Indian Energy Exchange Ltd

Initiating Coverage



Power surplus to drive shift towards short term markets, IEX in Sweet Spot



September 14, 2020

Indian Energy Exchange Ltd.

Power surplus to drive shift towards short term markets, IEX in Sweet Spot

- IEX India's first and largest energy exchange enjoys a dominant position led by its superior technology and network effect, creating barriers for new entrants.
- New product launches like RTM (Real Time Market), delivery based LDC (long duration contracts), GTAM and IGX (Indian Gas Exchange) are set to drive growth.
- Short-term markets (mainly spot) will be favourable amid a power surplus situation, thrust on renewables, low transmission congestion, cost optimisation by DISCOMS, and policy initiatives. In this scenario, IEX is set to benefit immensely.
- Over FY20-FY23, we see an 19% volume CAGR for IEX, and operating leverage leading to 180bps of margin gains. Consolidated sales/EBITDA CAGR would be at 16%/17%.
- > Strong Free Cash flow generating model with minimal capex requirement
- ▶ Initiate coverage with LONG and a Mar'22 TP of Rs 257 at 30x Mar'22 EPS of Rs 8.6

Rising share of short-term market to increase addressable market size: In India, short term (ST) markets form \sim 11% of total generation vs. 30% for developed countries. Over the last decade, the ST market share has remained stagnant owing to higher preference for long-term PPAs to ensure adequate power availability in power deficit conditions. However, the deficit has come down from 10% to 0.6% in the last seven years. We expect ST markets to contribute \sim 15% of total volumes in the next five years. Furthermore, several policy initiatives like market-based economic dispatch, capping of cross-subsidy surcharge for OA customers and privatisation of DISCOMS will be favourable for ST markets.

New products to drive growth: RTM, launched by IEX on 1 Jun'20, is expected to take volumes consumed through deviation settlement mechanism (DSM)/unscheduled interchange. The estimated size of this opportunity is ~20BU. Company also started Green Term Ahead Markets (GTAM) from 21st Aug, IEX through its subsidiary, IGX, has launched India's first gas exchange to facilitate the trading of imported LNG in spot markets. We expect this market to be around Rs 2bn. Many other products like cross-border contracts, Delivery Based Long Duration contracts upto one year etc. are in the pipeline.

Power exchanges gaining share in ST market: Over FY11-FY20, power exchanges have grown at a 15% CAGR. The share of exchanges has gone up from 17% in FY11 to \sim 36% in FY20, despite a constant share of ST markets. We expect the trend to continue amid lower transmission congestion, rising DISCOM participation and thrust on RE generation.

Risks: (1) Regulatory risk: IEX is regulated by CERC, and the power sector authority may pass regulations that can harm the monopoly and margins IEX enjoys. (2) Competition: Gol would want a market with more players and competition as the market for exchanges grows. MCO will also increase competition for IEX.

Financial Summary

YE Mar Rs mn	Sales	EBITDA	Recurring PAT	EPS (Rs)	P/E (x)	P/B (x)	EV/ EBITDA (x)	ROE (%)	ROIC (%)	EBITDA Margin (%)
FY20A	2,570	2,021	1,756	5.9	32.5	14.6	16.7	46.2	42.4	78.6
FY21E	2,978	2,293	2,064	6.9	27.6	11.6	14.1	46.8	44.4	77.0
FY22E	3,545	2,808	2,556	8.6	22.3	9.3	10.9	46.2	47.5	79.2
FY23E	4,047	3,256	2,985	10.0	19.1	7.6	8.7	43.8	57.0	80.4
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Source: Company, Equirus Securities

	Equirus Onward. Upward.
MP s 206	Target Price Rs 257 Mar 2022
ating ONG	Upside 25% (†)

Stock Information

C R

Market Cap (Rs)		61,784			
52 Wk H/L (Rs)	2	12/111			
Avg Daily Volum	1,0	05,360			
Avg Daily Value	(Rs Mn)		2.3		
Equity Cap (Rs N	1n)		405		
Face Value (Rs)		1			
Share Outstandi	299.6				
Bloomberg Code	IEX IN				
Ind Benchmark		BSEPOWR			
	Desert	214	1014		
Ownership (%)	Recent	3141	1 2191		
Promoters	0.0	0.0	0.0		
DII	DII 34.2				
FII	-0.7	11.7			



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Over the last 10 years, the short-term market has grown at a \sim 9% CAGR to

138BU in FY20

Growth in short-term market to inflate size of pie

Multipronged drivers to sustain momentum in short-term markets

Excess generation capacity, decongestion of transmission lines to drive volumes

Long-term PPA contracts had been the main source of electricity supply till date and contributed about 88-89% of total power market volumes. The main reason for dominance of PPAs was the power deficit situation in the past; thus, PPAs have ensured adequate power availability for DISCOMS. However, with improving power availability and decongestion of transmission lines, short-term markets are gaining ground. Power deficit has reduced from ~10% in FY13 to just 0.6% in FY20 supported by addition of generation capacity and low demand growth.

Since FY09, the short-term market has grown at a \sim 8% CAGR to 138BU in FY20. In comparison, gross generation capacity has gone up by \sim 5% CAGR in the same period.



Exhibit 1: Short-term volume as a percentage of total generation

Source: Equirus, Company Data



Exhibit 2: Base demand and availability

Source: Equirus, Company Data





The shift towards short-term market is primarily driven by various factors:

- Adequate supply for short-term markets
- Increasing preference of DISCOMs towards ST markets to optimise their power procurement costs.
- Rapid decline in project costs of renewable energy (solar and wind) projects and aggressive targets for RE generation and RPOs
- Greater flexibility in coal allocation via SHAKTI scheme which will allow the generators to participate even if they are without the Long Term PPA
- Phasing out of older thermal generation capacities

We expect the share of short-term markets to grow to \sim 15% of total generation in the next five years growing at a CAGR of \sim 13%.

Exhibit 4: Structure of Power Market





Source: Equirus, Company Data

Source: Equirus, Company Data

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Exhibit 5: Short-term market split FY20



Source: Equirus, Company Data, CERC

Power exchanges, post their inception in 2008, have rapidly evolved and gained market share in shortterm power markets led by the value proposition of transparency, liquidity, and efficient price discovery. Prior to exchanges, the ST power market was primarily dominated by OTC bilateral trades. Over the past 10 years (FY11-FY20), power exchanges have grown at a 15% CAGR vs. a 6% growth in bilateral trade and a 2% decline in DSM (Deviation Settlement Mechanism). The share of exchanges has gone up from 17% in FY11 to ~36% in FY20.



Exhibit 6: Volumes split of Short-Term Markets

Source: Equirus, Company Data, CERC

Exchanges are further gaining preference in short-term markets led by

- Reduced transmission congestion: The volume of electricity transacted through power exchanges is sometimes constrained due to transmission congestion. Over the last 10 years, volumes curtailed because of congestion has reduced from a high of 17% to a low of just 0.6% led by integration of transmission infrastructure. In the last five years, transmission capacity has increased at a ~6.2% CAGR against electricity generation of ~4.5%.
- Increasing participation from DISCOMS to lower procurement cost: In case of long-term PPAs, DISCOMS need to pay fixed charges even if they do not schedule any energy from the generating station. Exchanges provide flexibility to DISCOMS to optimise their procurement costs. A few distribution utilities such as Andhra Pradesh, Maharashtra, Gujarat, Tamil Nadu, Punjab, and Telangana have been buying aggressively on energy exchanges.
- Higher liquidity on exchanges is leading to efficient and transparent price discovery.
- Increasing emphasis on Renewable Energy generation: Exchanges provide required flexibility to DISCOMS for seamless integration of RE generation which involves the intermittence on the generation side.

