulatory issues	LANCO **Project - Amarkantak** **Capacity - 600 MW** **O/s Debt - INR 9,003 Cr**	• **Acquisition** - Adani Group and Vedanta are in fray to acquire Lanco's Amarkantak thermal power plant • Both the companies are in due diligence stage with none of them have made the financial offer
• GMR Warora Energy Limited's thermal power plant (2X300 MW) is located in Maharashtra • Unit 1 commenced commercial operation in March 2013 and Unit 2 in September 2013 • The company is in financial distress due to delay in payments from DISCOMs	GMR **Project - EMCO Warora** **Capacity - 600 MW** **O/s Debt - INR 3,012 Cr**	• **Disinvestment** – The company is in search of buyers to sell off its plant • Credit rating agencies are of view that the company will default on its INR 3,000-Cr loan amount due to lack of buyer
• Ind-Barath owns a 700 megawatts (MW) under-construction thermal power plant located in Odisha • Company is in financial distress due to time and cost overruns due to financial constraints	IBPIL **Project - Ind Barath Utka** **Capacity - 700 MW** **O/s Debt - INR 4,893 Cr**	• **Acquisition** - COC (Committee of Creditors) overseeing the insolvency resolution has approved the resolution plan submitted by the **JSW Energy** and deal is expected to be closed by Q2FY21. (Financial details are not disclosed)

Source – Media Reports, Company Website

Selected Stressed Assets - Cases To Be Resolved

Description of the Project	Company/ Project	Resolution Proposed/ Status as on date
• GVK's thermal power plant is located in Punjab and consists of 2 units of 270 MW each • Both the units were commissioned in April 2016. • The plant was unable to operate at optimal capacity during FY18 and FY19 due to low availability of fuel	**Project - Goindwal Sahib** **Capacity - 540 MW** **O/s Debt - INR 3,523 Cr**	• **One Time Settlement** - GVK is in talks with Deutsche Bank AG to transfer outstanding loans of INR 3,510 Cr from existing lenders • The bank is offering to buy the debt at a **haircut of about 70%**
• Mutiara is a 1200 MW(2×600 MW) coal based thermal plant located in Tamil Nadu • Unit 1 started operations in December 2014 and Unit 2 went live in January 2016 The company has been facing challenges due to non-availability of PPAs at remunerative tariffs	**Project - Mutiara** **Capacity - 1,200 MW** **O/s Debt - INR 6,483 Cr**	• **One Time Settlement** - Deutsche Bank AG and SSG Capital Management have made a joint bid for Coastal Energen's debt of ~INR 6,500 Cr. • The bidders have sought a **haircut of about 50%** on the company's debt, excluding outstanding accrued interest
• JITPL established 1200 MW thermal power plant in Orissa State in 2006. Plant consists of 2 units of 600 MW each • Both of the units were commissioned in 2015. • The company is in financial distress due to shortage of coal	**Project - Derang** **Capacity - 1,200 MW** **O/s Debt - INR 5,507 Cr**	• **IBC Proceedings** - Lenders are likely to initiate bankruptcy proceedings following unsuccessful talks between lenders and potential buyers due to mismatches in valuations • Also, lenders' consortium as rejected the promoter's debt resolution offer
• A coal-based thermal power plant located in Chhattisgarh comprising 6 units of 600 MW each. • Currently, 3 units are operational, rest are under different phases of construction • Company is in financial distress due to shortage of coal and non-payment of dues by DISCOMs	**Project - Alkaltara** **Capacity - 3,600 MW** **O/s Debt - INR 18,750 Cr**	• **IBC Proceedings** - The project has been admitted to NCLT after a failed out-of-court settlement with Adani Group, who was looking for a larger hair cut

