

Ref. No.

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Dated: 09th December, 2016

TRUSTEES

Ms. Yasmeen Lari

Justice (R) Nasira Iqbal

Ms. Shahana Kaukab

Mr. Sohail Muzaffar

Justice (R) Zia Perwaiz (Secretary General)

Justice (R) Dr. Ghous Muhammad (Vice Chairman)

> Syed Adil Gilani (Chairman)

The Chairman,
National Electric Power
Regulatory Authority (NEPRA),
Attaturk Avenue (East), NEPRA Tower,
Sector G-5/1,
Islamabad.

Subject: Intervention Request in Multiyear Tariff Petition Filed by K-Electric Limited (K-Electric) for Determination of Tariff for the period commencing from July 01, 2016 to June 30, 2026 - Comments on issues framed by NEPRA

Reference on current Issue:

- NEPRA's Advertisement Published on 24.06.2016
- Whistleblower intervention Request dated 13.07.2016 along with letter dated 12.07.2016 attached therewith Report-I & Report-II (191 pages)
- Whistleblower letter dated 24.09.2016
- Whistleblower letter dated 05.10.2016, and
- Whistleblower letter dated 14.10.2016

Earlier References:

- Whistleblower Pakistan letter dated 04.09.2014
- Whistleblower Pakistan letter dated 10.11.2014
- Whistleblower Pakistan letter dated 01.12.2014
- Whistleblower Pakistan letter dated 01.12.2014
- Whistleblower Pakistan letter dated 03.03.2015
- Whistleblower Pakistan letter dated 03.03.2015
- Whistleblower Pakistan letter dated 04.03.2015
- Whistleblower Pakistan letter dated 09.06.2015
- Whistleblower Pakistan letter dated 02.07.2015

Whistleblower Pakistan's following letters which it sent in the matter of Grant of Generation License and Tariff to K-Energy for the 420 MW Capacity Power Plants of K-Electric after its leasing to K-Energy:



- Whistleblower Pakistan letter dated 05.09.2014
- Whistleblower Pakistan letter dated 10.11.2014
- Whistleblower Pakistan letter dated 15.12.2014
- Whistleblower Pakistan letter dated 15.12.2014
- Whistleblower Pakistan letter dated 14.01.2015 (through Counsel)
- Whistleblower Pakistan letter which it sent in the matter of Grant of Generation License to OURSUN Pakistan Limited on 11 July 2016 may also be considered in the case.

Dear Sir,

At the very outset, Whistleblower Pakistan submits that NEPRA has advertised to start the public proceedings for the determination of Multiyear Tariff for K-Electric on 24 June 2016 i.e. just a week before the expiry of the earlier MYT. The MYT of K-Electric expired on 30.06.2016 and thus since July 01, 2016, K-Electric is operating without any valid Tariff. The late start of the proceedings amounts to mis-management.

Whistleblower Pakistan has also submitted its Intervention Request in the matter and submitted its comments through the letters referred to the above. Whistleblower Pakistan also participated in the public hearing held in Marriott Hotel Karachi on 27 & 28 September 2016. To assist the Authority in the matter and for providing detailed comments in the matter, Whistleblower Pakistan requested the Authority to provide the following information:

- all Intervention Requests and Comments filed by other stakeholders/parties in the subject matter;
- K-Electric's replies in response to Intervention Requests and Comments in the subject matter;
- Audio recording and transcript of the public hearing of 27 & 28
 September 2016;



Whistleblower Pakistan submitted the request in pursuance of the NEPRA Tariff Rules and the NEPRA Standard Operating Procedures (SOPs) for Inspection, Examination and Provision of Copies of Documents, 2015. A bank draft for Rs. 1000/- was sent in advance while an undertaking to pay all additional costs, if any, was also submitted vide letter dated 14.10.2016. Unfortunately, Whistleblower Pakistan did not receive the requested for information.

In view of the past track record of NEPRA in regulating the Power Sector in general and K-Electric in particular, and the health of the Power Sector of Pakistan, Whistleblower Pakistan has serious concern over the capacity and capability of NEPRA to determine this MYT.

Almost all Interveners have shown their concern on the injudicious and inactive role of NEPRA in regulating K-Electric. The favoring of K-Electric by NEPRA was also presented by some Intervener during the hearing. The announcement of legally flawed decisions, either due to incapability or for any other reasons, which provides opportunity to K-Electric to challenge the same in Courts of Law and non pursuance or inactive pursuance of those challenged decisions, were also submitted before NEPRA during the hearing. NEPRA was also informed during the hearing about the getting of injunctive orders from Courts, on legally flawed decisions, which were causing loss to the electricity consumers and the National economy and resulting in undue gain to K-Electric. Not assisting the Courts to vacate the stay orders in an expeditious manner was also submitted before NEPRA. But again all in vain as again nothing has been witnessed since September, 2016.

Whistleblower Pakistan once again submits that the inactive, in-appropriate and lethargic attitude of NEPRA is causing loss of billions of rupees to the State and electricity consumers and undue gain to K-Electric. The nature of this loss is, moreover fatal in nature and irretrievable.



Despite all discouraging responses and the intransigent attitude of NEPRA, on the available information Whistleblower Pakistan is submitting its comments on each issue framed by NEPRA in the best interest of the State and the electricity consumers of Pakistan in general and K-Electric in particular.

In addition to the attached comments (44 pages), Whistleblower Pakistan requests the Authority to consider all its letters referred to above while arriving at any decision in the matter.

Finally, Whistleblower Pakistan would like to clarify that it is not an expert of the Power Sector and is only raising issues which a common man can understand. However, NEPRA is an Authority, and which is enjoying all facilities from the money of electricity consumers, is bound to dig out and address all issues. NEPRA should have the foresight to stop K-Electric from its exploitation of national resources and consumers.

Yours faithfully,

Chairman, Whistleblower Pakistan Intervenor



Issue	Issue	Statement of K-Electric	Comments of Whistleblower Pakistan
No.	Whether the	VC is a unique paragination with additional association.	Managina in the immediate of all Arisin in Aba
1	Petitioner's	KE is a unique organization with additional responsibility:	Keeping in view the importance of electricity in the modern age, the privatization of K-Electric with overall
	request for	KE is a unique organization with overall responsibility for	responsibility for developing, managing and controlling
	continuation of	developing and managing the power infrastructure in	the Power infrastructure in Karachi, with the ownership
	existing Multi	Karachi. Unlike other generation and distribution	of all Generation, Transmission and Distribution facilities
	Year Tariff	companies, it has to carry out end to end planning of the	is a serious security, social and economic threat not only
	(MYT) is	city's energy system without any sovereign guarantee or	for Karachi city but for the country as well.
	justified?	GOP support.	
			To address the systemic problems of the Pakistan Power
		This means that KE has the additional responsibility of	Sector, WAPDA's Strategic Plan for the Privatization of
İ	:	stepping beyond the day to day functions of a power	the Pakistan Power Sector was developed in 1992.
		utility and design an integrated plan to meet the	
		forecasted demand through investment in generation,	While developing the Plan, the privatization model of
		transmission and distribution.	Malaysia was rejected, where the Government has
		E I I LANCE LO C	replaced an integrated State-owned electric utility
		Existing I-MYT structure and Performance:	monopoly with a privatized vertically integrated utility.
		This tariff structure incentivizes new investment, requires KE to bring efficiency improvements and meet demand;	With regard to the principation of KECC it was stated in
}		while enabling KE to provide a bankable security structure	With regard to the privatization of KESC, it was stated in the Executive Summary of the Strategic Plan that it does
		and regulatory certainty to execute its business plan.	not examine the Karachi Electric Supply Company (KESC),
		and regulatory certainty to execute its business plan.	the team advises that the ultimate Power Sector
İ		• Under this tariff, KE has been able to invest Rs. 120.7	restructure delineated for WAPDA should be considered
		billion (13% more than business plan at that time) in the	carefully as a model for the privatization of KESC. The
1		last 7 years which has resulted in an increase of 1,037 MW	team does not believe that privatizing KESC as a vertically
		in generation capacity, enhanced network capacity,	integrated electric utility will induce competition or be
j		improved fleet efficiency (30.4% to 37%), reduced T&D	compatible with the future structure of the industry
		losses (35.9% to 23.7%) and improved system resilience.	proposed in the Strategic Plan.
		The current power scenario demands huge investment in	Ignoring the above, and without doing sufficient
		infrastructure:	homework, KESC was privatized as a vertically integrated
		• There is a significant demand supply gap in the power	utility.

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sector and Karachi's demand is projected to grow at a CAGR of 5%.

- KE's power infrastructure has aged and though there have been significant investments in up gradation of the system there is still dire need to continue investing to not only upgrade but expand the infrastructure to meet the expected demand growth. Therefore there is need for huge investment in Karachi's power infrastructure. The current power scenario demands huge investment in infrastructure
- KE has designed a well thought and prudent investment plan to expand and rehabilitate its generation, transmission and distribution capacity in order to meet the expected demand growth. In order to deliver the investment plan worth Rs. 496 billion KE needs a tariff structure that provides lenders the confidence to invest. Therefore the existing tariff structure is critical in securing long-term investment for the future expansion of electricity supply in Karachi. It achieves this in the following ways:
- Lowers the cost of financing investments by providing regulatory certainty on revenues, which in turn reduces financing risk.
- Further regulatory certainty makes future revenue streams reliable hence building investor's confidence.
- Enables KE to offer a combined security package, whereby assets of one business unit can be offered as security for financing against other business units in the absence of sovereign guarantee.

Execution of Business Plan is dependent on continuation of existing tariff.

Whistleblower Pakistan is of the view that privatization of KESC was either a great blunder or plunder. Privatization of K-Electric in this form may not be less than an advertent or inadvertent conspiracy. The adverse financial and economic losses, which the country has so far suffered and is suffering, need to be assessed on urgent basis. The study of gain or loss from the privatization of KESC should be carried out before deciding the terms and conditions of the next Multiyear Tariff.