Over FY11-FY20, power exchanges have grown at a 15% CAGR vs. a 6% in bilateral trade and a 2% drop in DSM



Exhibit 7: Share of different modes of transaction in Short-Term Power Market

Source: Equirus, Company Data

Case Study:

Andhra Pradesh lower cost of procurement

Andhra Pradesh has a total generating capacity of 20 GW of which 6.8 GW is under AP GENCO (3.4GW from thermal and 1.7 GW from Hydel and APPDC 1.6GW) Private sector has 10.6 GW and central capacity is of 2 GW. In FY20 it has generated 60 BU of electricity against the requirement of 63 BU. In FY20 APTRANSCO has saved Rs 500 Cr by cost effective power procurement of energy from exchanges In March and April it could save ~Rs1.9bn by procuring the electricity at affordable rates.

AP electricity regulatory commission has approved power procurement at Rs 4.68 per unit for FY21. However, due to COVID crisis and government action of country wide lockdown there was very low demand. This led to very high liquidity on exchanges because large number of GENCOs wanted to sell their electricity on exchange leading to the price discovery of as low as Rs 1.8 per unit.

APTRANSCO was already purchasing power through exchanges because of its efficient power procurement system established by KVN Chakradhar Babu Joint MD AP TRANSCO. Looking at this opportunity during the crisis they initiated power procurement from April 1 to April 21 and procured around 0.5 BU at an average price of Rs 2.51 per unit which was below the threshold set by APERC of Rs 4.68 per unit by APERC and end up saving around Rs 1.02 Bn.

IEX has also launched various cost optimization tool for power procurement one of which is SPP (Smart Power Procurement). SPP helps the utilities to draw the most competitive merit order schedule for dispatch of power from short term market as well as Long Term PPA, IEX also advises utilities on replacement of power wherever prices are higher compared to the competitive prices discovered on the Exchange. This will help the DISCOMs to understand their energy requirements and they can take initiatives that were taken by AP TRANSCO and Babu to save Billions.



Exhibit 8: Changing installed capacity mix

Source: Equirus, Company Data

Indian power exchanges significantly underpenetrated vis-à-vis peers in developed markets

Globally, in developed countries, short-term markets are highly evolved as against the nascent Indian markets. The primary reason for matured ST markets is the higher contribution of renewable energy and less reliance on long-term PPAs. In developed markets, short-term markets are largely dominated by power exchange. In most developed countries, the contribution of power exchanges to energy consumption varies from 20-91%. Even in US majority of the power is traded through the Power exchanges (ISOs)

As India treads on the path of development, we believe exchanges will have a greater role to play; we expect the contribution from exchanges to increase to 10-12% in the next 5 years from current levels of 4%. The increasing significance of exchanges is clearly going to be beneficial for IEX as it caters to about 95% of the volumes on the exchange. Globally, power markets are dominated by single exchange. We thus expect IEX to continue its dominance led by higher number of participants and higher liquidity.

Country	Exchanges	Traded in Exchange/Total Consumption
Nordic Countries	NORDPool	91%
UK	APX, N2EX	47%
France	EPEX-SPOT	15%
Germany	EPEX-SPOT	49%
Belgium	BELPEX	23%
India	IEX, PXIL	4%

Exhibit 9: Share of Power exchanges in developed economies

Source: Company Data, Equirus

	IEX	Nord Pool	PJM (US)	NEM	EPEX Spot
Participation	Voluntary	Voluntary for day- ahead and adjustment market	Compulsory for dayahead market	Compulsory for day-ahead spot	Compulsory for day-ahead spot
Market Offering	Intra-day market and limited forward contracts up to 11 days	Day-ahead spot, hour ahead	Day-ahead spot, real time balancing, capacity credits market	Day-ahead spot and short-term forwards	Intra-day market, day-ahead auction, and balancing market
Bidding Type	Double-sided	Double-sided	Single-sided	Single-sided	Double-sided
Adjustment Market	Intra-day	Intra-day auction market (Elbas technology platform)	Bid quantity can be changed till gate closure		Intra-day auction market
Real-time /Balancing Market	Deviations are subjected to DSM charges	Counter-trade for real-time, participants are given MCP	Deviations are traded in real-time	Through purchase of ancillary services, reserve capacity buying	Counter-trade for real-time
Pricing Rule	Zonal pricing	Zonal pricing	Nodal pricing	Zonal pricing	Zonal pricing
Pricing Type	Ex-ante	Ex-ante	Ex-post	Ex-post	Ex-ante
Hedging options with participants	Bilateral OTC	Forwards and futures on separate markets	FTRs-ARRs, bilateral OTC, multi-settlement market, virtual bidding, financial trading at NYMEX	Bilateral OTC, derivatives on Sydney futures exchange	OTC clearing
Congestion Management	Market splitting	Market splitting	Security constrained economic despatch	Locational signals for transmission tariff	Market splitting
Transmission losses	To be purchased by participants	Included in zonal price	Included in LMP	To be purchased by generators	Included in the zonal price
Time Blocks	15 minutes	Hourly blocks	Hourly blocks	Half-hourly blocks	Hourly block, 15 minutes

Exhibit	10:	Comparison	with	Global	Power	Exchanges
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Source: Equirus, Company Data

Strong moats guard leadership in Indian market

About 95% of electricity traded on the exchange is through IEX. IEX has been a dominant player in India's duopoly market; PXIL is the other player. Both players started operations almost at the same time in FY09. However, over the years, IEX has dominated the market and captured a ~95% of the share. Exhibit 11 shows the comparison between volumes traded on IEX and PXIL. PXIL is promoted by National Stock Exchange, NCDEX, Tata Power, PFC, GMR Energy, and Gujarat Urja Vikas Nigam. PXIL currently is a loss-making entity with a market share of only 5%. Recently CERC has also given an approval to PTC India for starting the exchange in partnership with BSE Investments and ICICI Bank which is expected to get operationalised within a year.

Over the years, IEX has dominated the market and captured a \sim 95% of the share





Source: Company Data, Equirus, CERC

Over the years, IEX has successfully built on its market dominance led by following factors

- A virtuous cycle of liquidity feeds itself to incrementally bring in more liquidity: Higher liquidity on the exchange leads to efficient price discovery which further brings in a greater number of participants thereby creating a virtuous cycle and self-fuelling network effect. Number of participants on IEX has grown at a 53% CAGR, from 39 in 2008 to ~6,700 in FY20 (Exhibit 12)
- Efficient & scalable technology capable of handling multi-fold spike in volume: IEX's main moat has been its technology platform which it acquired from Financial Technologies (FT) in 2017. IEX thus now has its in-house Technology Development Centre. Recently, this centre developed the Smart Power Procurement to optimise power procurement cost of state utilities which has already been adopted by several DISCOMs.
- Strong management pedigree: PXIL, primarily promoted by NSE, had limited experience in the power industry as against IEX which had industry veterans in the driver's seat; this helped it gain in initial days.



