

CORPORATE BRIEFING SESSION

22nd November 2022









KE Overview

KE's Presence Across the Value Chain

Incorporated in <u>1913</u>, KE is the only vertically integrated power utility in Pakistan, a customer base of more than <u>3.4 million customers</u>, <u>6,500 sq. km of service territory</u> and <u>peak demand of over 3,600 MW</u>.



Generation

Installed generation capacity of own plants to increase to **2,817 MW**⁽¹⁾. Acquire **1,650+ MW** via power purchase agreements

Transmission

6,853 MVAs Capacity, 71 Grids, 180 Power Trafos, and 1,354 km of lines

Distribution

8,728 MVAs capacity, 2,009 feeders, 30,094 PMTs and 10,540km HT lines

As the only vertically integrated power utility in the country, KE is required to plan for its entire value chain – to ensure sustainability and reliability of power supply to the consumers

(1) As per Generation License and including 900 MW RLNG plant which is expected to achieve commercial operations by early December 2022 MW = Mega-watts; MVAs = Mega-volt Amperes; PMT = Pole Mounted Transformer; HT = High Tension







Operational Performance

Operational Performance



Investment of around PKR 62.8 billion across the power value chain resulted in improved sent out in FY22. However, current socio-political challenges locally and internationally, resulted in rising commodity prices, surging inflation and reduced economic activity which resulted in decline in sent out in Q1 FY23.



Generation Efficiency (%)



The loss reduction is progressing well due to fall out impact of ABC PMT's executed in previous years under the project Sarbulandi, coupled with better Governance and favorable weather cyclical impact.



In FY22, launching of 'Ehad scheme' and tailormade Area-Specific Rebate Schemes led to an improved recovery ratio. However, in Q1 of FY23, recovery was adversely impacted owing to increase in consumer tariff, high FCA, imposition of taxes and current economic conditions.

Recovery Ratio (%)

Operational Performance - Generation

KE continued to operate generation machines prudently during the year resulting in improvements in generation efficiency, reliability and forced outages.





Forced Outage No.

KE's Generation Fleet

Bin Qasim Power Station 1 (BQPS-I)

	Capacity ⁽¹⁾⁽⁴⁾	840 MW (4 units)
	GDC ⁽²⁾	750 MW
	Year	1983 – 1997
THE COLUMN L MANAGE	Fuel	FO / Gas / LNG

Bin Qasim Power Station 2 (BQPS-II)

Korangi CCPP

	Capacity ⁽⁴⁾	573 MW (3 units, 1ST)		Capacity ⁽⁴⁾	248 MW (4 units, 2ST)
ia.	GDC ⁽²⁾	526 MW		GDC ⁽²⁾	227 MW
	Year	2012		Year	2008 – 09
1	Fuel	Gas / LNG	Autoria Di	Fuel	Gas / LNG / HSD

GE Jenbacher SITE & GE Jenbacher Korangi

Marsan.	Capacity ⁽⁴⁾	214 MW (64 units 2ST)
	GDC ⁽²⁾	192 MW
	Year	2009/2016
	Fuel	Gas / LNG

Bin Qasim Power Station 3 (BQPS-III)⁽³⁾

4 units,	Capacity ⑷	942 MW (2 units, 2ST)
	GDC ⁽²⁾	N/A
	Year	2022 - 2023
	Fuel	LNG / HSD

(1) Unit3 and 4 of BQPS I decommissioned (210 MW each) (2) Gross Dependable Capacity (FY22)

(3) BQPS III is under testing and commissioning phase



Update on 900 MW BQPS III Project (1/4)

900MW BQPS III CCPP & Associated Transmission Projects





Update on 900 MW BQPS III Project (2/4)

BQPS III pictures



Unit – 02 First Fire

Unit – 02 First Synchronization

Aerial View of Plant



Update on 900 MW BQPS III Project (3/4)

BQPS III pictures



Reactor Aerial View

KPC Grid





GIS and Relay Building Aerial View



BQPS III Grid



Switchboard Room

Update on 900 MW BQPS III Project (4/4)

Financial Close of 900 MW achieved successfully

Foreign Participating Banks (USD 414 Mn)



Local Participating Banks and DFIs



Operational Performance - Transmission

Increased transmission network reliability through addition of 10 new grid stations and c. 106 km of EHT lines, while also rehabilitating over 420 km of old EHT lines – as a result, 2,216 MVAs of transmission capacity has been added since FY 12.