Privatization of KESC as a vertically integrated utility is a security threat for the country. This privatization has created a monopoly of the worst possible dimension in the electric business in the area of Karachi. Electricity is the basic necessity of life and K-Electric has been given exclusive right to do this business with all ownership rights not only on the infrastructure but on the sale business. This privatization is not only against the Strategic Plan but it is also against the NEPRA Act and Mission Statement which require competition.

Due to the monopoly in the business, compounded with the in-capable electricity Regulator, K-Electric is treating the electricity consumers of Karachi as its slaves and minting money by using various illegal, unethical and immoral means. Miseries of the electricity consumers can be heard from the audio recordings of the hearings that have been held at Karachi in the matter of quarterly Fuel Charges Adjustments. The transcripts of the audio recordings must be available in NEPRA record.

Due to the nature of electricity business and monopoly of K-Electric in the business, K-Electric is exploiting the situation. Some examples of this exploitation are that it is not paying the Gas bill to SSGCL (Rs. 68 billion payable as per the news which appeared in the 'Business Recorder'

- KE has invested in long term assets to upgrade and enhance the existing infrastructure in the last control period and has not fully realized the efficiency gains of the investment.
- This tariff structure protects the consumer through an in-built mechanism to ensure that excess efficiency gains are shared with consumers in the form of claw back and hence lowering the tariff in long run. Further it improves transparency by capping excess profits to a reasonable extent. Consumers will benefit in the form of additional capacity, improved performances while efficiency gains will be shared through Clawback Therefore the existing tariff structure should be continued to guarantee future investment in Karachi's power sector, continuous improvement in quality of service and lower tariff in the long run.

and 'The Nation' of 21.10.2016).

KE is drawing the Gas without any firm GSA and is using this National scarce resource much below its economic value. It needs to be noted that around 80% of electricity generated through K-Electric's own Power Plants was from Pipeline quality Gas while this ratio of Gas based generation in CPPA basket is around 30%.

Exploiting the situation, K-Electric is drawing 650 MW electricity from NTDC and causing huge financial loss to EX-WAPDA consumers and the National Exchequer. Whereas, under the Law and prudent utility practices, K-Electric is bound to offer its Power Plants to NTDC for their Economic Dispatch but K-Electric is neither following the Law nor the prudent utility practices. The Regulator, NEPRA, is just watching the situation and not taking any action against the wrong doings of K-Electric. It also needs to be noted that K-Electric is not paying the cost of Power Purchases from NTDC as per Invoices: rather, the payment amount is being calculated after deduction of Tariff Differential Subsidy which the Government has to pay to K-Electric. Even after this Agreement tilted infavour of K-Electric, the receivables of NTDC from K-Electric, as was informed during the hearing, were around Rs. 22 billion.

In its presentation K-Electric has claimed that it has invested Rs. 120.7 billion (13% more than Business Plan at that time) in the last 7 years which has resulted in an increase of 1,037 MW in Generation capacity.

The consumers of K-Electric would like to know the details where K-Electric has invested this amount. Whether this investment was made prudently or it was imprudent? Whether the Investment was made with prior approval of

NEPRA or K-Electric has made the investment without approval?

Whether NEPRA has carried out the technical and financial audit of the investment made by K-Electric?

There are several investments which do not seem prudent: like investment in Rental Power Plant, investment in induction of low efficiency Power Plants, Investment in commissioning of other Power Plants prior to converting the Open Cycle Power Plants to Combined Cycle. All these investments need to be audited and investigated through forensic audit. The Terms of Reference (TORs) of that Audit should be prepared and approved by NEPRA after consulting all stakeholders through public hearings. The induction of RPP needs to be investigated as it has caused severe financial loss to the electricity consumers.

After going through the figures of Generation capacities given in the Generation License granted to K-Electric in the year 2002 and modified subsequently through licensee Proposed Modifications, the claim of K-Electric of increase in the Generation capacity seems to be incorrect. K-Electric has failed to induct additional 1000 MW in its system as committed under the Implementation Agreement (IA). The timeframe for investments was also given in the IA and other documents but K-Electric has not been able to follow the timelines given in the documents. Further, K-Electric is not even using its existing Power Plants.

The privatization of K-Electric was made under various privatization Agreements which include the Share Purchase Agreement, Subscription Agreement, Implementation Agreement and O&M Agreement. Unfortunately these documents were never made public. The electricity consumers, who are paying to K-Electric,

want to know about the obligations of K-Electric under these Agreements and their status of compliance by K-Electric. Is it not the job of NEPRA to carry out compliance audits of these documents?

With regard to reduction of T&D losses from 35.9% to 23.7%, K-Electric is still beyond its target T&D losses of 15%. This means that K-Electric is taking a hit of 8.7% T&D losses. Furthermore, the realization of the billed amount in K-Electric is not more than 87%. This means that after taking a hit of 8.7% in T&D losses it is further taking a hit of short recovery. But it is surprising how, after such a big hit, it has gone into profit. The question arises whether it is due to lucrative Tariff given by NEPRA or by using means which are neither legal nor prudent?

Whistleblower Pakistan appreciates the observations of Interveners and Commentators which they have made in the Tariff Determination process of 2002 and 2009 and would like to refer to para 10 of the Authority's Determination of 10.09.2002 under which the Interveners expressed their fear that the higher Tariff was demanded only for facilitating KESC privatization and encouraging investors. Unfortunately the high Tariff of 2002 was made higher in 2009 by NEPRA.

The consumers of K-Electric and Whistleblower Pakistan want to know how K-Electric, even with higher T&D losses (7.8% more than the allowed one) and short recovery, has turned its balance sheet from loss to profit?

It is learnt that the amount of subsidy given to K-Electric alone is more than the subsidy given to all XWDISCOs combined. Consumers of K-Electric and Whistleblower Pakistan would also like to know from the Regulator i.e. NEPRA the details of the subsidy which K-Electric has received so far from the Federal Government during the

last 10 years: it is requested that year wise detail of subsidy be provided.

Based on the above, the request of K-Electric for continuation of the existing MYT is not justified. Whistleblower Pakistan request the Authority to reject the request of K-Electric and determine the Tariff for each of the Generation, Transmission and Distribution activities separately. The Tariff should be determined in the same way as that of IPPs/GENCOs, NTDC, XWDISCOs. Information should be taken from K-Electric on the format as given in Tariff guidelines. Integrated Generation, Transmission and Distribution Plan, Schemewise showing the start and completion date and estimated expenses, should be discussed and approved separately as provided in the NEPRA Guidelines and the copies of the Approved and Notified Plan should be available on NEPRA website. Till such time this is done, K-Electric may be given the Tariff of the 2002 Determination. Continuation of this Tariff will be considered as favor of NEPRA to K-Electric.

Whistleblower Pakistan would like to place on record that the highest fora in the country like the Senate and the National Assembly Standing Committees and/or Subcommittees have several times in the past shown their non-satisfaction on the performance and working of K-Electric but Whistleblower Pakistan has found NEPRA always hesitant in taking strict action as per Law against K-Electric. Resultantly, the highhandedness of K-Electric is increasing day by day. Since one of the most important State Organs, i.e. NEPRA, the exclusive Regulator of the Power Sector in Pakistan has failed to protect the interest of the consumers of K-Electric, the consumers of Karachi are losing faith in State Organs, which in the long term is not in the interest of Pakistan.

Recently, on 27 September 2016, the Sindh Assembly has

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			taken up the case of K-Electric and passed a Resolution against K-Electric unanimously in respect of K-Electric's working and demanded an investigation from NAB. But Whistleblower Pakistan is of the firm opinion that unless NEPRA assists the Courts or the Investigating Agencies in a clear and positive manner, this investigation is difficult to conclude in a just and judicious manner because the nature of electricity business is complex and full information in a refined manner at one place is not available at any other forum except NEPRA. In the eyes of Whistleblower Pakistan, NEPRA is mainly responsible for all negative things being discussed and reported about K-Electric.
2	Whether the tariff should be based on price cap or revenue cap regime?	Price cap performance based tariff is the optimal choice for KE given its unique position and the challenges it faces and therefore it should be continued. Existing tariff structure is based on Price Cap Regime The I-MYT is a performance-based price control. It allows uncontrollable costs to be passed through into tariff, while controllable costs are subject to CPI-X price regulation.	The existing Tariff of K-Electric is Price Cap while that of the XWDISCOs is Revenue Cap. The effectiveness of any Tariff, especially from the consumers' perspective, depends on strong monitoring from the Regulator. For the Price Cap Tariff it is essential that Tariff should be given with clear and comprehensive terms and conditions and its strong monitoring should be ensured during the period of implementation of the Tariff.
		 No guaranteed return is built in tariff and the only way the utility earns is through improving efficiency. In a revenue cap regime, on the other hand, a utility is allowed a guaranteed return on investment in advance. Consumers cannot be passed on the cost of any inefficiency at utility's end 	The Tariff of K-Electric was determined as price cap Tariff in 2002 with clear and comprehensive terms and conditions. K-Electric was privatized through bidding process on the same determined terms and conditions of 2002 MYT. KESC was privatized on 29 November 2005 and the Tariff on which KESC was privatized was locked for seven years from the date of privatization i.e. till November 2012.
		 Regulatory oversight on the performance of the utility is possible as performance benchmarks are set by NEPRA and KE has to outperform against those in order to earn 	Till 2009 no major change in terms and conditions was allowed by NEPRA except 4% cap in the adjustment of fuel price. This change was made by NEPRA through its
		• KE's performance based tariff has an in-built protection mechanism to ensure that excess efficiency gains are	determination of 14.09.2006. The change was made by NEPRA despite opposition of Ministry of Finance, Ministry

shared with consumers in the form of claw back.

- KE, a VIU with responsibility of end to end planning, requires a price cap tariff that incentivizes improvement in efficiency and provides appetite to meet additional demand through continuous investment in all 3 core functions.
- Further NEPRA also emphasized the same point in KE's Determination 2002: "Under the specific circumstances in which KE would be operating the request for a price cap is understandable...We do not want to take away the incentive from the investor to increase its revenue through increased sales" and hence allowed a price-cap regime to KE.

of Water and Power, Interveners etc. Every word of that determination needs to be read by all stakeholders because the Authority while making this change in the determination implicitly committed that base rate and any other terms and conditions cannot be changed prior to expiry of term of 1st MYT which was fixed as seven years.