Exhibit 12: Number of participants has grown at 53% CAGR from 2008-20

Source: Company Data, Equirus

IEX's main moat has been its technology platform which it acquired from Financial Technologies in 2017and higher Liquidity which feeds the self- fuelling network effect

Exhibit 13: Typical profile of participants in FY20



Source: Company Data, Equirus, CERC

RTM set to gain share from DSM (for

Expect RTM volumes to touch 3-4BU in

the next 2 years

 \sim 17% of short-term market)

New product lines to drive growth

Introducing new products to entice DISCOMs and OACs

Real Time Market to attract DSM volumes

IEX launched its new product RTM (Real Time Market) on 1 Jun'20 wherein auctions are conducted every 30 minutes. About 48 auction sessions are conducted each day and power delivery is done within one hour of bid session closure. Price and quantity of electricity to be supplied is decided through double-sided auctions.

RTM provides the platform for energy trading closer to real time, thus allowing utilities to manage their power demand in real time and reduce deviation-related penalties. The platform also helps in integrating renewables in an effective way. Currently, utilities are using DSM (Deviation Settlement Mechanism) to manage the deviation i.e. over-drawing or under-drawing power from contracts. Deviation Settlement Mechanism (DSM) is a regulatory mechanism by which grid stability is achieved by imposing penalty and incentives for over drawl/injection or under drawl/injection from the schedule. DSM is a frequency linked mechanism. It is not related to any market conditions. The size of DSM currently is around 22-25 BU per year. RTM has shown good response from participants in the first month with volumes of 515MU and price discovered at Rs 2.22/unit; in July, volumes cleared were Rs 784MU at an average price of Rs 2.49/unit while in Aug the cleared volumes stood at 856MU at an average price of Rs 2.26/unit. Though it is a preliminary stage for RTM, we expect the platform to reach volumes of ~10BU in the next two years. Besides, RTM will also help in the seamless integration of RE players.

Exhibit 14, which depicts DSM volumes over the last decade, clearly points to a downtrend in the volume of electricity transacted from 2010-11 to 2014-15 but an uptick from 2014-15 to 2018-19. However, DSM volumes as a percentage of total short-term volumes declined to 17% in 2018-19 from 39% in 2009-10. Since DSM is not a market mechanism, the volume decline is good for the market. For the electricity market, short-term DSM volumes should be as minimal as possible.

On Nov'18, the Central Electricity Regulatory Commission (CERC) revised DSM charges and linked them to the daily Average Clearing Price (ACP) in DAM at the power exchange. The amendment also stated that in the event of a sustained deviation in one direction by any regional entity, it will be required to change its sign of deviation from schedule at least once after every 6 time blocks (from 12 blocks earlier); failure to do so would lead to the levy for each violation of stipulation of sign change. Stricter regulations and efficiency of exchanges will force DISCOMs and OACs (open access consumers) to shift to RTM.





Source: Equirus, Company Data, CERC

Exhibit 15: Trading process in RTM market



Source: Equirus, Company Data

IGX is 100% subsidiary of IEX started operations on 15th June

Expect IGX to capture 2-3% of the addressable market in first year

Indian Gas Exchange

IEX, through its wholly-owned subsidiary, Indian Gas Exchange (IGX) launched India's first gas trading platform on 15 Jun'20. IGX platform will allow the trading of natural gas in both spot and forward markets for imported natural gas across three hubs: Dahej and Hajira in Gujarat and Kakinada in Andhra Pradesh. It will facilitate transparent price discovery in natural gas, thus leading to growth in the share of natural gas in India's energy basket. As on date, IGX has 12 members and 350+ clients, including buyers, sellers and users on the platform.

The Indian gas market is currently small, accounting for hardly 6.2% of the total energy mix and is growing speedily led by the rapid expansion of the country's gas distribution network. Most of the gas consumption currently is in petrochemicals, power and fertiliser sectors, which account for roughly 65% of total consumption (Exhibit 16).

Of the total 166mmscd consumption of natural gas in FY19, 47% of the requirement was imported. The import share has gone up from 34% in FY14 to 47% in FY19 due to unproductive domestic reserves. Gol plans to increase the share of gas in the energy mix from 6.2% to 15% by 2022.

Total LNG imports in India during FY20 were 33,680 MMSCM or \sim 1.35bn MMBTU. About 30% of this is the spot market – the target market for IGX as domestic gas is used on allocation basis. We expect IGX to capture 2-3% of the total market in the first year of operations.

Currently, on the supply side, there are a limited number of players (15-17) in the gas market, which may lead to an initial resistance from participants. However, on the buyer side, because of increased transparency and lower prices on the exchange, we believe IGX to be a favourable platform. To counter supplier-side resistance, the company is looking to bring in a strategic partner. We believe there is only initial supplier-side resistance, and the entry of even a single player on the exchange will force other suppliers to join IGX.





Most of the gas consumption currently is in petrochemicals, power and fertilizer sectors

Source: Equirus, Company Data

Exhibit 17: Product offerings by IGX

Exchange Products	Trading hours (IST)	Tenor	Trading window (S)	Trading window (E)	
Day-ahead	10:00 - 12:00	1 Gas Day	D-1 business days	D-1 business days	
Daily	10:00 - 12:00	1 Gas Day	D-9 business days	D-2 business days	
Weekly	10:00 - 12:00	7 Gas Days	D-5 business days	D-5 business days	
Weekdays	10:00 - 12:00	5 Gas Days	D-5 business days	D-5 business days	
Fortnightly	10:00 - 12:00	13-16 Gas Days (1-15 & 16-EoM)	D-6 business days	D-6 business days	
Monthly	10:00 - 12:00	Calendar Month	D-9 business days	D-9 business days	

Source: Equirus, Company Data

Opportunity from delivery-based forward contracts in the range of 20-25BU

Delivery-based long duration contracts and derivatives

The Ministry of Power has issued orders to allow the trading of forward contracts and derivatives in electricity. This will help DISCOMs by providing flexibility in long-term contracts. Currently, exchanges only have contracts up to 11 days while forward contracts are traded via bilateral transactions through tendering. Yearly, around 70BU of electricity is traded through bilateral transactions, of which ~40% are direct bilateral and ~60% are through traders. Management believes the opportunity for forward contracts lies in the range of 20-25BU. Also, prices on the exchange have been significantly lower than bilateral contracts (Exhibit 18). We expect LDC (long duration contracts) to start trading from FY22E and expect volumes of ~4.7BU in FY23E.

Derivatives on the other hand cannot be directly traded through the IEX and might have to form another company as pure financial products will fall under SEBI regulations. IEX is working on various ways to approach the market for derivative contracts; in mature markets, derivatives play a signalling role. As the dependence on spot market increases, there is need of a financial product to hedge the price risk. In global markets, derivative volumes are 10x of spot delivery. Therefore, we believe as more volumes move towards the exchanges, the forward and futures market will also deepen.





Source: Equirus, Company Data, CERC

Green Term Ahead Market

IEX has commenced the trading of Green Term Ahead Market (GTAM) on its platform from 21 Aug'20. The market will offer trade in four types of green term-ahead contracts: green intra-day contracts, dayahead contingency contracts, daily contracts and weekly contracts. There will be separate contracts for solar and non-solar energy to facilitate fulfilments for solar and non-solar renewable purchase obligations (RPOs).

GTAM will enable entities to fulfil their RPOs to procure renewable power at competitive prices from power exchanges. This will thus benefit both DISCOMS and developers as the latter need not tie up capacity in advance or depend on PPAs with DISCOMS for selling power. The power exchange market also gives small open access to developers and captive power producers the opportunity to buy green power at competitive rates to meet their RPOs and energy requirements.