Source – Media Reports, Company Website

Selected Stressed Assets - Cases To Be Resolved

Description of the Project	Company/ Project	Resolution Proposed/ Status as on date
• Simhapuri thermal power plant, located in Andhra Pradesh and consists of 4 units of 150 MW each • 600 MW is operational & another 1320 MW is under implementation • The company has been facing challenges due to lack of long term PPAs	SIMHAPURI ENERGY POWER TO PROSPER **Project – Simhapuri** **Capacity – 600 MW** **O/s Debt – INR 2,608 Cr**	• **IBC Proceedings** - Lenders are likely to initiate bankruptcy proceedings against Simhapuri Energy Limited
• LVTP is a coal fired thermal power project with two super critical units of 660 MW each • Delays in project execution has led to the downfall of Vidarbha plant	LANCO **Project - Vidarbha** **Capacity - 1,320 MW** **O/s Debt - INR 4,762 Cr**	• **IBC Proceedings** - Lenders have taken Lanco Vidarbha to NCLT • Bank of Baroda is looking to sell it's stressed account (INR 628 Cr) in Lanco Vidarbha Thermal Power on cash basis
• KVK is setting up 1×350 MW Coal Based Thermal Plant in Phase in Cuttack, Odisha with future plans to implement Phase II of 700 MW • The company faced challenges due to stay order (for 2 years) on project construction and scarcity of funds	KVK **Project - Nilachal** **Capacity - 350 MW** **O/s Debt - INR 4,893 Cr**	• **IBC Proceedings** – Company has been admitted to corporate insol-vency resolution process through the order of the NCLT passed on 17th September 2019
• Essar Mahan is located in Madhya Pradesh and consists of 2 units of 600 MW each • Both units were commissioned in October 2018 • Cancellation of the coal mine assigned to the plant severely affected the Mahan project and led to project delays and cost overruns	ESSAR **Project - Essar Mahan** **Capacity - 1,200 MW** **O/s Debt - INR 5,984 Cr**	• **Debt Restructuring** - After the lenders disapproved Arcelor Mittal's bid of INR 4,800 Cr, Essar Power has submitted a debt resolution proposal to the banks which includes an upfront cash payment of 70% and the balance to be a mix of debt and equity

Source – Media Reports, Company Website

8

An Unexpected Enemy

An unexpected enemy

Impact on the power sector from the Covid-19 pandemic

- Electricity demand that dipped sharply by 20-25% during the COVID led lockdown, has now gradually started to recover, however, the lockdown has resulted in an estimated INR 50,000 Cr liquidity crunch in the entire sector
- Thermal power companies that account 62% of India's power generation is put up with the system of paying for coal in advance and stocking these up even by paying high railway freight rates, despite falling demand. This has dented their cash position
- **1/3rd of the DISCOMs** has invoked **force majeure** against IPPs, some states asked IPPs to pull shutters and not expect payment for the period

Government measures to bring down the impact on the sector

- GOI has announced INR 90,000 Cr bailout package for the fund crunched DISCOMs, to clear their dues with GENCOs. PFC and REC to kick off the liquidity infusion package by offering concessional loans to DISCOMs. The two companies are expected to offer long-term loans ranging from 7-10 years with moratorium of two-years to the DISCOMs
- GOI has also resolved to privatise DISCOMs in all the eight Union Territories and explore PPP for power distribution in some states. The move is expected to improve operational and financial efficiencies, bring in more funds and give a huge boost to the power sector
- New proposed tariff policy is expected to be implemented soon. The policy to address issues like limiting cross-subsidies, penalising DISCOMs for unnecessary power cuts, and preventing them from passing their losses to the consumers

DISCOMs expected financial health position post INR 90,000 Cr liquidity infusion

- DISCOMs which already owe INR ~93,000 Cr (Feb 2020) to GENCOs are expected to be given temporary relief and not long term stability from this INR 90,000 Cr liquidity infusion
- Subdued energy demand and substantial financial losses amounting to INR 18,316 Cr (9M FY 20) has already hit DISCOMs badly, and the situation is expected to further deteriorate because of COVID pandemic
- The above-mentioned reasons are expected to result in outstanding debt of DISCOMs to rise to INR 4.5 lakh Cr by the end of FY 20-21, according to a leading Credit Rating agency

Source – RBSA Analysis, Media Reports

9 Conclusion

Conclusion

The stress likely to continue

- The outbreak of COVID 19 has further aggravated the situation and might have taken the sector to a point of no recovery for the next few years
- With all the resolutions resulting in massive haircuts, the power sector stress has already started to dent the banking sector, with huge amounts likely to be irrecoverable
- The DISCOMs financial position has not improved much despite of many measures taken by the government over the past few years, hampering the sustainability of demand growth and signing of new long-term PPAs
- With government's focus shifting towards renewable environmental-friendly sources, the thermal generation sector does not look to overcome its ongoing stress in the near future
- Coal India is mulling to divert the fuel supply to the other sectors like cement and sponge iron on account of subdued demand of coal by the power sector
- There has been a substantial haircut in the resolved 14 projects, and with COVID in picture other thermal stressed assets and 14 GW Gas Power plants are unlikely to find buyers
- The benefits from schemes like SHAKTI, UDAY Schemes have fallen short of expectations