In 2009 Abraaj bought the shares from Al-Jumiyah with control and Management of the Utility.

After 2009, when Abraaj took over the charge of K-Electric, God alone knows what happened because all of a sudden NEPRA revised the base rate up-ward, revised the terms and conditions in favor of K-Electric and all these revisions were made prior to the maturity of the 1st MYT which was locked upto 2012. The changes were of a serious nature and a big favor to K-Electric at the cost of some other stakeholders. It is not only that changes were made in the price cap Tariff of 2002 but it was a huge favor that the time period of seven years MYT, expiring in 2012, was also extended till 2016.

With the weak and lenient attitude of the Regulator, K-Electric adopted only such terms and conditions which were in its favor and refused to follow those terms and conditions which were included in the Tariff on merit and were providing justice to the electricity consumers. Taking bank charges & meter rent, not charging the consumers on TOU metering, providing electricity through hook connections, not providing the second meter in one premises, not providing electricity to industrial connections having their own generation, not sharing the profit with consumers as per claw back mechanism, not printing the snapshot on electricity bills, preferring load shedding over providing the available electricity, under utilizing their own Power Plants and

taking electricity from NTDC, induction of high cost Rental Power Plant, illegally depriving the eligible consumers of electricity for reasons of T&D losses, not rectifying the errors made by NEPRA in its decision which went in its favor, using the Gas in low efficiency Power Plants, operating the Gas based Power Plants in Open Cycle mode for a period of more than six years, not increasing the Generation capacity as required under the Implementation Agreement are but a few examples through which K-Electric has tilted the price cap Tariff in its favor and started making profit at the cost of electricity consumers and resources and the economy of Pakistan.

In price cap Tariff it is also necessary to analyze the gains/profit and loss to the Utility and consumers, against each Bench mark component after an interval of one or two years to develop a history for future use. Unfortunately NEPRA has no record as to what are the Tariff components against which the Utility has lost revenue and what are those components against which the Utility has gained revenue over and above the estimates of NEPRA.

Although the price cap Tariff is more prudent, its effectiveness is linked to the availability of unchangeable, comprehensive and clear terms and conditions. All components of Tariff should be determined separately and audit should be conducted against each Benchmark Tariff component. The gain on account of efficiency to any extent may be given to the Utility but transparency should be ensured as to against which efficiency factor the Utility has earned profit how much and Abnormal profit due to Regulatory weakness, whether in the process of Tariff determination or in the process of monitoring, is not justified.

Whether the duration of MYT control period should be 10 years as proposed by the Petitioner?

KE plans to invest Rs. 496 billion in its power infrastructure, of which: Generation Rs. 203 billion (41%) Transmission RS. 179 billion (36%) Distribution Rs. 108 billion (22%). Majority of investment is in G & T where asset life vary from 25 to 30 years. Therefore a control period of 10 years is justified

Long term investments: The electricity supply industry is characterized by long term capital investments which require long term planning and have long gestation periods. IPPs and Independent Transmission Companies are given a tariff period over the lifetime of the asset.

Regulatory certainty: KE, a vertically integrated Utility (VIU), needs to plan for the long term and requires a tariff control period which provides regulatory certainty - essential to attract investment as it gives visibility over long term cash flows.

Bankable Security Structure for Lenders & IPPs: Unlike other entities in the sector, KE neither gains from a sovereign guarantee for its own generation projects nor in projects where KE is an off-taker for IPPs. Therefore KE's ability to finance future projects requires stability and visibility of cash flows for which a long term control period is necessary.

Long term Debt tenors: KE has negotiated debt tenors of 10 years and above for its large infrastructure projects which require revenue projections of 10-15 years. Hence tariff control period should at least correspond to the same.

Therefore in view of the above, duration of the I-MYT control period of 10 years should be allowed to give KE the ability to meet the demand growth and provide citizens of Karachi a sustainable low cost power supply.

The first Multiyear Tariff for K-Electric was determined by NEPRA by engaging a foreign consulting firm in 2002 for a period of seven years after its applicability. This MYT was made effective in November 2005 i.e. with the privatization of the Utility. Therefore this Tariff was got locked for seven years after 2005. Thus the expiry date of this MYT was in 2012.

NEPRA has, however, opened this seven years locked Tariff mid-way. NEPRA increased the base Tariff by Ps.15/kWh and its expiry date was also extended from 2012 to 2016. Further, NEPRA has also changed the terms and conditions of the first MYT. The power purchase from NTDC which was envisaged on marginal cost principle was also changed to Basket Price principle. The terms and conditions of the Tariff as set by NEPRA were ambiguous. NEPRA's mind towards many issues like bank charges, meter rent etc, was not clear. Similarly, NEPRA was not able to decide whether K-Electric had followed the Economic Merit Order in operating its Plants or not. Due to non-clarity of the issues, many decisions of NEPRA relating to K-Electric were challenged by K-Electric in the Court and the Company succeeded in obtaining injunctive orders against the decisions of NEPRA. By choice, or for any other reasons, NEPRA did not try to get the Stay Order vacated. Whistleblower Pakistan is confident that there must be ways and means to request the Courts for expeditious processing of the cases. But NEPRA did not make that effort despite knowing that the nature of the cases is such that the loss to the consumers is of fatal nature. Thus due to the in-action of NEPRA, K-Electric is still enjoying the financial gains which it is getting due to incapability of NEPRA.

Based on the past working of NEPRA, Whistleblower Pakistan is of the opinion that NEPRA neither has the capability nor the capacity to determine a Tariff price cap

			Multiyear Tariff for a Vertically Integrated Utility which is
			equally suitable for all parties, especially the electricity
			consumers, the National Exchequer, Pakistan's economy
1	İ		and the Utility.
Ì			With regard to the control period, Whistleblower
			Pakistan would like to draw the attention of the Authority
			towards the time lines for development of Electricity
			Market in Pakistan by 2020 and thus requests the
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			Authority that under the circumstances the control
			period of 10 years should not be allowed. The MYT
			should not be given more than three years but the Tariff
			should be determined for each function i.e. Generation,
İ			Transmission and Distribution separately.
			Whistleblower Pakistan is of the view that NEPRA has
1			already made a mistake to allow privatization of K-Electric
			as a Vertically Integrated Utility with owner ship rights on
			Generation, Transmission and Distribution facilities as
			well as electricity sale. Now, it is required that before
			giving any long-term MYT NEPRA should develop a Plan
			to unbundle the three functions of K-Electric. The
			infrastructure business in Transmission and Distribution
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	1		should be separated from the retail business.
			Ten years MYT in the present form of Utility business
			would be a serious security threat for the city and the
i			country. This business model can also affect the
			Sovereignty of the country. The current working of the
			Utility has already created social disorder in the citizens
			of Karachi, economic disorder among the industrialists,
			traders and builders. This situation may lead the City and
			the country towards civil war due to social disorder,
			economic discrimination and unemployment resulting
			from the closure of industries in the City.
	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	The Authority allowed 100% IDD beard not use to a self-cold	At the outset Whistleblower Pakistan would like to state
4	Whether the proposed	The Authority allowed 18% IRR based return to non-local Thar coal power plant and 20% IRR to Thar Coal power	that K-Electric is a master of making disputes where it has
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change in sharing mechanism's thresholds from 12%, 15% and 18% to 15%, 18% and 20% are justified? plant. Return on Equity allowed indexation of US\$ to Pak Rupees.

China Machinery Engineering Corporation Power Private Ltd. 330 MW Coal power plant, Tariff Determination July 10, 2015

According to the Petitioner, the ROE component of tariff (including return on equity during construction) has been based on an internal rate of return of 16%....The request of the petitioner is in line with the decision of the Authority in similar cases and accepted as such. Return on Equity allowed indexation of US\$ to Pak Rupees.

Quaid-e-Azam Thermal Power (Pvt) Limited 1,180.17 MW, Tariff Determination dated April 14, 2016

Accordingly after due deliberation, the Authority decided to allow a 17% return considering this project is the first HVDC transmission venture. Return on Equity allowed indexation of US\$ to Pak Rupees.

Matiari to Lahore HVDC Transmission Line. Tariff Determination August 18, 2016

- The purpose of this request is to enable KE to earn returns that are in line with the returns offered to other private investors in power sector, with longer control periods, including IPPs and Independent transmission service providers, such as Matiari to Lahore HVDC Transmission line project.
- KE is an integrated utility responsible for end to end planning of the city's power needs.
- KE's sponsors have injected foreign equity of USD 361 million since 2009.

to pay money due to any of the parties including the electricity consumers. Further, NEPRA makes the work of K-Electric easier by giving decisions of a quality, which is challenged in the Courts of law and due to serious legal flaws Courts have to pass injunctive orders. Thus due to weakness of NEPRA and cleverness of K-Electric, consumers of K-Electric are suffering huge financial loss.

For early processing of the cases, whether in the Courts or with the Investigating Agencies, fair assistance from NEPRA is crucial. Electricity and its tariff is a special subject which is difficult to understand. This task will become more difficult when relevant and to the point information is not presented before the Courts and Investigating agencies. The party which is enjoying the facility will give its own interpretation, but NEPRA should have given a very clear picture of each case. Efforts for expeditious processing of the cases is the prime responsibility of NEPRA.

It is a fact that K-Electric has earned profit and is liable to share the profit as per the laid down and notified claw back mechanism but K-Electric has not, so far, paid even a single rupee to its consumers on this account.

With regard to share mechanism threshold, it is submitted that due to low interest rate and improved law and order situation that make doing business easier, the sharing mechanism's thresholds need to be changed downward i.e. from 12%, 15% and 18% to 10%, 12% and 15%.