GTAM will help in fulfilling RPOs for DISCOMS and integration of RE developers

Eligibility conditions for participating in GTAM

- Solar energy sellers will be eligible to trade in 'Solar Green Term Ahead Contracts,' and non-solar sellers in 'Non-Solar Green Term Ahead Contracts.'
- All entities eligible to procure power through open access will be eligible to participate in GTAM as buyers.
- Buyers will be eligible to participate in GTAM based on the same NOC issued for the day-ahead market (DAM) or intra-day market by the state load dispatch center (SLDC).

Renewable energy rich states will also be able to use GTAM to sell their surplus power on a short-term basis. Thus, given Gol's rising focus on increasing the RE share (from \sim 87GW to \sim 175GW by 2022), the burden on states with excess RE capacity will also be relieved.

Cross Border Contracts

Under the Cross-Border Trade of Electricity Regulations 2019, CERC has allowed participants from neighbouring countries such as Bangladesh, Nepal and Bhutan to participate in electricity trading through mutual agreements between local entities in both countries. All the modes of transactions – long, medium and short-term trade – were already happening so far. The regulations have now allowed trade of electricity through the exchanges in the Day Ahead Market (DAM).

Though most of the demand is met by long-term PPAs and a major portion of the capacity is already assigned, there is an opportunity of 5-6 BU for exchanges. IEX is trading 1 BU of this market. However, after a few years, it will attract more participants as exchanges do not charge fixed cost if there is no usage.

CERC has allowed participants from Bangladesh, Nepal and Bhutan to participate in electricity trading via mutual agreements between local entities in both countries MBED, after implementation, to lead to

savings of $\sim 12\%$ of electricity

procurement costs

Policy & regulatory initiatives to further boost short-term markets

Initiatives to strengthen power sector, ensure 24*7 power supply to benefit power exchanges

MBED an uphill task to improve efficiency, reduce cost of electricity procurement

In 2018, CERC floated a staff paper titled "Market-based economic dispatch (MBED) of electricity: Redesigning of Day-Ahead in India". In the discussion paper, CERC proposes to shift the entire power volumes sold in the country onto the exchange platform. Through MBED, CERC aims to eliminate inefficiencies and gaps that result from a bifurcated power sector. It is envisaged that the reform would lower tariffs and promote utilization of efficient plants in India; this in turn will help reduce the cost of generation on pan-India level, absorb large amounts of RE generation and provide better clarity to system operators in terms of reserves availability. As per the staff paper, MBED, after implementation, will lead to savings of ~12% of electricity procurement costs (~Rs 624bn per year).

Under MBED, all power buying/selling is expected to move to power exchanges (Exhibit 19). CERC proposes that scheduling of power should be carried out through nation-wide participation in the dayahead market by both DISCOMS and generators (gencos) to discover the marginal clearing price. At present, DISCOMS follow self-scheduling within their own tied-up power sources as against the marketbased scheduling covering all thermal plants across the country proposed under MBED.

Exhibit 19: Proposed Model under MBED



Under MBED, all power buying/selling expected to move to power exchanges

Source: CERC, Equirus

MBED implementation is a daunting task considering the fact that it will require amendments of all existing 25-year PPAs. Players that need to agree to this proposal are all state governments and all existing generators that have long-term PPAs. However, under power market regulation, CERC has also proposed for Market Coupling Operation (MCO) which we believe is the first step towards MBED.

Approval of derivative markets improve liquidity on exchanges

Long duration contracts and derivative markets were given a go-ahead by Ministry of Power in Jul'20, post the mutual settlement of spat between CERC and SEBI on the subject to approval by the Supreme Court. There was a long pending case on who will regulate the market. CERC and SEBI both mutually decided that delivery-based long-term duration contracts will be regulated by CERC and derivative markets by SEBI under commodity exchanges. This is a very important regulation for the power market, which will lead to deepening of the market, reduce risk for power procurers who can hedge risks by purchasing these contracts, while also leading to better price discovery. Power markets will benefit from the exchange, first from trading of these contracts and second from increased delivery of power as at last these contracts must be fulfilled with delivery of electricity. However, derivatives will not be traded on the same exchange as electricity; so, exchanges have to find a way to launch these contracts

Long-term duration contracts to be regulated by CERC and derivative markets by SEBI under commodity exchanges Privatization to eliminate payment delays, curtail power cuts and lack of market-based electricity pricing

DISCOM privatization to further improve their efficiency, increase liquidity on exchange

The central government plans to privatize DISCOMs of UTs in the first phase, and then eventually privatize DISCOMs across the country. The draft has proposed sublicensing wherein states can choose a private company for distribution of power to the area. This is done to make DISCOMs resilient and remove inefficiencies in the power sector. Privatization will eliminate payment delays, curtail power cuts and lack of market-based electricity pricing. The first phase is planned to be completed till Jan'21. An increase in efficiency of DISCOMs will lead to efficient procurement of power through various modes, including power markets. As liquidity increases, power will get cheaper on exchanges vis-à-vis PPAs, enhancing volume traded on the exchange.

National Open Access Registry

National Open Access Registry is a centralized electronic platform that will be operated by National Load Dispatch Centre. This will provide single point electronic interface for all stakeholders, including open access participants, state distribution utilities, state/central/IPP generators, trading licensees, power exchanges, NLDC/RLDCs/SLDCs, regional power committees, CERC and SERCs for short term open access. Short-term open access applications for bilateral transactions as well as for the exchanges will be processed through NOAR. This will reduce the time required to get transmission capacity as RLDC and SLDC will also be a part of NOAR.

In case of long-term PPAs, DISCOMs can deny generator for the power required just one hour before the actual power transfer whereas power exchanges close the gate 3 hour before the actual power transfers. With the successful implementation of NOAR, gate closure time for power exchanges will reduce as they can send the communication and get the transmission capacity sooner from RLDC, SLDC and NLDC. This will allow the generators to sell the unutilized capacity to the exchanges and enhance the liquidity on the exchanges. NOAR will further reduce the time for RTM from 4-time blocks after auction and increase the efficiency of Real Time Markets.

Abolition of cross-subsidy charges to buoy OAC volumes

Cross-subsidy charges are additional charges levied on one consumer group to provide subsidies to another consumer group. In India, subsidies are provided to rural consumers and agricultural sector and additional tariffs are charged on industrial and urban consumers. Sometimes these subsidies charged are as high as 100% by some states.

These charges make the proposition of exchange unfavourable when prices discovered are higher. When prices discovered are lower, the participation from industrial consumers or Open Access Consumers even reach to 40% in case of IEX. In the draft of Electricity Amendment Bill, 2020, there is a discussion for abolishing cross-subsidy charges. If this happens, then participation from OAC will increase substantially and continuously.

Financial profile to improve

Topline growth to be volume-led

Expect revenue 16% CAGR over FY20-FY23E

We expect a 16% revenue CAGR for IEX over FY20-FY23E led by a pickup in traded volumes. Traded volume growth will be led by growth in new products like RTM – a platform which started in Jun'21 and is expected to grow at a 19% CAGR over FY21-FY23E. Volume growth (ex-REC volumes) is expected to be at ~19% over the same period. REC volumes however are expected to grow at a tepid 3% CAGR; we expect total volume growth of ~17% over FY20-FY23E. We also factor in volumes of LDC of ~4BU for FY22 and ~5.4BU for FY23.

In 1QFY21, despite the nation-wide lockdown, total volumes (ex-RECs) stood at 14.8BU as against 13.1 BU last year, implying ~15% yoy growth. REC volumes however tumbled ~42% owing to lower supply-side inventory. For FY21, we expect 16%/13% volume growth excluding/including REC volumes. In FY22 volume growth is expected to be 25%/26% excluding/including REC volumes. On IGX, volumes traded were 9600MMBTU in the last 15 days of June; however, overall in June and July, volumes on this platform were negligible.