System Reliability and Capacity Enhancements

- **59%** reduction in **transformer trips** from FY12 to FY22
- Over 420 km of old circuit length rehabilitated
- Increase of around 106 km in EHT lines since FY 12
- KE has sufficient transmission capacity to serve the power demand and has various planned initiatives for capacity enhancement and improved network reliability

Operational Performance - Distribution

Through targeted investments focused on loss reduction and capacity enhancement, KE has reduced its T&D loss significantly and for the first time in FY 2022 beat NEPRA T&D loss benchmark and achieved 15.36% T&D loss as opposed to target of NEPRA of 15.95%.



Other Operational Improvements

- **Targeted recovery drives and campaigns** to improve recovery ratio as a result, KE's company-wide recovery ratio has improved to around 96.7% in FY22. Subsequently, in FY23, recovery got adversely impacted owing to increase in consumer tariff, high FCA, imposition of taxes and current economic conditions and declined to 88.9% in Q1 FY23, however, expected to improve in next quarter.
- Focus on improved customer experience and implementation of New and Re-engineered Processes
- Technological advancements for better network visibility and to enable targeted investments
- Lasting social impact through a Segmented Load-shed Policy which sought to discourage electricity theft and non-payment of bills today, over 74% of the city is load-shed free

T&D Loss = Transmission & Distribution Loss







Financial Performance

Financial Highlights





Reasons for Major Variations (FY21 vs FY22)

- In FY22, NEPRA issued its determination on MTR wherein it has determined a downward adjustment of Rs. 0.22/kWh. NEPRA has not allowed additional investment requested, disallowed cost of working capital, allowed partial exchange rate variation for return on equity indexation and has not considered other adjustments which had a negative impact on profitability by PKR 9.5 billion for FY22.
- Provision against doubtful debts have increased significantly PKR 9.1 billion in FY22 mainly due to high inflation, increase in consumer tariff and high FCA impacting consumers propensity to pay.
- Due to severe devaluation of Pak Rupee, foreign currency exchange loss increased significantly by PKR 10 billion in FY22.
- Finance cost increased by PKR 4.0 billion mainly on account of increase in effective rate of borrowing and higher levels of borrowing due to non-payment of dues by Government entities.

Reasons for Major Variations (Q1-FY22 vs Q1FY23)

- During the first quarter of FY23, as a result of challenging macroeconomic factors resulting in surging inflation and reduction in economic activity, there was a reduction in units sent-out by 8.9% causing sent out loss of PKR 2.4 billion.
- Increase in impairment loss by c. PKR 4.0 Bn against doubtful debts due to high inflation, increase in consumer tariff, high FCA and current economic conditions impacting consumers propensity to pay.
- Due to severe devaluation of Pak Rupee, foreign currency exchange loss increased significantly by PKR 2.6 billion.
- Finance cost increased by PKR 3.4 billion in Q1 FY23 over the comparative period mainly on account of increase in effective rate of borrowing and higher levels of borrowing due to non-payment of dues by Government entities.







Key Challenges / Issues

To overcome the challenges faced, KE is making efforts to mitigate them through effective engagement with all key stakeholders

Challenges			Mitigants
	Receivables / Payables – Government Entities	As of October 2022, KE is to receive PKR 78 Billion on net principal basis from Government entities and departments	Engagement with Government Entities for release of net receivables, discussions on arbitration for resolution of disputes around historic dues & for approval of write-off claims
	Adjustments in Tariff for key Uncontrollable Factors	Current MYT does not allow for pass-through of increased cost and sent-out adjustment	Working diligently for renewal of tariff with an aim to obtain a sustainable cost reflective tariff with robust adjustments mechanism which is timely determined
<u>o000</u>	Demand disruption due to macro-economic Factors	Power demand lower than projected particularly from the industrial segment due to various macro-economic factors	Conversion of captive consumers to grid in line with GoP's policy as well as simplified New Connection process to have a positive impact on power demand. KE have already energized around 150 MW captive connections.
	Non-provision of Local Gas Supply to KE	During FY 2022, KE was provided with 16 MMCFD of local gas supply – due to non- provision of local gas, KE has to resort to expensive sources of generation	In addition to engagements with SSGC and Petroleum Division for supply of local gas, KE also plans to add around 1,200 MW of renewables to diversify its fuel mix
	Execution of Forward- Looking Contracts	Agreements for off-take of upto 2,050 MW from National Grid and to streamline the process for filing and release of monthly TDS claims pursued	Engagements with Power Division and Taskforce constituted by the Honorable PM to expedite the approval process and execution of agreements



Receivables from Government Entities

October 2022 Position¹

Receivables from Govt. Entities	PKR Billion		Payables to Government Entities	PKR Billion		
Tariff Differential Claims	421.1		NTDC / CPPA – G	333.2		Net Receivable to KE
KWSB "Strategic Customer"	28.2	_	SSGC ⁴	38.7	=	
Government of Sindh (GoS)	8.4		PSO	7.2		C. PKR 78.3 Billion
Other Federal & Provincial Entities ²	17.4		Other Federal & Provincial Entities	17.7		
Total Receivables	475.1	-	Total Payables	396.8		