15-20% IRR is an abnormally high return and is making the electricity price unaffordable for the public and rendering the industries of Pakistan in-competitive. Economic survival of the Country is subject to lower electricity cost/Tariff.

		· · · · · · · · · · · · · · · · · · ·	,
		• KE's risk portfolio is higher than other privative investors as KE has no sovereign guarantee and has to bear complete burden of tax and exchange rate devaluation. On the other hand, returns of other private investors are backed by sovereign guarantees and are adjusted for exchange rate parity and all tax incidences are also passed through in the tariff.	
		• The existing claw back thresholds are lower than the current market returns offered to other private investors such as IPPs and transmission service providers which are being allowed dollar based IRR ranging from 15% to 17% (IRR of 22-23% in PKR terms) for control period of 25 years from the date of COD.	
		• Therefore KE has requested for an increase in claw back thresholds considering the current market returns and KE's risk portfolio.	
5	Whether the existing calculation methodology with respect to Claw Back Mechanism is	KE has a performance based tariff structure where there is no guaranteed return included in tariff, rather the entity is incentivized to investment in order to improve the efficiency, beat the benchmarks and earn a reasonable return. • Under performance based tariff, Claw back mechanism	Gain through efficiencies of the machines, systems, management etc. is a win win situation and this gain is gain of both parties i.e. consumers as well as investors. But any gain to the Company at the cost of National resource, National exchequer, the Country economy, electricity consumers etc. is not a gain but unethical and immoral cleverness of the Company.
	justified?	provides protection to consumers from the burden of excess efficiency gains ensuring that returns earned by the entity are reasonable. Therefore this mechanism should continue.	Whistleblower Pakistan is of the view that the existing mechanism of claw back is fine and needs to be continued with downward revision of the threshold as stated above.
		• Under the claw back mechanism, returns/efficiency gains are shared with consumers when annual real returns exceed the designated thresholds.	Here, Whistleblower Pakistan would like to put on record that so far NEPRA has not been able to give its decision in the matter of claw back within the time frame given in
		 Claw back is important in providing for transparency in the I-MYT and it offers a more equitable, sustainable and 	the notified mechanism.

fair form of regulation.

• Since debt component is not allowed in KE's tariff, the claw back calculation methodology covers both the debt and equity investments. This is essential to attract and support the long term investment of Rs. 496 billion planned by KE in the next ten years through a mix of debt and equity financing.

Annual real return on the regulatory asset base = Earnings before interest and tax /Average of opening & closing regulatory asset base for the year

Regulatory asset base = Share capital & Reserves add Bank and other borrowings less cash and securities

Surplus on revaluation of fixed assets is part of Regulatory asset base...

- Reserve created for surplus on revaluation is a 'capital reserve' in nature and hence should be included in the regulatory asset base.
- Since KE's returns under claw back thresholds represent real returns, therefore, correspondingly revaluation surplus should be included in the regulatory asset base.
- NEPRA's Uniform System of Accounts also classify 'Surplus on Revaluation of Assets' under Share capital & Reserves.

The existing calculation methodology is working well as it accounts for the investor perspective considering both debt and equity investments, in the absence of any debt component in tariff.

The Claw-back mechanism provides a precise and definite time line to submit the Adjustment request in the matter which is within the first week of January every year. The time given in the mechanism for NEPRA's decision is as soon as possible but not later than one month. It is also provided in the mechanism that in case K-Electric does not submit a request, NEPRA shall review the audited accounts on its own and approve a Tariff reduction required to pass on the respective share of profit to the consumers.

Unfortunately, NEPRA has not been able to follow the timelines in the matter.

K-Electric is a king in challenging the decisions of its Regulator in the Court. Whistleblower Pakistan doesn't know whether it is the incapacity of NEPRA or high-headedness of K-Electric that the Regulator looks to be captured in the hands of its Licensee. Like many other cases, this decision of NEPRA in the matter of Claw-back was also challenged by K-Electric in the High court of Sindh. Due to the weak decision of NEPRA, K-Electric, like in many other cases, succeeded in getting the injunctive Order in this case as well. Unfortunately, NEPRA did not make any serious effort to get the stay vacated and/or pursue the case for early decision. Resultantly, K-Electric is enjoying with public money on one or the other pretext.

It is surprising for Whistleblower Pakistan that one Licensee of NEPRA i.e. K-Electric is challenging most of its decisions in the Court and has successfully obtained stay Orders in most of the cases. This means the quality of NEPRA's decisions is not upto the mark that could achieve legal sustainability. It is also a fact that stakeholders have requested NEPRA to provide the details of Court cases that K-Electric has filed against NEPRA's decisions but

			NEPRA is avoiding to provide the details, for reasons best known to NEPRA.
			Whistleblower Pakistan has already provided its detailed comments in the matter under para 'W' of Report I submitted vide its letters dated 15.03.2016 and 12.07.2016. The detailed comments of Whistleblower Pakistan should be considered here as well.
6 19	& Whether the Petitioner's request for continuation of existing monthly, quarterly and annual adjustment mechanism is justified? Whether the existing mechanism of calculating the weighted average cost of furnace oil while working out the monthly / quarterly adjustments is	KE's I-MYT is a performance-based price control. It allows uncontrollable costs to be passed through into tariffs, while controllable costs are subject to CPI-X price regulation. • Accordingly, monthly, quarterly and annual adjustment mechanisms were devised to pass the impact of uncontrollable costs (fuel price and power purchase price) and adjust the controllable costs with CPI-X. Therefore this mechanism is justified and should be continued. • KE calculates cost of furnace oil consumed based on moving weighted average where average prices changes after each purchase transaction. Whereas, NEPRA calculates the price based on periodic weighted average on a monthly basis. Both the methods are acceptable for calculating the cost of consumption and NEPRA may continue with the method currently under practice.	The impact of T & D losses is not being considered and taken into account when monthly adjustment is made by NEPRA. The actual T&D loss of K-Electric is more than the allowed T&D losses. By not taking the impact of T & D losses in monthly adjustments, consumers of K-Electric are at a loss. The impact of T&D losses, therefore, needs to be considered while making monthly adjustments. Annual adjustment mechanism looks to be fine; however, monthly and quarterly adjustment may be revised in the light of the above observation.
	justified?		
7	Whether the	Working capital allowance should be allowed to	It is surprising for Whistleblower Pakistan to hear that K-
	request of the	compensate KE for the unavoidable costs of providing	Electric receivables from Government entities was Rs.57
	Petitioner to	additional working capital when there are delays in energy	billion as in August 2016. This receivable is after off-
	allow working	payments by Government (Federal, Provincial or Local)	setting payable to Government entities.
		15	

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	capital	entities and tariff differential claims (TDC) by the	
	allowance to	Government. 7	Whistleblower Pakistan would like to know from where
	cover late		K-Electric has got the mandate to off-set. This is illegal,
	payments by	This is an uncontrollable and unavoidable cost being	against the business norms and exploitation in the
	Government	borne by KE.	opinion of Whistleblower Pakistan. If K-Electric is duty
	entities and		bound to disconnect the electricity of defaulter
	Tariff	Circular debt has constrained KE's liquidity.	consumers, then why is K-Electric not disconnecting the
	Differential		electric supply. If someone is guaranteeing payment of
	Claims (TDC) by	KE's net receivable from Government entities (after off-	someone's amount, the Guarantor should be taken to
	the	setting payable to Government entities) currently amount	task and not others. Why is K-Electric off-setting this
	Government is	to Rs. 57 billion as at August 2016.	amount from the other independent business
	justified?		Houses/concerns is not understandable. All this is bad
		KE is trying to resolve the issue of piling up receivables	governance in the eyes of Whistleblower Pakistan and
		from government entities through discussions with	against the independent working of the business houses.
		respective authorities. In this respect, rigorous discussions	
		are going on with Government of Pakistan and	It should be a matter of concern for all of us that we are
		Government of Sindh.	promoting illegality at an organizational level.
		KE suggests that working capital allowance should be	If K-Electric was not able to get its money from any other
		included as a pass through component in the tariff on the	party or its consumer(s), its burden in any case cannot be
		basis of a mechanism to be determined by NEPRA.	shifted on to the other electricity consumers. There is,
			therefore, no justification to allow working capital
		KE has only asked to be compensated for additional cost	allowance as requested by K-Electric.
		of working capital incurred due to delay in payments.	
		We expect the mechanism to account for both	
		receivables and payables with respect to circular debt, and	
		accordingly allow for working capital cost i.e. finance cost	
		incurred on net receivable amount from government	
		entities.	
8	Whether the	KE requests that a force majeure clause should be included	Adjustment of irrecoverable cost due to business
	request of the	in the I-MYT to recover the unavoidable costs (or lost	disruption in case of force majeure cannot be shifted on
	Petitioner for	revenue) due to force majeure events such as	to the consumers. Force majeure is a defined term. There
	inclusion of a	earthquakes, floods, acts of terrorism etc.	is no justification for inclusion of the force majeure clause
	force majeure		as proposed by K-Electric.
	clause for	KE has adequate insurance policies for its assets in line	
	adjustment of	with the best practices, however, the unavoidable costs or	

			· · · · · · · · · · · · · · · · · · ·
	irrecoverable	lost revenue under force majeure events are largely	
	costs due to	uninsurable, and outside of KE's control.	
	business		
	disruption in	KE requests for the clause to account for the costs	
	case of force	incurred or lost revenue over and above the insurance	
	majeure event	policy.	
	is justified?		
		• In an extreme and unforeseen event, these costs could	
		be significant and may disrupt the execution of KE's	
		investment plan.	
1		·	
1		This component is included to ensure the ability to cover	
		the costs of quickly resuming the operations and hence	
		lowering the sufferings of consumers at large in case of	
		force majeure event.	
		This request is in line with the force majeure clause	
		included in Power Purchase Agreement of IPPs.	
		Mechanism: These costs shall be computed after the	
		occurrence of such an event at which point KE shall	
		estimate the financial impact and request NEPRA's	
		approval for inclusion in the tariff.	
		approvation inclusion in the turn.	
		Clarification: This component is not included in the current	
		tariff calculations. KE has requested that only in case a	
		force majeure event happens, there should be a clause in	
		the determination through which the unavoidable costs	
		could be recovered as per mechanism determined by	
		NEPRA.	
9	Whether the	The implementation agreement entered between KE and	There are several other privatization Agreements like
,	Petitioner's	GoP on November 14, 2005, amended with mutual	Share Purchase Agreement, Subscription Agreement and
	assumption of	consent on April 13, 2009 provides certain supports and	O&M Agreement which are also binding on K-Electric. But
	continuation of	guarantees to KE. The amended agreement has expired in	K-Electric is always talking about IA and has never
	the protection	April 2016 and KE is in negotiation with Federal and	presented a report with respect to its liabilities under the
	under the		
		Provincial governments for its continuation.	other Agreements.
	Implementatio		

n Agreement throughout the tariff control period including the guarantee of payment of strategic customers is justified?