Exhibit 21: Volume Growth to be driven by pickup in LDC and RTM



Source: Company Data, Equirus

Expect revenue growth of 16% driven by 19% growth in traded volumes and 1% growth in REC

Traded volume growth to be led by a pick-up in new products like RTM and

LDC

Source: Company Data, Equirus





Source: Company Data, Equirus

Margin expansion to be driven by operating leverage gains

Employee expenses contributed to \sim 60% of IEX's total operating cost in FY20. A large portion of its cost structure is fixed in nature. Thus, we believe with an increase in volumes on IEX, operating leverage benefits will kick in, leading to margin expansion. We expect \sim 180bps margin expansion over FY20-FY23E.



Exhibit 23: Sales EBITDA and EBITDAM over FY20-23E

Source: Company Data, Equirus

Balance sheet to remain healthy; to be aided by strong cash flow generation

IEX has an asset-light business model with major capex going into technology development. We expect capex to remain in the range of \sim Rs 150mn per year over the next two three years despite to introduction of several new products. We expect this to be entirely funded by internal accruals and strong cash flow generation (Exhibit 24). Owing to superior margin profile, negative working capital business model and low capex requirements IEX can generate very strong Free Cash Flows. FCFF to Sales for IEX for FY22 is expected \sim 80%

IEX has a strong, debt-free balance sheet. It operates on negative working capital owing to advances and deposits from participants. By FY20, it had cash & cash equivalents of ~Rs 5.3bn.

Furthermore, we expect IEX to generate ROEs north of 40% on sustainable basis owing to strong profitability. We expect PAT margins of \sim 65% ahead.

Operating leverage benefits will lead to margin expansion by ~180bps over FY20-23E

Capex heavy phase behind

Exhibit 24: Strong FCFF to fund capex ahead



Source: Company Data, Equirus





Source: Company Data, Equirus

Forecast: Key assumptions & sensitivity

Expect 16%/17% revenue/EBITDA CAGR over FY20-FY23E

We expect 16%/17% revenue/EBITDA CAGR over FY20-FY23E driven by:

- An 19% CAGR in traded volumes with 11%/16%/19% CAGR in DAM/TAM/RTM volumes.
- A tepid 1% growth in REC volumes over FY20-FY23E.
- Pick up in volumes of IGX, LDC and GTAM (underlying optionality).
- Expansion of short-term market post introduction of MBED.
- A 180bps margin expansion over FY20-FY23E led by operating leverage benefits.
- ROE/ROCE expansion of 14%/12% over FY20-FY23E.

Exhibit 26: Key assumptions

Volumes (BU)	FY19	FY20	FY21E	FY22E	FY23E
DAM	50	49	53	59	67
ТАМ	2	5	2	8	9
RTM	0	0	7	10	11
LDC				4	5
REC	9	6	5	6	7
Total	61	60	68	82	93

Source: Company Data, Equirus

Strong growth in RTM & DAM to drive revenue growth

Risk & concerns

- **Regulatory Risk:** IEX is regulated by CERC which is a key regulator of power sector in India. It may pass regulations that can harm the monopoly and margins which IEX enjoy.
 - CERC in recent past mentioned in its draft that any change in per unit charges by exchanges should be approved by them. IEX charge 2 paisa from each side for every unit of electricity traded and it has also approved this from CERC. However, in future it may ask exchanges to reduce the price.
 - o CERC recently has brought a concept of Market Coupling Operator in its Draft of Power Market Regulations 2020. In which it has mentioned that Market Coupling Operator will discover the common price for the electricity traded on both exchanges by combining the total seller surplus and total buyer surplus. As DISCOMs trade on exchange for better price discover it can now shift to either exchange as price is common. However, IEX has an advantage as all the Generating companies and DISCOMs is already using their platform so they will be avoiding shifting to other exchange.
- **Competition**: Power exchanges have a share of 4% in the total generation. There are 2 players that compete IEX and PXIL. IEX has more than 99% share in Day Ahead Market and there is a competition in TAM however IEX dominate in this section too. Other segments like REC and ESC are small and IEX dominates in these sections. Reason for dominance is presence of liquidity because of no. of players, better technological platform, and trust on IEX.
 - Recently PTC has also got approval for its own exchange in collaboration with ICICI bank and BSE India. PTC was the member of IEX few years back.
 - Government would want a market with a greater number of players and competition as the market for exchanges grow. In its earlier draft, CERC has mentioned that if a player is unable to get more than 20% of market share it would be merged in one of the exchanges.
 - MCO will also increase competition for IEX.

Corporate Governance

- As of Mar, 20. IEX had 7 directors of which three were Independent Non-Executive Directors, 3 Non- Executive Directors and 1 Executive.
- Company paid dividend of Rs 2.5 per share in FY20 leading to dividend pay-out of 42.4%.
- B S R & Associates LLP is the statutory auditor and the auditor report does not contain any adverse remark.
- IEX has been prompt in hosting conference calls post quarterly results and the new project launches which company has mentioned in its conference calls like launch of a gas exchanges, real time market, long duration contracts and cross border contract, has been launched or in process of launching them. Company is walking the talk.
- IEX undertakes CSR activities as per statutory requirements. It incurred Rs 38.9mn towards CSR in FY20.
- Salary of Chairman & MD in FY20 is Rs 45.4mn against the ceiling of Rs 212.0mn.
- IEX is known for its operational transparency and has reported virtually zero complaints or disputes.

To factor in IEX's superior quality multi-

pronged growth opportunities, we

value the business at 30x Mar'22 EPS

to arrive at a Mar'22 TP of Rs 257

Valuation

Superior growth, dominant market position help command premium valuations

We initiate coverage on the stock with LONG, deriving comfort from the following:

- The share of short-term contracts in total electricity consumption is expected to go up to \sim 15% of total generated volumes.
- Exchanges are set to gain a majority share of expanding ST. The share of exchanges has gone up from 17% in FY11 to ~36% in FY20. A large part of DSM volumes and volumes through bilateral contracts are expected to shift to exchanges.
- Furthermore, various regulatory measures like MBED and reduction of cross-subsidy surcharge on open access consumer are set to further boost ST volumes.
- IEX is expected to sustain its dominant position amongst exchanges. The company commands a ~95% market share in electricity traded on exchanges.
- Introduction of new products like RTM, delivery-based long-term contracts, green TAM and Cross Border Contracts will expand product offerings and thereby increase the opportunity size.
- RTM, which started in Jun'20, has picked up really well with 0.5/0.7/0.86BU volumes in June/July/Aug.
- IGX, a 100% owned subsidiary which commenced operations on 15 Jun'20, is another big opportunity for IEX. The total opportunity size is expected to be ~Rs 2bn in longer run.

We expect 16% revenue growth over FY20-FY23E. We also factor in 180bps margin expansion over same period led by operating leverage benefits.