Mark-up Dispute on Receivables and Payables

- The disputed mark-up, claimed by SSGC and NTDC / CPPA-G, amounts to **c. PKR 141 Billion** & **c. PKR 125 Billion**, respectively, however KE is contesting on following grounds
 - Delays in release of TDC and energy dues of strategic customers including KWSB by GoP resulted in consequential delays in payments to NTDC / CPPA – G and SSGC
 - Therefore, KE is not liable to pay any mark-up KE is in litigation disputing this markup and has strong legal basis
 - GoP is a party on both sides (receivables & payables) establishes mutuality of obligations and accordingly, settlement of outstanding dues, including any mark-up, shall be done on net basis
- KE is in continuous engagement with relevant stakeholders for a fair and expedient resolution to the issue of receivables and payables, including any mark-up
- Further, option of arbitration for settlement of outstanding receivables / payables is also under discussion with GoP.
- 1. Balances on principal basis



Future Outlook – New Multi Year Tariff

New Multi-Year Tariff key for sustainable development of power infrastructure of Karachi

New Multi-Year Tariff envisages improvements on various fronts, which will help the Company continue the investment journey in the interest of consumers

- 1. Keeping in view learnings from previous MYT and KE will file **separate tariffs for each business i.e. generation**, **transmission and Distribution**
- 2. New power policy envisages recovery loss allowance component based on improvement curve of the recovery ratio through a set procedure, which will ultimately help in timely cost recoupment and cash flows.
- 3. Tariff split for generation **capacity payments** & standalone generation tariff which will ensure adequate cost recovery of both variable and fixed costs and allow participation in Open Markets and Central Despatch
- 4. CAPEX targets divided into controllable and non-controllable
- 5. Consistent with other power sector entities **Indexation** mechanism for variation in **KIBOR / LIBOR/ SOFR rates** and adjustment mechanism for over/(under) recovery due to variation in sent out units will be requested.

The tariff features explained above are subject to corporate and regulatory approvals







Future Plans & Initiatives

Planned initiatives across the value chain from FY 23 to FY 25, subject to regulatory approvals – would enable KE to unlock key value drivers under the MYT along with benefitting consumers and the economy at large

Initiatives Across The Value Chain

Generation

- 900 MW RLNG Plant would significantly improve KE's overall fleet efficiency and enable KE to phase out the old units of BQPS I
- **450-500 MW of renewable** projects by FY 25 which includes 150 MW Solar (WUB) and 350 MW Solar (GoS/WB), being Pakistan's first-ever competitive bidding projects.
- Planned projects would help bring down the electricity cost, diversify KE's fuel mix, while the improved power supply will result in enhanced business activity, job creation, infrastructure development, & overall socio-economic uplift.

Transmission

- Completion of TP 1000 project (remaining TL works).
- Construction of Dhabeji and KKI Interconnections by summer of 2024 for off-take of additional power of upto 1,400 MW from National Grid
- Transmission Capacity is planned to be enhanced to around 7,200 MVA by FY-23 through multiple Capacity enhancement projects

Distribution

- Capacity enhancement through addition of around 155 feeders & 2600 PMTs during FY23-25
- Continued improvements in load-shed reduction
- Targeted recovery drives / campaigns to engage defaulting consumers and improve recovery levels
- Continued reduction in distribution losses primarily through conversion of LT bare conductors into ABC, rehabilitation & replacement of existing LT ABC cables networks, enhancement of HT network coupled with stringent governance activities.

Improved Network Reliability Reduction in Load-shed Process Automation and Improved Service Levels

Enhanced Network Safety Industrial Connections fueling economic growth

Note: Planned investment is subject to regulatory and corporate approvals







Key Sector Developments

Market reforms are underway to provide policy directions and to bring in efficiency and enable integrated planning which is expected to result in improvement of ecosystem and system performance



Draft National Electricity Plan

In advance stages of finalization – caters to transform and develop all aspects and levels of the power sector value chain in line with the broad contours laid down in the National Electricity Policy 2021



Indicative Generation Capacity Expansion Plan

IGCEP 2022-2031 has been submitted for NEPRA approval – for the first time, KE has also been included in the IGCEP indicating the shift towards a more integrated planning



10,000 MW of Solar for Cheaper Energy

GoP plans to set up 10,000 MW of solar projects to reduce the import bill of costly furnace oil and diesel and provide cheaper power to consumers



Regulatory Framework for Open Markets

CTBCM dry run commenced along side notification of multiple regulations with respect to opening up of the market – however, NEPRA decision on stranded cost and cross subsidy is under deliberation







Corporate Social Responsibility

CSR Framework







Promoting safety and resilience through public service messages and donations



Safety road shows organized in 8 high risk areas of Karachi reaching 30,000 persons. Monsoon and heatwave safety messaging spread through multiple mediums reached 270,000 persons in 513 areas



220 frontline workers trained on Monsoon Safety and CPR in collaboration with Pakistan Red Crescent Society (PRCS).