- Although KE has undertaken considerable investment which has improved the performance of the business over the last seven years, there remain a number of significant challenges that KE needs to address.
- KE has developed a comprehensive business plan that addresses these challenges. The business plan is based on the continuation of the I-MYT until FY26 and results in KE investing Rs. 496billion over the next 10 years.
- While preparing the business plan, KE has assumed the protections under the Implementation Agreement continue throughout the tariff control period, including the guarantee of payment for strategic customers.
- The absence of this protection under IA, joined with absence of sovereign guarantee, will further increase KE's risk profile and will highly impact KE's capability of negotiating workable rates with the lenders and provide bankable security to IPPs.
- Without this protection, KE will be exposed to a huge risk of recovery of principal and markup from GoP entities including TDC. These costs are outside KE's control and it will be unjust to make KE bear these costs and this will have a direct impact on the business plan.
- Therefore, the assumption of continuation of protection under IA is justified. In the absence of this protection, these costs may be required to be compensated in tariff.

Supports and guarantees under IA....

Guarantee of payment obligations of strategic consumers.

- Guarantee of payments for Tariff Differential Claims.
- Support for notifications of tariff applicable to the company.

Continuation of protection under the Implementation Agreement throughout the Tariff needs to be agreed between the concerned parties but electricity consumers of K-Electric should not be burdened on this issue.

Compliance of K-Electric of the agreed terms and conditions of the IA and the other Agreements needs to be checked by NEPRA and its report should be made public through NEPRA website. Whistleblower Pakistan is of the view that K-Electric has not complied with the agreed terms and conditions of the IA, at least with the condition of increasing the Generation capacity by 1000 MW within a certain time period etc.

Further, Amended Implementation Agreement is still a secret document. Lack of transparency of this Agreement has already been agitated by many stakeholders.

Undue guarantees cannot be provided to K-Electric.

Being private entity and claiming to be the most efficient, K-Electric should be out of the business of TDS because getting out of the business of subsidies was the main objective of privatization.

K-Electric has demanded the following Supports and guarantees under IA....

- Guarantee of payment obligations of strategic consumers.
- Guarantee of payments for Tariff Differential Claims.
- Support for notifications of tariff applicable to the Company.
- KE to be treated at par with other DISCOs by NTDC for rate of sale of power.
- Support for issuance of consents, orders and

- KE to be treated at par with other DISCOs by NTDC for rate of sale of power.
- Support for issuance of consents, orders and documents such as application to NEPRA for licenses and tariff, obtaining gas allocation, obtaining title documents, right of way etc.

documents such as application to NEPRA for licenses and tariff, obtaining gas allocation, obtaining title documents, right of way etc.

K-Electric demanded that in case of absence of the support and guarantees in the IA, NEPRA should consider the cost of these to be compensated in the Tariff.

This demand of K-Electric is nothing but exploitation. The above demand of K-Electric is not a part of the business deal and K-Electric cannot burden its consumers for the fulfillment of these demands.

Whistleblower Pakistan is of the view that K-Electric is an expert of such deals as it is neither paying directly and prudently to NTDC for the electricity supplied to it nor to SSGC for the Gas supplied to it. Probably, the outstandings of NTDC and SSGC, as informed by K-Electric, were around Rs.22 billion and Rs.68 billion, respectively. The figure of Rs.22 billion was probably uttered during the hearing while Rs.68 billion is the figure reported in the Business Recorder and 'The Nation' of 21 October 2016.

Whistleblower Pakistan is of the view that the treating of K-Electric at par with other DISCOs by NTDC, for rate of sale of Power, as was being done in the past and is also being done now, is not prudent. This transaction is causing more than a billion rupees loss per month to electricity consumers and the National economy. NEPRA should ensure that there should be one Generation Basket and one System Operator. All the Generation Power Plants of K-Electric should be given under the disposal of the System Operator. This working of K-Electric is totally defeating the idea of one National Grid Company and thus causing huge financial loss to Pakistan.

			er en en en en en en en en en en en en en
			By having one Generation Basket and one System
			Operator, Pakistan will not only have additional
			Generation capacity in its Basket but by following the
			Economic Merit Order in Plant operation, the Power
			Sector can save billions of rupees on a monthly basis.
10	Whether the	KE is currently facing a shortfall of Rs. 1.44/kWh in	The base rate of seven years locked MYT was revised by
	Petitioner's	recovery of O&M expenses and significant funds are being	NEPRA in 2009. This midway revision was not only
	proposed	utilized to bridge this gap.	opposed by all stakeholders but also opposed by two
	increase of	Current O&M shortfall 2016	Authority members. The revision was made on the basis
	Rs.0.66/ kWh	O&M (Rs. Million) 37,240	of induction of some 7000+ employees in K-Electric after
	on the existing	Units Billed (GWh) 12,865	determination of the MYT and prior to privatization. It is
	O&M cost	O&M cost per unit (Rs./ kWh) 2.89	important to note that not only the privatization was
	allowed by the	O&M cost allowed in tariff (Rs./kWh) 1.45	made with this setup but even after privatization i.e. from
-	Authority is	Shortfall (Rs./kWh) 1.44	2005 to 2009 this cost was not allowed to K-Electric.
	justified?	KE highlighted the shortfall in O&M in the 2009 petition	2000 to 2000 tills cost was not allowed to K Electric
	Justilieu.	and asked for an increase of Rs. 0.64/kWh in the tariff.	Further, employee retainer ship contract was for one year
ı		KE was only allowed 15 paisas against 64 paisas asked.	probably and if these employees were surplus then why
		• Since the new management takeover in 2009, KE has	did K-Electric not retrench them and why was the burden
	1	bought in efficiencies in O&M costs by implementing a	of these surplus employees shifted on to the electricity
ļ		number of operational improvements across all business	consumers? If there were any other problems in their
		units.	retrenchment, the cost, if any, should have been shifted
1		 Generation, transmission and distribution capacities 	to the concerned party and not the electricity consumers.
	}	have increased significantly since 2009 and certain costs	to the concerned party and not the electricity consumers.
		_ ·	It is a supertion before all of us as to why after the littlity
		increase faster than CPI.	It is a question before all of us as to why, after the Utility
		• Currently KE's shortfall is Rs. 1.44/kWh and KE expects	was taken over by Abraaj, this cost was allowed and why
		this gap to further widen due to substantial growth and	was this cost was not allowed earlier?
		expansion in operations.	
			Whistleblower Pakistan does not know about the
			component wise O&M expenses; It is stated in the
		Recognizing the regulatory objective of incentivizing cost	presentation that K-Electric is charging Rs. 1.45/kWh,
}		reduction and minimizing the impact on customers. KE has	lump-sum, from its consumers against O&M expense.
		only asked for a small amount of this short fall i.e. Rs.	
		0.66/kWh and is willing to share significant portion of the	K-Electric is supplying electricity to its consumers from its
		increase in cost.	own Generation sources and secondly from the Power
		• KE has no guaranteed return or cost recovery provision	Purchases from external sources.
		in tariff and has to arrange for investments through its	
L		own resources.	Consumers of electricity are paying the Generation O&M

		This increase in O&M component will ensure that KE does not divert significant funds away from important planned capital expenditures. It is notable that, as per the business plan after incorporating the impact of 66 paisa, KE will still be bearing average shortfall of Rs. 1/kWh in the next 10 years on account of O&M. 2010 2011 2012 2013 2014 2015 2016 Analysis- Shortfall in O&M Cost Recover Actual O&M (Rs. / Kwh) 1.54 1.58 1.79 1.86 1.91 2.27 2.89 O&M Recovered in tariff 0.98 1.10 1.22 1.34 1.37 1.45 1.45 Shortfall (Rs. / Kwh) 0.55 0.48 0.57 0.52 0.54 0.82 1.44 Shortfall (%) 36% 30% 32% 28% 28% 36% 50% Increase in CPI 16.4% 12.2% 10.5% 9.6% 2.4% 5.6% 0.3% Comments: The analysis clearly portrays that KE's O&M cost recovery in tariff is far below and the shortfall in 2016 approximates 50% and the cumulative growth in shortfall stands at 17% over the last 6 years. This remains a substantial challenge, affecting the Company's ability to undertake investments for growth prospects and to reduce the demand – supply gap.	charges to the external Power Plants through their respective tariff. This means K-Electric can charge the Generation O&M from its consumers on the electricity which is being supplied through its own Power Plants. Whistleblower Pakistan wants a clarification in this regard from NEPRA as to whether the O&M @ Rs1.45/KWH is being allowed to K-Electric on all units sold by K-Electric or it is allowed on the units which are being supplied by K-Electric's own Power Plants. Whistleblower Pakistan wants confirmation from NEPRA that K-Electric is not charging the O&M portion of the Generation (included inRs.1.45/kWh) on the units which are supplied to the consumers from Power Plants other than K-Electric's own Power Plants. With the huge investment, induction of new Power Plants, replacement of old equipment with new, increased sale of electricity etc., the O&M cost should have come down rather than go upward. Further, the charging mechanism of O&M cost is on per unit basis, therefore, there is no justification for increase of O&M cost. For the sake of transparency and clarity, NEPRA should determine the three Tariffs separately.
	Whether the	Need for the business plan	The claimed addition in Generation is neither correct nor
11	claimed	The rapid growth in population of Karachi is expected to	justified. Whistleblower Pakistan wants to put it on
	addition in	result in significant increase in electricity demand	record that K-Electric has added the Generation Plants in
	Generation, Transmission	• KE's peak demand for electricity is expected to grow by 72% to over 5,200MW by 2026.	its system even before NEPRA's approval. NEPRA has just regularized the action of K-Electric and it has not acted as
	and	72/0 to over 3,20019199 by 2020.	a Regulator. Electricity consumers, the National
		Generation: Substantial investment is required in	Exchequer and Pakistan are facing huge financial losses
	2.50.15001011 57	21	The state of the s

the Petitioner is justified and what are the Petitioner's financing plan in this regard?

generation (including contracting through IPPs) to meet the forecast demand growth and to maintain the existing generation infrastructure.