To factor IEX's superior business model and scope of increasing the penetration of Exchanges, we value the business at 30x Mar'22 EPS to arrive at a Mar'22 TP of Rs 257. Initiate with LONG. Similar exchanges in the developed economies also trade at higher multiples and to factor in the scope of higher penetration in the Short-Term markets IEX should also trade at higher multiples

Exhibit 27. Hoding Comparable of IEX														
Company CMP	CMP	CMP Mkt Cap Rs. Mn.	P/E			P/B			EV/EBITDA			RoE		
	CMP		FY20A	FY21E	FY22E	FY20A	FY21E	FY22E	FY20A	FY21E	FY22E	FY20A	FY21E	FY22E
IEX	206	60,915	35.0x	29.8x	24.2x	15.8x	13.6x	11.7x	28.0x	24.5x	19.6x	47%	49%	52%
MCX	1,780	90,762	38.4x	39.2x	32.8x	6.7x	6.1x	5.7x	58.7x	45.5x	34.6x	18%	16%	18%
BSE	551	24,808	20.3x	19.5x	18.0x	1.0x	1.1x	1.1x		6.6x	5.6x	5%	5%	6%
Mean			31.0x	30.6x	26.2x	7.8x	6.8x	5.9x	43.4x	22.4x	17.7x	23%	22%	22%

Exhibit 27: Trading Comparable of IEX

Exhibit 28: Trading Comparable of IEX Global

Company	P/E			P/B			EV/EBITDA			RoE		
Company	FY20A	FY21E	FY22E	FY20A	FY21E	FY22E	FY20A	FY21E	FY22E	FY20A	FY21E	FY22E
NASDAQ	26.5x	15.2x	12.4x	0.7x	0.7x	0.7x	12.3x	9.6x	9.1x	17%	16%	21%
ICE	22.3x	21.3x	19.6x	3.1x	3.1x	3.0x	16.4x	15.6x	14.6x	14%	13%	14%
CME	23.3x	23.2x	21.8x	2.2x	2.2x	2.2x	18.1x	17.6x	16.2x	6%	7%	8%
Deutsche Börse	23.5x	22.9x	21.1x	4.5x	4.2x	3.8x	15.8x	15.4x	14.4x	20%	19%	19%
London Stock Exch.	43.8x	38.8x	35.4x	6.3x	5.2x	4.7x	23.6x	18.8x	18.8x	16%	18%	19%
HK Exch.	43.1x	37.3x	33.4x	10.0x	9.5x	9.0x	23.9x	20.8x	18.7x	24%	26%	28%
Singapore Exch.	21.5x	21.0x	20.8x	7.2x	6.8x	6.4x	13.8x	14.2x	13.8x	40%	34%	32%
ASX	31.9x	32.7x	32.0x	4.3x	4.3x	4.2x	21.3x	21.9x	21.0x	13%	13%	13%
Mean	29.5x	26.5x	24.6x	4.8x	4.5x	4.2x	18.2x	16.7x	15.8x	19%	18%	19%

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Company overview

Exhibit 29: Product Portfolio	
Day Ahead Market (DAM)	 15 min contracts for 24 hours of next day Delivery: Next Day Double Sided Auction Market Share: 98-100%
Term Ahead Market (TAM)	 Intraday Contract: Same Day Delivery Day Ahead Contingency Daily Contracts Weekly Contracts Market Share: 65-70%
Real Time Market (RTM)	 Electricity Delivery After 4 time blocks or 1 hour of delivery Price Discovery: Closed, Double Sided Auction
Renewable Energy Certificate (REC)	 Green Attributes as Certificates Sellers: RE Generators not under Feed in Tariffs Buyers: Obligated Entities, 1MWh equivalent to 1 REC Market Share: 70%
Energy Certificate(ESCert)	 1 ESCert=1MTOE (metric Tonne of Oil Equivalent) Trading Session on every Tuesday of the Week Closed Auction
IGX	Day Ahead Market (DAM)Term Ahead Market (TAM)
GTAM	 Green Energy Power Trading Platform Green Intraday Market started Daily and Weekly market to commence soon Continuous trading

Source: Equirus, Company Data

IEX is the first and largest energy exchange in India providing a nationwide, automated trading platform for physical delivery of electricity, renewable energy certificates and energy saving Certificates. The exchange platform enables efficient price discovery and increases the accessibility and transparency of the power market in India while also enhancing the speed and efficiency of trade execution.

IEX began its operations in 2008. The first product launched on its platform was the Day Ahead Market with \sim 39 participants. About 12 years from its launch, there are more than 6,700 registered participants on the exchange with more than 53 BU of electricity traded in FY20.

IEX has further expanded its product portfolio to Term Ahead Market (Intra-day contracts to upto 11day contracts) which Renewable Energy Certificate (REC), Energy Saving Certificate (ESCert). Recently it has launched Real Time Market (RTM), Green Term Ahead Market and Indian Gas Exchange (IGX). (Exhibit 26). IEX has maintained more than 95% market share in DAM and more than 60% share in TAM and REC.

Main function of the exchange is price discovery and ensure settlement of electricity through physical delivery. IEX has an efficient platform which is very crucial for better price discovery. Bidding process is done via closed price auctions or continuous auctions depending on the products. Closed price auctions lead to better price discovery, but it requires more liquidity as in case of DAM. Physical delivery is ensured by communicating the trading electricity to Load Dispatch Centers while the Settlement is ensured by maintaining the trading margins in advance with the buyers and sellers.

IEX charges 4p/unit as the commission from the participants for the electricity traded on the exchange.



Exhibit 30: Volume has grown at 11% over FY14-20

Source: Company Data, Equirus

Key management profile

Mr. Satyanarayan Goel: Mr. Satyanarayan Goel is the Board's Non-Executive Chairman. He holds a bachelor's degree in electrical engineering from REC Rourkela and an MBA from FMS, New Delhi. He has over 40 years of experience in different areas of power sector – power generation, transmission, system operation, power trading, commercial, regulatory affairs, power market development and cross border trade.

Prof. Kayyalathu Thomas Chacko: Prof. Kayyalathu Thomas Chacko is an Independent Director of IEX. He is a retired Indian Administrative Services officer and has 34 years of experience in public administration. He worked with Gol for 15 years, almost entirely in the Ministry of Commerce and Industry and closely involved in the trade and industry sectors. He holds a master's degree in economics. He also holds a master's degree in Public Administration from Harvard University, U.S.A.

Ms. Sudha Pillai: Sudha Pillai is an Independent Director of IEX. One of the foremost women to serve in the Indian civil services, she was appointed as member secretary of the Planning Commission in 2010 in the rank of minister of state- the first woman to hold this office. She has 45 years of experience in policy formulation relating to Technology Transfer, Foreign Investment and Competition Law, National Skill Development Policy and Safety, Health & Environment at Workplace.

Mr. Tejpreet Singh Chopra: Mr. Tejpreet S. Chopra is an Independent Director of IEX. He holds B.A. Honors degree in Economics from St. Stephen's College, Delhi University and an MBA degree from Cornell University. He is the Founder & CEO of Bharat Light & Power (BLP) - a leading clean energy generation company in India, and a technology leader in providing Enterprise AI & Industrial IOT solutions and products.

Mr. Gautam Dalmia: Mr. Gautam Dalmia, aged 51 years, has been a driving force behind the exponential growth of the Dalmia Bharat Group. He leads a professional team while maintaining the core values which have been the foundation of this 75-year old conglomerate with interests in cement, sugar and refractories.

Mr. Rajesh Kumar Mediratta, Director (Strategy & Regulatory Affairs): Mr. Mediratta is a Director Strategy & Regulatory Affairs and is associated with IEX from Sept'2007. He is a Bachelor of Mechanical Engineering from Rani Durgavati Vishwadvidyalaya, Jabalpur, and MBA from Indira Gandhi National Open University, New Delhi. He has 29 years of experience in the power sector. Prior to joining IEX, Mr. Mediratta has also worked as an Assistant Director at CEA and later as Chief Manager at PGCIL.