Some recommendations for revival

- Doing away with cross subsidy and moving towards a high-tariff structure seems to be the need of the hour. This will certainly help in increasing the revenues of the DISCOMs and can remove the ACS-ARR gap and also reduce the AT&C losses
- There is an immediate requirement of segregation of all the stressed plants which has realistic chance of survival and paying more attention towards reviving them, rather than wasting efforts on dormant or under construction plants or on plants which do not have FSAs or PPAs. This can help in timely resolutions for most of the stranded assets
- Identification of alternate sources of financing can also contribute towards reducing pressure on the sector. Currently, most of the funding is done by the banking sector. Considering the long duration of power projects, infrastructure funds or bonds can prove to be better means of funding such projects than the banks
- All efforts should be made towards strict adherence to PPAs by DISCOMs and no negotiations shall be allowed without imposing heavy penalties. This will lead to reasonable demand assessment and better procurement policies. Negotiations in the contracts creates an uncertain environment for the existing investors and makes the sector less attractive for new investors

Source – RBSA Analysis

Services

Valuation

- Business & Equity Valuation
- Valuation of Brands, Goodwill, Other Intangible Assets & Intellectual Property
- Valuation of Financial Securities, Instruments & Derivatives
- Valuation of Industrial Assets and Plant & Machinery
- Valuation of Real Estate
- Valuation of Infrastructure Assets & Specialized Assets
- Purchase Price Allocations (PPA) for Mergers & Acquisition (M&A)
- Impairment Studies for Tangible Assets
- Impairment Studies for Cash Generating Units, Intangible Assets & Goodwill
- Mines, Mineral Advisory and Valuation
- Valuation of ESOPs and Sweat Equity
- Valuation for Tax, Transfer Pricing and Company Law Matters
- Fairness Opinions
- Valuation under Insolvency & Bankruptcy Code (IBC)
- Determination of Swap Ratio under Mergers and Demergers
- Valuation of Inventory / Stocks and Debtors / Receivables
- Litigation and Dispute Valuation Services

Risk Consulting

Strategic Risk Advisory Services
- Techno Economic Feasibility Studies & Viability assessment
- Business Plan Review

Technical Support Services
- Lender's & Investor's /Independent Engineer Services
- Technical Due Diligence, Technical Opinions
- Chartered Engineers Opinion & Certification
- Project Cost Investigation and Monitoring

Agency for Specialized Monitoring (ASM)
- Term Loan, Working Capital and Cash Flow Monitoring

Financial & Treasury Risk Advisory
- Assessment of risks – ALM, Credit, Market, Interest Rate & Liquidity Risk
- Asset Quality Review & Stress Testing
- Assessment of Expected Credit Loss

Business Risk Advisory
- Internal audits, Process and Internal Financial controls review
- SOP, policies and Authority level matrix development
- Supply chain improvement and Working capital optimization
- Enterprise Risk Management
- Regulatory compliance review

Dispute & Litigation Support

- Valuation Services
- Damages & Loss of Profit Analysis
- Independent Expert testimony
- Anti-trust & Competition Advisory
- Post-Acquisition Disputes, Joint Venture & Shareholder Disputes
- Civil & Construction Disputes, Real Estate Disputes
- Intellectual Property Rights Dispute

Investment Banking
(Category 1 Merchant Bank)

- M&A Advisory:
  - Sell Side & Buy Side
  - Domestic & Cross Border
- Partner Search, Joint Ventures & Strategic Alliances
- Government Disinvestment & Privatization
- Fund Raising - Equity, Mezzanine, Structured Finance & Debt (Corporate & Project Finance)
- Distressed Investment Banking - One-Time Settlement, Priority and Interim Funding, Rescue Financing, and Buyouts
- Capital Market Advisory

Transaction Services

- Buy side due diligence and closing due diligence
- Vendor due diligence and vendor assistance
- Setting up and managing dataroom
- Advice on sale and purchase agreements (SPA) and business transfer agreements (BTA)
- Assistance in deal negotiation

Transaction Tax

Deal Tax Advisory (Strategic, IBC, PE/VC)
- Tax Due-Diligence
- Tax Structuring
- Deal Negotiation Review
- Transaction Documentation Review
- Post-Deal Integration

Corporate Restructuring
- Group Restructuring
- Financial/Capital Restructuring

Succession Planning

Holistic Implementation Support
- Merger/Amalgamation
- Demerger/Spin-off
- Capital Reduction
- Share Buyback
- Business Transfers
- Liquidation/Wind-up

Restructuring

- Insolvency Professional Services
- Assistance in the preparation of Resolution Plan
- Independent Bid Evaluation of Restructuring Proposals
- Process Advisor
- Advisor to Committee of Creditors / Creditor Advisory
- CRO services – Chief Restructuring Officer
- Priority and Interim Funding
- Turnaround Advisory and Business Transformation
- Interim Management Services

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