Transmission: There are constraints on the capacity of the large and ageing transmission network. Significant investment is required to maintain and upgrade this network to ensure that it is capable of meeting current and future transmission requirements stemming from forecast demand growth.

Distribution: The lack of urban infrastructure planning and ad-hoc growth of the city has led to the design of an inherently complex distribution network. This makes planning and implementation of projects not only expensive but an engineering challenge. This coupled with the aged distribution infrastructure means that considerable capital expenditure on maintenance and replacement will be required.

KE's business plan has been designed to address these challenges directly and to build upon the improvements that KE has brought in the past few years through significant investment resulting in improved efficiency and financial stability. Ultimately, these improvements have resulted in delivering significant benefits to consumers in the form of a more reliable source of power supply and reduced tariff in real terms.

Demand Growth and Network Expansion:

The focus of K-Electric ("KE" or the "Company") for the last 6 years had been to improve operational and financial stability of the system. Going forward, the Company aims to build on significant demand growth, maintain efficiency and focus on reliability and expansion of network.

Pakistan GDP Growth and Karachi's Contribution: Pakistan's Real GDP is expected to grow by 5% over the due to induction of Power Plants which were less efficient and the consumers and the country will suffer this for the next 25-30 years.

Therefore, the proposed addition in Generation, Transmission and distribution needs to be viewed critically by NEPRA to ensure transparency.

This fact should be kept in mind that K-Electric is a Vertically Integrated Utility. This fact should also be kept in mind that increase in Generation through its own Power Plants and through Power purchases will impact the consumer Tariff differently as per the existing mechanism. Therefore, it needs to be viewed in detail that the ratio of Power Purchases and own Generation should be balanced in such a way that consumers should not be burdened. The principle needs to be laid down by NEPRA in the matter.

In a private Vertically Integrated Utility which is also enjoying a Monopoly in an area, it is difficult to have a transparent look at all three (Generation, Transmission and Distribution) businesses. And with a single consumerend Tariff it is almost impossible for the electricity consumers to have a look at the transparency of all businesses. Therefore, it is essential that all three Tariffs should be determined separately and one System Operator should be nominated in the country. Operation of all Power Plants in strict Economic Merit Order can only be ensured if there is one System Operator. NEPRA law also requires one National Grid Company in the country.

Whistleblower Pakistan has serious observations on the Power Plants that K-Electric has inducted in the past. The induction of pipe line quality Gas-based Power Plants with efficiencies of 36%, 42% or even 45%, when a Plan of

period 2017-2026

A large component of this growth will come from Karachi which currently

contributes 20% to Pakistan's GDP;

- has 30% of national manufacturing;
- 95% of foreign trade runs through the city; and
- has population growth of 5% compared to 1.6% for Pakistan

Karachi will remain the economic hub of Pakistan and KE plans to stimulate the economic growth further by providing reliable and affordable supply of electricity.

Steadily Increasing Demand:

Karachi's peak demand is expected to reach over 5.2 GW by 2026

KE has clear visibility on expected demand in Karachi – applications for 2.5 GW in new connections by 2020 have already been received Select large scale projects include:

- 600 MW Bahria Town Development
- already contracted 100 MW DHA City
- application received 50 MW Textile City

There is also an aggregate demand of over 1 GW of additional capacity required in existing areas

KE's Business Plan has been built around new investments in generation, transmission and distribution to accommodate growing demand and to improve availability and reliability of electricity.

Future Investments:

Over Rs. 496 billion planned to be invested over the next 10 years to meet the growing power demand of Karachi.

4,283 MW of Additional Generation Capacity: Investment of Rs. 203 billion planned to increase generation capacity by:

1,983 MW from equity participation with IPPs and addition

60% efficiency is available in the market amounts to criminality in the eyes of Whistleblower Pakistan. Induction of low efficiency Power Plant on pipe line quality Gas is an economic crime.

It is also surprising for Whistleblower Pakistan to learn that K-Electric is burning the pipeline quality Gas in the Power Plant having efficiency of 32-33% i.e. in the BQPS-I. On several occasions K-Electric kept burning the Gas in less efficient Power Plants while leaving the more efficient Power Plant unutilized. K-electric assigns the reason of low Gas pressure for this, which is a controllable factor.

Investment of Rs. 470 billion in 10 years' time is a big task. NEPRA should not allow this huge investment without analyzing it scheme by scheme. NEPRA should clarify to K-Electric that before implementation of any Investment Plan it should get written approval of NEPRA. Transparency should be ensured while undertaking each investment scheme.

Whistleblower Pakistan would like to put it on record that in the past K-Electric has commissioned their Power Plant first and NEPRA has accorded its approval after the commissioning of the Power Plant. This means that NEPRA has only regularized the initiative. In case of Aggreko Rental Power Plant, NEPRA has not even issued the License. The consumers of K-Electric are now facing the adverse financial burden due to inaction of NEPRA. And the consumers have to bear this burden of NEPRA's in-action for the next 20-25 years.

Based on past precedence, Whistleblower Pakistan request the Authority that while approving the Investment Schemes the economic analysis of each Investment Scheme or Plan should be carried out by

to KE's Fleet

2,300 MW from new external power producers through offering a bankable security without sovereign guarantee

Transmission & Distribution:

Investment of over Rs. 287 billion planned in transmission and distribution network enhancement.

Transmission capacity is expected to increase by more than 3,370 MVA

Enhancement of Distribution network by adding 1,000 new feeders and 4,500 km of 11 kV underground and overhead circuits

Benefits to Consumer:

Moving from a supply deficit of 421MW to surplus in capacity of 106MW

System Average Interruption Duration Index (SAIDI) expected to improve from 1,330 minutes per customer per annum in FY 15 to 481 minutes per customer per annum in FY 26

System Average Interruption Frequency Index (SAIFI) expected to reduce from 22.21 interruptions per customer in FY 15 to 8.03 interruptions per customer in FY 26 Distribution Fault rates reduce from 1.5/km to 0.6/km Additional connections to over 800,000 new customers with an aggregate load of 3,754MW by FY26.

Improvements in customer service, including an increase in the reliability of supply.

Real reduction in the tariff and improved affordability for customers.

Secure and uninterrupted supply of power.

Key Generation Initiatives – Planned investment of Rs. 203 billion:

As mentioned previously, KE is expected to add 4.3 GW of new capacity over the next 10 years. It will undertake various projects including both enhancing its own NEPRA. The Plan should be approved in consultation with stakeholders and after its analysis and recommendation by world class consultants. After the approval of NEPRA, the Plan needs to be notified in the Gazette and it should be available on K-Electric as well as NEPRA websites. While approving the Plan, the best interest of the country should be kept in mind.

The milestones already set up for the development of electricity Power Market should also be kept in mind while considering the proposed Plan.

K-Electric has entered into Agreements for the purchase of Power from FFBL and Oursun Power Plants.

The efficiency of the FFBL Power Plant is very low. Therefore the cost of the Power which is produced from this Power Plant must be high. Similarly, the cost of electricity purchase from Oursun will be in the range of Rs. 19-20/kWh as today's cost of electricity from Quaid-e-Azam Solar Power Plants is around Rs.19/kWh. The cost of electricity from Oursun would therefore be the highest and this Plant will not come in the economic Merit Order.

Whistleblower Pakistan submits that K-Electric should be instructed that it should not purchase electricity from any of the Power Plants which are not falling in the Economic Merit Order. The factor of Capacity Purchase Price should also be considered when preparing the Economic Merit Order. It needs to be noted that for consumers it is the cost of Power Purchase, neither the CPP nor the EPP.

It also needs to be noted that NEPRA cannot, for any reason, force or burden the electricity consumers to buy the costlier electricity if cheaper electricity is available. In the case of Oursun, NEPRA will create a situation where consumers will be forced to buy costlier electricity while

generation while also facilitating investment in IPPs in order to meet increasing demand.

250 MW Embedded Generation:

Korangi Power Complex for a power plant with 253 MW of gross capacity. The project is strategically being implemented in the north-west quadrant of the grid to provide stability to the 132 kV network

Load flow study contract has been awarded and work has started

Total project cost is expected to be US\$ 200 million planned to be financed by a mix of debt (88%) and equity (12%)— 100% owned and operated by KE

Both local and foreign financing avenues being explored, term sheets for foreign financing received.

Project planned to be commissioned in FY 18.

700 MW IPP Coal Power:

China Datang Overseas Investment Company, China Machinery Engineering Corporation (CMEC) and KE have entered into a Joint Development Agreement to construct a 700 MW coal fired plant in the Port Qasim area. Land required for the project has already been acquired. Estimated cost of the project is US\$ 1 billion – KE equity stake of 24% - to be arranged by KE's own resources. Upfront Coal tariff has been awarded by NEPRA Target financial close of 2017 with expected COD is 2020.