Mr. Vineet Harlalka, CFO & Company Secretary Mr. Harlalka was appointed as the CS of IEX in January 2010. He has been serving as the CFO since May 2014. He is a Bachelor of Commerce from the University of Delhi, He is also a member of ICAI and ICSI. He has over 13 years of experience in the field of finance, taxation, and treasury, secretarial and accounting practice. Prior to joining IEX, Mr. Harlalka worked at New Holland Fiat (India) Private Limited.

Mr. Rohit Bajaj, Head (Business Development): Mr. Bajaj joined IEX on 24 May, 2014. He is a Mechanical Engineer from Regional Engineering College, Rourkela, Sambalpur University and holds a Postgraduate Diploma in Executive Management from Management Development Institute, Gurgaon. He has 23 years of experience in the energy domain, particularly in the power, oil and gas sector. Prior to joining IEX, Mr. Bajaj worked at National Energy Trading and Services Limited as head of business

Mr. Indranil Chaterjee, Chief Risk Officer: Mr. Chaterjee is with IEX since December, 2016. He is a Bachelor of Engineering (Electrical and Electronics) from the University of Mangalore, Mangalore, and MBA from Faculty of Management Studies. He has 14 years of experience in the power market sector. Prior to joining IEX, Mr. Chaterjee worked at Indus Towers Limited as Deputy General Manager, Energy.

Mr. Sangh Suman Gautam, Chief Technology Officer: He was appointed the CTO with effect from 2nd August, 2019. He is a Master in Science (Computer Science) from UNM (USA) and Bachelor of Technology (Electronics and Communication) from NSIT (Netaji Subhas Institute of Technology, Delhi University). He pursued MBA, PT from Faculty of Management Studies. He has 20-plus years of experience in the technology industry and has worked in a variety of domains: telecom (Tellabs), product (Adobe, LinkedIn), e-commerce (Amazon), analytics (Guavus), print (Hindustan Times) and recruitment (Shine.com).

Company Snapshot

How we differ from consensus

Particular (Rs Mn)	I	Equirus	Consensus	% Diff	Comment
<u> </u>	FY21E	2,978	2,829	5%	
Sales	FY22E	3,545	3,312	7%	
EBITDA\	FY21E	2,293	2,284	0%	
	FY22E	2,808	2,746	2%	
D T	FY21E	2,064	1,839	12%	
PAI	FY22E	2,535	2,201	15%	

Key Estimates

Volumes (BU)	FY19	FY20	FY21E	FY22E	FY23E
DAM	50	49	53	59	67
ТАМ	2	5	2	8	9
RTM	0	0	7	10	11
LDC				4	5
REC	9	6	5	6	7
Total	61	60	68	82	93

Source: Company Data, Equirus

Comparable valuation

Company Read Chap Mkt Cap Price Targ		Target		P/E		Р/В		EV/EBITDA		RoE		Div Yield						
Company	Keco.	Civir	Rs. Mn.	Target	Date	FY20A	FY21E	FY22E	FY20A	FY21E	FY22E	FY20A	FY21E	FY22E	FY20A	FY21E	FY22E	FY20A
IEX	LONG	206	62,195	255	Mar'22	35.0x	29.8x	24.2x	15.8x	13.6x	11.7x	28.0x	24.5x	19.6x	47%	49%	52%	1%
МСХ	NR	1,780	90,762			38.4x	39.2x	32.8x	6.7x	6.1x	5.7x	58.7x	45.5x	34.6x	18%	16%	18%	1%
BSE	NR	551	24,808			20.3x	19.5x	18.0x	1.0x	1.1x	1.1x	NM	6.6x	5.2x	5%	5%	6%	1%





Source: Company, Equirus Research



Source: Company, Equirus Research

EV-EBITDA chart



Source: Company, Equirus Research

Quarterly performance

Y/E Mar (Rs mn)	1QFY20A	2QFY20A	3QFY20A	4QFY20A	1QFY21A	2QFY21A	3QFY21E	4QFY21E
Revenue	606	675	597	693	663	753	729	833
COGS	0	0	0	0	0	0	0	0
Employee Cost	73	82	79	90	92	94	95	98
Other Expenses	38	60	41	62	82	75	69	79
EBITDA	494	533	477	542	489	584	565	656
Depreciation	33	34	41	46	44	44	45	46
EBIT	461	499	436	496	445	539	519	609
Interest Exp.	5	5	0	5	5	0	0	0
Other Income	91	113	97	100	142	149	164	171
Profit before Tax	547	607	533	591	582	689	683	780
Tax Expenses	151	118	110	134	153	165	164	187
Profit After Tax	396	488	423	458	429	523	519	593
Minority Interest	0	0	0	0	0	0	0	0
Profit/(Loss) from Associates	0	0	0	0	0	0	0	0
Recurring PAT	396	488	423	458	429	523	519	593
Exceptional Items	0	0	0	0	0	0	0	0
Reported PAT	396	488	423	458	429	523	519	593
Other comprehensive income.	0	0	0	0	0	0	0	0
PAT after comp. income.	396	488	423	458	429	523	519	593
FDEPS	1.3	1.6	1.4	1.5	1.4	1.8	1.7	2.0
Cost items as % of sales								
RM expenses	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Employee expenses	12.1	12.2	13.3	13.0	13.9	12.5	13.0	11.8
Other expenses	6.3	8.8	6.9	8.9	12.3	10.0	9.5	9.5
Margin (%)								
Gross Margin	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
EBITDA Margin	81.6	78.9	79.8	78.1	73.8	77.5	77.5	78.7
PAT Margin	65.4	72.4	70.9	66.0	64.7	69.5	71.2	71.2
YoY Growth (%)								
Sales	(9.6)	0.9	(6.5)	22.8	9.5	11.7	22.1	20.1
EBITDA	(9.3)	(2.6)	(2.5)	21.0	(0.9)	9.6	18.5	21.1
EBIT	(11.1)	(4.1)	(5.8)	17.5	(3.5)	8.1	19.2	22.8
PAT	(5.5)	14.4	(0.8)	20.9	8.4	7.2	22.7	29.6

Key Financials (Standalone)