1,000 Safety gear including rain-jackets, rainboots, and life-jackets distributed among traffic police, front line workers, and vulnerable communities. Rain safety leaflets distributed among 75,000 people

Public service **TVC** aired on monsoon safety















Community Engagement

Uplifting marginalized communities through collaborations



150,000 persons provided access to clean water through **15** water filtration plants



37,500 were facilitated through health camps and **5000** through Covid-19 vaccination mobile drive in inaccessible areas. **33,000** water bottles with ORS sachets were distributed at **11** Heatwave relief camps in collaboration with Saylani.



Renovation of **3** schools benefitting **950** children



1,300 youth engaged in sports through Khelo Shaan Sey campaign, and football and Cricket tournaments























Environment and Sustainability

Contributing to a greener Karachi.



Sustainability Report 2022 published in accordance to GRI Standards and UN SDGs.



7.5 Million donated to NEPRA's microfinance fund for solar installations in low income areas.



2 parks renovated in Korangi and Nazimabad benefiting **10,000** individuals



300 entries received for 7/11 Innovation
Challenge
10 projects have been shortlisted for the final round









12 RESPONSIBLE CONSUMPTION

AND PRODUCTION



Social Investments

3 GOOD HEALTH AND WELL-BEING

Floods 2022 – Relief and Rehabilitation

163.7 Million PKR pledged for flood relief activities.



Supported **1,400 families** with dry ration & **200** with cash assistance in collaboration with Saylani, Akhuwat & Sahil NGO.



153.9 Million PKR invested in infrastructure rehabilitation.



Medical supplied for flood relief worth **3.77 Million PKR** provided to LRBT, Child Life, Saylani, Bait-us-Salam, NOWPDP etc.



0.6 Million PKR invested in tents for flood affectees.



















Diversity and Inclusion

Supporting women in breaking the glass ceiling



100 women graduated in Roshni Baji (cohort 1 &
2) – educating 463,304 households on safety awareness during the program



15 Roshni Bajis from cohort 1 hired as KE female Meter Data Maintenance Officers including 1 as a Customer Care Representative



100 women graduated under Pakistan's first certified female electrician program

Capacity Building through:



170 women trained by State Bank of Pakistan on financial literacy



120 women trained to drive motorbikes. **57** facilitated with licenses



100 women trained by Sindh Judo Association on self-defense (Roshni Baji cohort 1 & 2)



100 women (including Roshni Baji and community women) were trained on Heatwave Exhaustion and as certified CPR providers.











Diversity & Inclusion









Awards

- Asia Export Finance Award by Trade and Export Finance (TXF) for BQPS III
- S&P Platts Global Energy Award corporate social responsibility in diversified category for Roshni Baji programme
- United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA) Award for covid vaccination efforts
- NEPRA Gold Award in CSR
- Asian Power Awards
 - IT Project of the Year for KE Live
 - $\circ~$ Power Utility of the Year
- WePower, South Asia Award for employee retention initiatives
- Silver Employer of Choice Gender Diversity Award by International Finance Corporation (IFC) and Center of Excellence in Responsible Business (CERB) - Pakistan Business Council (PBC)
- 14th National Forum for Environment & Health (NFEH) CSR Award
- 13th Annual Environment Excellence Award by NFEH
- United Nations Global Compact (UNGC) Business Sustainability Award
- Fire Safety Award by NFEH & Fire Protection Association Pakistan (FPAH)
- 7th International Summit and Awards on Environment, Health and Safety by the Professionals Network
- International Safety Award by British Safety Council UK in Seize the Opportunity Award
- SAFA Best Presented Annual Report (BPA) Award 2020. First Runner up in the category of Power and Energy





The Journey Continues

With the ongoing developments / investments in KE's network and necessary support from the government entities, KE is confident in serving its customers in a reliable and efficient way

Moving Forward

Aligned with the mission of brightening lives by building the capacity to deliver uninterrupted, safe and affordable power to Karachiites, KE will continue to make investments across the value chain, enabling the company to improve operationally whilst progressing on the value creation curve through innovation and technological advancements. However, support from government and regulatory authorities remain critical for the execution of the planned investment.

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