450 MW IPP LNG:

In partnership with Engro, KE will construct a 450 MW LNG power plant in the Port Qasim area. Additional partnerships on this project are currently being explored. Estimated cost of the project is US\$ 450 million – KE equity stake of 25% - to be arranged by KE's own resources. Generation License Application has been filed with NEPRA Target financial close of 2017 with expected COD is 2020.

leaving the cheaper electricity available in the System. In the eyes of Whistleblower Pakistan this is the worst form of exploitation and would be a misuse of the Authority's Power. Focus on increasing available capacity through various IPPs that will help diversify the fuel mix

420 MW IPP Coal Conversion:

KE is converting 420 MW of existing furnace oil units at Bin Qasim Power Plant I into coal-fired plants

The project is structured as an IPP in which two older inefficient units will be leased out to a consortium that will provide lease income to the Company

The total project cost is c. US\$ 400 million — with COD targeted for 2020

Embedded Generation plan of 1,000 MW (including 750 MW through external IPPs):

KE has planned to add capacity of 750 MW on its system through three IPP projects of around 250 MW under the umbrella of embedded generation plan. These plants will be developed in areas having high density of load requirement and will help to address the transmission constraints.

KE has started the initial activities of these projects such as signing of Letter of Interest and preparation of Power Purchase Agreement, in collaboration with the respective parties. Further, KE has started discussions with NEPRA on the plan for embedded generation projects.

Other IPPs

KE is also planning to contract electricity from various other IPPs to boost external generation. The upcoming projects include :

- Nooriabad 104 MW Gas Power A gas based IPP under public-private partnership with capacity of 104 MW. An initiative taken by Government of Sindh under the name of Sindh Nooriabad Power Company.
- Fauji 52 MW Coal Power Fauji Fertilizers Bin Qasim Limited is setting up a power plant through its subsidiary FFBL Power Company (FPCL) with capacity of 118 MW out

of which 52 MW will be sold to KE.

- Ourson solar 50 MW - In line with strategy to encourage renewable resources KE is engagement with The Meeco Group headquartered in Switzerland, which is interested in developing a 50 MW Solar IPP, through its local subsidiary Oursun Solar, wherein KE will be power purchaser.

Key Transmission Initiatives – Planned investment of Rs. 179 billion

In order to cater to the growth in demand and service additional capacity, there will be a large focus on upgrading, enhancing and expanding the transmission infrastructure

TP-1000 Transmission Package

1,000 MVA transmission enhancement and rehabilitation project

Addition of eight new grid stations and new transmission lines over 116 km

The project will enhance the operational flexibility of KE's transmission network, hence relieving the majority of the overloaded EHT circuits. It will aid the saturated 220 kV Baldia and Mauripur grids and improve power quality at the overloaded portions of the KDA/Gulshan, KDA/Johar, and KDA/Maymar grids.

Consortium includes Siemens Germany, Siemens Pakistan and Shanghai Electric Group of Companies.

Total project cost is US\$ 400 million.

The funding of this project has already been secured through institutions such as Overseas Private Investment Corporation (OPIC), China Export and Credit Insurance Corporation (SINOSURE), Euler Hermes - Germany and Citibank - Pakistan on the basis of continuation of the I-MYT.

Further Transmission Expansion

Plans to further enhance the grid and transmission

capacity from FY-2018 onwards in order to continue to take on new connections and meeting increased capacity needs with new generation

The scope will be covered in two phases:

i. In the short term — to serve the immediate addition of generation in parallel with TP-1000 mainly restrengthening of existing transmission line network ("TLN") to support self generation with few auto transformers;

ii. Over the long-term — addition of new grid stations, expansion of existing 11 kV Power Feeders with Power Transformers and New Interconnecting Grids supported by additional embedded generation directly in the load centers to relieve the existing network

Key Distribution Initiatives – Planned investment of Rs. 108 billion:

Going forward KE plans to invest significantly in capex based projects in order to expand network, improve reliability and continue to reduce losses

KE has made a comprehensive business plan for distribution to over come the challenges through investment of Rs. 108 billion

Challenges ahead:

Bridging the demand-supply gap.

- Peak demand of electricity expected to grow by 72% to 5,200 MW by 2026.
- Maintaining the aging assets and dilapidated network.
- High T&D losses in certain areas caused by the socioeconomic situation in Karachi (and consequent issues with collection rates).
- The fact that, as T&D losses fall, it becomes progressively more difficult and costly, to achieve further reductions.

This will enhance the distribution capacity, increase its

reliability and provide sustainable and improved customer service

Network upgrade (growth)

- Augmentation of the existing dilapidated network and laying of new infrastructure.
- Growing the network and deliver more than 1,000 new 11kV feeders and 4,500km of additional 11kv power lines Technical Loss Reduction Plan (TLR)
- Technical Loss Reduction aims to reduce technical loss on the HT/LT network
- Improving the power quality and reducing faults / tripping through Management of distribution transformers (addition / augmentation / splitting of transformers, improving joints and connections) and Network reconducturing Maintenance
- Annual preventive maintenance (APM) to optimize network health; priority based rehabilitation of dilapidated infrastructure both HT and LT network (feeders and PMTS)
- System improvement plans; replacement of faulty PMTs, wires etc.

Faulty meter replacement

- This project aims to replace all types of meters that go defective at any point in time to minimize the loss of revenue through inaccurate or assessed billing
- Improve quality of billing and subsequently customer satisfaction Aerial Bundle Cabling (ABCs)
- To curtail losses by replacing bare conductors with insulated twisted cables to prevent theft against installation of hook connections
- Improvements in voltage profile; Reduced fluctuations & consumer complaints Smart Grid
- Conversion of existing network into smart network by installing smart devices at PMTs and at selected customer level.
- Smart Grid technology also allows remote disconnection and activation

		<u> </u>
12 Whether the Petitioner have a Control Center to dispatch and control its generation facilities.	 Yes. KE has an State of Art Control Centre which is equipped with SCADA system (Sinaut Spectrum Version 4.5.1). The monitoring of entire Transmission Network and Generation is done from the control centre. 	K-Electric is required to install an Auto Control Centre that can place a Dispatch Order as per Economic Merit Order.
Whether the current practice of the Petitioner to carry out load shedding, despite having sufficient own generation facilities, is justified?	 KE conducts load shed to bridge the demand supply gap and has a well thought and considerate strategy of reward and reprimand. Industrial zones are exempt from load shed. Industrial consumers play an important role in terms of their contribution to Pakistan's tax base, exports, GDP and overall employment. There was unscheduled load shed across the board but due to consistent approach and application of the scheme, 61% of the city is exempted from load shed and there is a growing acceptance that stealing of electricity and illegal abstraction of electricity is a menace which affects all consumers of Karachi equally. The Segmented Load Shed (SLS) policy divides feeders on the basis of their loss profile determined by Aggregate Technical & commercial (AT&C) loss in any particular area. High loss areas face upto 7.5 hours of load shed in summer months when demand is at peak where as low loss areas face no load shed. KE conducts a quarterly review process wherein it evaluates the AT&C loss of each area and profiles it as high or low loss respectively. Success of the SLS scheme is clear from the fact that there has been a shift of several areas from high loss to low loss. MoW&P has announced a segmented load shed policy in 2013 where areas with losses great than 80% will face up to 18 hours of load shed. MoW&P has also formally approved it as part of National Power Policy 2013. Currently, there is a shortfall against peak demand in KE's 	Preferring load shedding while having sufficient Generation Capacity available is illegal and thus not justified. Further, the load shedding in some areas on the basis of T&D loss level is neither legal nor justified. If the fundamental organization will not follow the law then it will promote a culture of non obedience to law. It is the responsibility of K-Electric to control the T&D losses in coordination with other agencies but penalizing the electricity consumers, who are in a majority of more than 90%, is the worst form of illegality. Nobody can even think about it in any civilized society. It is the principle of might is right not a principle of justice. Besides being illegal, this practice is also not economically viable. The people in the area either use UPSs or small inefficient Generators: the use of both is not economically feasible in the presence of electricity available with a large scale Utility. By using illegal approaches we are pushing the country towards darkness. It is also a dilemma that while on the one hand we are not providing the available electricity, on the other hand we are inducting new costlier Power Plants. It needs to be noted that we cannot recover the cost of bad governance, by using illegal means. To eliminate the cost of bad governance we have to improve the governance and bring discipline in all sections of our society.

		 Nameplate capacity of Power Plants should not be confused with available capacity as it is dependent on various factors: Gas availability, ambient temperature, availability of gas load, planned and unplanned outages, force majeure etc. play an important role in determining the available capacity at a certain period of time. K-Electric dispatches power as per the Economic Merit Order (EMO) from its own generation and imports from external sources in order to achieve lowest variable cost to end consumers as required under the provisions of NEPRA Act and License (Generation) Rules 2000. 	
14	Whether the request of the Petitioner to maintain the existing target heat rates of its Power Plants is justified?	KE's I-MYT is a performance based tariff where there is no guaranteed return on investment. The only way KE can earn is to improve the efficiency benchmarks through investments • KE has made huge investments of Rs. 120.7 billion since 2009 including Rs. 81.4 billion on generation. • KE's management installed four new generation plants in the period of 2009 to 2012 with installed capacity of over 1,000 MW. • These investments were made to improve the efficiency so that consumers can benefit from increased generation. • Under the performance based mechanism, the utility has the right to retain the earning arising from efficiency gains which is the incentive it gets to continuously invest in	In the Regulated regime where a lucrative return has already been assured, there is no concept of retaining the cost on fuel etc. Heat rate is basically the use of primary fuel which the Plant has used to generate one Unit of electricity. Efficiency of the Power Plant is determined on the basis of this heat rate. Prior to the approval the Power's induction in the system, the Power Plant has to declare and guarantee the efficiency which it has for the term of its useful life. In the Regulated environment, it is a norm that the Power Project cannot retain the impact of improved efficiency while it cannot pass on the impact of lower efficiency.
		outperforming the benchmarks and improving service quality. • Generation plants are long term investments with useful life of 25-30 years. KE has invested heavily in generation keeping in view the long term nature of the assets and expects to earn a reasonable return through beating the efficiency benchmarks. • Four new plants installed have been commissioned in the last 6 years. Revision of heat rates in this short span of	The reason for not retaining the impact of higher efficiency with the Power Plant is that it had not, advertently or in-advertently, stated the actual figure of the efficiency and thus when actual figures come out, this needs to be passed on to the consumers. The reason for not passing on the impact of lower efficiency is that the Power Plant had given a guaranteed figure of the efficiency after due diligence and agreement with the Supplier and based on that guaranteed figure, the

system.