Income Statement

Y/E Mar (Rs mn)	FY17A	FY18A	FY19A	FY20A	FY21E	FY22E	FY23E
Revenue	1,987	2,305	2,541	2,570	2,978	3,545	4,047
COGS	0	0	0	0	0	0	0
Employee Cost	155	241	248	332	380	418	447
Other Expenses	397	215	264	217	305	319	344
	1 405	1.0.40	0.000	0.001	0.000	0.000	2.05/
EBILDA	1,435	1,849	2,028	2,021	2,293	2,808	3,256
FBIT	1 401	1 746	1 924	1 868	2 113	2 613	3 061
Interest Exp.	4	2	7	16	5	0	0,001
Other Income	342	256	401	403	626	750	867
Profit before Tax	1,739	2,000	2,318	2,255	2,734	3,364	3,927
Tax Expenses	603	683	667	499	670	807	943
Profit After Tax	1,136	1,317	1,650	1,756	2,064	2,556	2,985
Minority Interest	0	0	0	0	0	0	0
Profit/(Loss) from Associates	0	0	0	0	0	0	0
Recurring PAT	1,136	1,317	1,650	1,756	2,064	2,556	2,985
Exceptional Items	0	0	0	0	0	0	0
Reported PAT	1,136	1,317	1,650	1,756	2,064	2,556	2,985
Other comprehensive income.	0	0	0	0	0	0	0
	1,130	1,317	1,650	1,/56	2,064	2,556	2,985
	37.7	43.7	5.5	5.9	0.9	0.0	10.0
BVPS	92	94	12	13	17	21	25
5413	/2	7 - 7	12	10	17	21	20
YoY Growth (%)	FY17A	FY18A	FY19A	FY20A	FY21E	FY22E	FY23E
Sales	13.5	16.0	10.3	1.2	15.9	19.0	14.2
FBITDA	14.6	28.9	97	(0.4)	13.5	22.4	16.0
ERIT	15.0	20.7	10.2	(0.1)	12.1	22.1	17.1
	15.0	24.7	10.2	(2.9)	13.1	23.7	17.1
PAI	36.3	(25.2)	56.4	0.5	55.5	19.8	15.5
Key Ratios							
, Profitability (%)	FY17A	FY18A	FY19A	FY20A	FY21E	FY22E	FY23E
Gross Marain	100.0	100.0	100.0	100.0	100.0	100.0	100.0
EBITDA Marain	70.0	80.2	79.8	78.6	77.0	70.2	80.4
	72.2	57.1	/ 7.0	/0.0	//.0	77.2	70.7
	57.2	57.1	65.0	00.3	09.3	/ 2.1	/3./
ROE	47.7	46.9	50.5	46.2	46.8	46.2	43.8
ROIC	44.1	45.1	47.1	42.4	42.6	42.8	41.2
Dividend Payout	0.0	0.0	18.6	51.1	50.5	52.5	54.0
Dividend Fayou	0.0	0.0	40.0	51.1	50.5	52.5	54.9
CAGR (%)		1 year	2 years	3 years	5 years	7 years	
Revenue		1.2	5.6	9.0	7.8	9.3	
FBITDA		(0.4)	4.5	12 1	8.3	10.8	
PAT		6.4	15.5	15.6	14.3	14.9	
Valuation (x)	FY17A	FY18A	FY19A	FY20A	FY21E	FY22E	FY23E
P/E	5.1	4.4	35.0	32.5	27.6	22.3	19.1
P/B	2.1	2.0	15.6	14.6	11.6	9.3	7.6
P/FCFF	31.3	59 1	76 9	48.6	22.7	20.0	14 9
	(3.4)	0.5	21.2	16.7	14.1	10.0	Q 7
	(5.0)	0.5	21.3	10.7	14.1	10.9	0.7
	(2.6)	0.4	17.0	13.1	10.8	8.7	7.0
Dividend Yield (%)	0.0	0.0	1.4	1.6	1.8	2.4	2.9

Balance Sheet							
Y/E Mar (Rs mn)	FY17A	FY18A	FY19A	FY20A	FY21E	FY22E	FY23E
Equity Capital	301	302	302	298	298	298	298
Reserves	2,481	2,536	3,401	3,603	4,624	5,840	7,185
Net Worth	2,782	2,837	3,703	3,901	4,923	6,138	7,484
Total Debt	0	0	0	0	0	0	0
Other long term liabilities	36	187	300	439	439	439	439
Minority Interest	0	0	0	0	0	0	0
Account Payables	1,719	846	1,338	756	908	1,003	1,278
Other Current Liabilities	1,003	1,872	1,715	1,585	1,904	2,104	2,681
Total Liabilities	5,540	5,743	7,056	6,681	8,174	9,684	11,882
Gross Fixed Assets	118	1,323	1,342	1,566	1,716	1,866	2,016
Acc. Depreciation	(34)	(133)	(229)	(376)	(556)	(751)	(947)
Net Fixed Assets	84	1.190	1.114	1.190	1.159	1.115	1.069
	10	5	12	10	10	10	10
long term investments	0	0	0	100	100	100	100
Others	295	37	33	.31	31	31	.31
Inventory	0	0	0	0	0	0	0
Receivables	0	0	459	0	3	2	3
Leans and advances	2	2	437	2	2	2	35
Other current assets	0	680	14	21	23	20	34
Cach & Cach Equivalanta	5 114	3 838	5 403	5 308	6 822	27	10 500
	5,110	5,828	7.054	2,308	9.174	0,372	11,992
	5,540	5,743	7,058	0,001	6,174	9,004	(2,004)
Non-Cash WC	(2,080)	(2,036)	(2,580)	(2,298)	(2,780)	(3,050)	(3,880)
Cash Conv. Cycle	(315.5)	(133.7)	(126.3)	(107.0)	(111.0)	(103.0)	(115.0)
WC Turnover	(0.7)	(1.1)	(1.0)	(1.1)	(1.1)	(1.2)	(1.0)
Gross Asset Turnover	1,687.8	1/4.2	189.3	164.1	1/3.6	190.0	200.8
Net Asset Turnover	21.3	1.9	2.3	2.1	2.5	3.2	3.8
Net D/E	(183.9)	(134.9)	(146.5)	(136.0)	(138.6)	(136.4)	(141.6)
Days (x)	FY17A	FY18A	FY19A	FY20A	FY21E	FY22E	FY23E
Receivable Days	0	0	66	0	0	0	0
Inventory Days	0	0	0	0	0	0	0
Payable Days	316	134	192	107	111	103	115
Non-cash WC days	(494)	(322)	(371)	(326)	(338)	(314)	(350)
Cash Flow							
Y/E Mar (Rs mn)	FY17A	FY18A	FY19A	FY20A	FY21E	FY22E	FY23E
Profit Before Tax	1,739	2,000	2,318	2,255	2,734	3,364	3,927
Depreciation	34	103	104	152	180	195	196
Others	(1,555)	(1,284)	(1,581)	(1,373)	0	0	0
Tax paid	610	518	596	499	(670)	(807)	(943)
Change in WC	1,231	(25)	(54)	(282)	463	289	836
Operating Cashflow	2,059	1,312	1,383	1,252	2,707	3,041	4,017
Capex	(13)	(1,204)	(36)	(78)	(150)	(150)	(150)
Change in Invest.	(777)	705	(1,073)	37	0	0	0
Others	5/9	165	488	15	(150)	0	0
Investing Cashtiow	(212)	(334)	(621)	(25)	(150)	(150)	(150)
Change in Debt	0	0	0	0	0	0	0
Others	(1,000)	(1.070)	1/	(1 4 1 4)	(1.0.42)	(1.241)	(1 420)
Einancina Cashflow	(1,090)	(1,2/2)	(002)	(1,014)	(1,043)	(1,341)	(1,037)
Net Change in Cash	(1,070)	(1,203)	(704) (22)	(1,014)	1 51 /	1 550	(1,007)
riter Chunge III Cush	/5/	(205)	(23)	(200)	1,514	1,000	2,220

Source: Company, Equirus Research

Indian Energy Exchange Ltd. (IEX IN)

Rating & Coverage Definitions: Absolute Rating • LONG : Over the investment horizon, ATR >= Ke for companies with Free Float market cap >Rs 5 billion and ATR >= 20% for rest of the companies • ADD: ATR >= 5% but less than Ke over investment horizon • REDUCE: ATR >= negative 10% but <5% over investment horizon • SHORT: ATR < negative 10% over investment horizon	Registered Office: Equirus Securities Private Limited Unit No. 1201, 12th Floor, C Wing, Marathon Futurex, N M Joshi Marg, Lower Parel, Mumbai-400013. Tel. No: +91 - (0)22 - 4332 0600 Fax No: +91- (0)22 - 4332 0601
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