o m	time is not justified. • KE's tariff structure also has an in-built protection mechanism to ensure that excess efficiency gains are shared with consumers in the form of claw back. • In case of IPPs, NEPRA even allows degradation curve where in KE tariff, no such degradation is allowed.	decision was made to induct this Plant. It is, therefore, the responsibility of the Power Plant to give that efficiency. This is the basic principle of contract administration.
2.	New plants added to KE's generation fleet 247 MW Combined Cycle Power Plant at Korangi Commissioned in FY 09 (Completely converted to combined cycle in FY 15)	Whistleblower Pakistan has already observed and stated its concern over the efficiencies of the Power Plant inducted in the K-Electric system. The technology inducted by K-Electric was not the most efficient technology of even that time.
Co	200 MW GE Jenbacher (GEJB) at Korangi and SITE Commissioned in FY 09 to FY 10 (converted to combined cycle FY 16)) 260 MW BQPS-2 Commissioned in FY 12	NEPRA has miserably failed to determine the heat rates of K-Electric Power Plants in a timely manner. After grievous delay, when it determined the heat rates, the same were quite low. NEPRA would have to determine the heat rates of these Plants theoretically. Every manufacturer declares the designed efficiency of its Plant. This efficiency is subject to adjustment at site and that should be the guaranteed efficiency of the Plant. Whistleblower Pakistan would like to see the details of this working.
		After 5-6 years of operation of the Power Plants in Open Cycle Mode, K-Electric has finally converted the Power Plants to Combined Cycle Mode. However, NEPRA is giving the benefit of billions of rupees to K-Electric on this account because NEPRA has not approved the Plant heat rates of K-Electric Power Plants on Combined Cycle Mode.
		Due to NEPRA's imprudent favor, K-Electric is gaining undue profit on this account also.
15 Whether the NE	EPRA approved the heat rates in the 2009 determination	Determination of the Auxiliary consumption is also a part
1 1	n sent out basis while taking into account an auxiliary	of heat rate test. NEPRA has determined the block wise
1 1 1	onsumption of 6.1%.	Tariff in case of GENCOs Power Plant. For fair treatment,
maintain the		separate Generation Tariff for each Power Plant Block of

	existing target of auxiliary	• KE has requested for continuation of the existing heat rates. Accordingly, auxiliary consumption of 6.1% should	K-Electric also needs to be determined by NEPRA.
	consumption of	also be continued in line with the heat rates.	Whistleblower Pakistan's observation on the Auxiliary
	6.1% for its	also be continued in line with the heat rates.	consumption written in the previous letters should also
	entire	Currently KE's actual auxiliary consumption is around	be considered with this letter.
1	l	7.6%, however, as KE has requested continuation of heat	be considered with this letter.
	generation	·	
	fleet is	, ,	
	justified?	continue the benchmark of 6.1% for auxiliary	
		consumption.	
16, 27	Whether the	• In the current low inflation scenario, increase in CPI in	NEPRA has determined the Multi Year Tariff (MYT) of
& 28	request of the	May 2015 was 3.16%. This meant that with X factor	three XWDISCOs in the recent past; the treatment meted
	Petitioner to	applied at 2% (for Generation & Transmission) and 3% (for	out to the DISCOs should be applied in this case as well.
	allow efficiency	Distribution), KE was only allowed an indexation of 1.16%	
ļ	factor "X" as	and 0.16% respectively.	
]	lower of 2% or		
	30% of	• Given that the utility is already experiencing a significant	
1	increase in CPI	shortfall in O&M component allowing such negligible	
	allowing	indexation would result in further exacerbating the deficit.	
1 1	annual		
	indexation in	KE is currently being allowed an increase significantly.	
	O&M cost	lower than the inflation itself, whereas several cost heads	
	component of	increase faster than the rate of CPI growth.	
	generation is		
	justified?	• Therefore it is only reasonable to modify the X factor so	
ŀ		that KE has some cushion to efficiently manage its O&M	
}	16 Whether	costs.	
	the request of		
	the Petitioner		
	to allow		
	efficiency		
	factor "X" as		
	lower of 2% or		
	30% of		
	increase in CPI		
	allowing		
	annual		
	indexation in		

			-
	O&M cost		
	component of		
	Transmission is		
	justified?		
İ	27 Whether		
1	the request of		
	the Petitioner		
	to allow		
	efficiency		
	factor "X" as		
	lower of 3% or		
	30% of		
	increase in CPI		
	allowing		
	annual		
	indexation in		
	O&M cost		
	component of		
	Distribution is		
	justified?		
17	Whether the	KE has a Fuel Supply Agreement with PSO which is valid till	It was observed that K-Electric was buying the RFO from
	Petitioner has	2020 and can be further extended with mutual consent of	BYCO. It needs to be checked by NEPRA as to under what
	renewed/	the parties.	conditions K-Electric can buy the RFO from the other Oil
	entered into		Marketing Companies (OMCs) while it has entered into
	long term Fuel		FSA with PSO. NEPRA needs to ensure that K-Electric is
	Supply		making all efforts to buy the RFO on the best effective
	Agreements		price. NEPRA should also check the issue of Calorific
	(FSA) for firm		Value of the supplied oil and confirm that K-Electric, in
	supply of		this matter, is also being treated in the same manner as
	Furnace Oil?		the other Companies.
18	Whether the	KE does not have a Gas Supply Agreement (GSA) with SSGC	It is surprising that NEPRA has approved the Generation
	Petitioner has	which has been pending since the time of privatization. It	License to K-Electric for around 1000 MW Gas based
	signed Gas	was decided in Cabinet Committee on Energy Crises	Power Plant without confirming that it has a firm GSA
	Supply	(CCEC)'s meeting dated July 30th 2009 that:	with Gas supply Companies.
	Agreement	"SSGC will guarantee availability of 276 MMCFD of gas and	
	with Sui	with adequate pressure which will comprise of 236	Gas is a scarce national resource and needs to be burnt at
		2.4	

Southern Gas Supply Company (SSGCL) for firm supply of gas? MMCFD already allocated and additional 40 MMCFD of additional quantities and KE would also execute the GSA with SSGC in this regard."

- KE has been continuously making efforts to enter into a long term GSA with SSGC. After rigorous efforts, a payment plan was signed between KE and SSGC to streamline the payment modalities of current and old dues, along with minimum quantity of supply for summers and winters. This agreement was renewed in 2015 and 2016. Under this agreement KE has paid a total of Rs. 12.7 billion to SSGC to settle outstanding arrears since FY 13. Thereafter KE is receiving relatively stable supply compared to 2011.
- In the absence of a signed GSA, the payment plan and explicit allocation as per CCEC's decision will ensure smooth gas supply to KE throughout the year. Further KE is in discussion with SSGC to formalize and sign a Gas supply agreement as soon as possible.
- Further, KE in its business plan has diversified its fuel mix with significant additional capacity based on Coal and LNG fuel.

its best economic price. Every Pakistani is pained when he/she comes to know that K-Electric is burning the pipeline Gas in the Power Plants of 31-32% efficiency.

The burning of Gas in BQPS-I, Korangi and Site Gas engines is nothing less than a financial crime and needs to be stopped immediately. The Gas being burned in these in-efficient Power Plants should be diverted to efficient Power Plants. The equivalent amount of electricity to the capacities of these Power Plants should be provided to K-Electric in lieu of the diversion of the Gas Fuel from these K-Electric inefficient Plants to CPPA System's efficient Power Plants. This is the reason why Whistleblower Pakistan is demanding one Grid Company and one System Operator.

Whistleblower Pakistan requests NEPRA to play its role and to not allow any such operation which is causing loss to Pakistan. The Country's resources are being wasted under the current setup: NEPRA should save the country and the nation.

NEPRA should fix some efficiency Bench-mark for Gas burning in the Power Plants. Gas should not be allowed for Steam Generators. The Gas should not be allowed to be burnt in Gas Turbine having efficiency below 45%.

Whistleblower Pakistan has serious observation on the burning of Gas simultaneously with RFO in the Dual Fuel fired Boiler of BQPS-I. There is always a chance of oil swindling under this kind of Plant operation.

Auxiliary consumption and Plant heat rate on Gas and Oil are different but there are no approved Auxiliary consumption and Plant heat rates for BQPS-I for these two fuels separately. All this needs to be settled through determination of Tariff in respect of each Block on each

			fuel separately.
20	What are the	The table below shows plant wise unit sent out of KE's	Whistleblower Pakistan demands one Grid Company
	projections of	own fleet and power purchases projected for the next ten	with one System Operator so that the country's resources
	plant wise	years:	are utilized in the most economical way. At present, the
	generation of		country is losing much due to imprudent use of energy
	energy and	Table appended	resources in Pakistan.
	energy planned		
	to be procured		
	from external		
	sources for the		
	MYT control		
	period and		
	what is the		
	component		
	wise detail of		
	power		
	purchase cost /		
	price?		
21	Whether any	Vertically Integrated Utility = End to End Planning:	One Grid Company and one System Operator is the need
	cap on power	As a vertically integrated utility, KE is pursuing a	of an efficient Power Sector in the country. It needs to be
	purchase be	comprehensive investment strategy catering towards	noted that in Pakistan there is uniform Tariff for
	placed in	expansion, enhancement, and rehabilitation of all 3 of its	electricity consumers and the country so far has not been
	relation to the	core functions in a prudent manner.	able to afford Differential Tariff. This Differential Tariff for
	new		the Distribution Companies and a uniform Tariff for
	generation by	The demand in the KE system is increasing at a fast rate	electricity consumers by using Tariff Differential Subsidy
	the Petitioner's	and hence it is important that KE expand not only its	is not only wasting our resources but has created a
	own	supply capacity but at the same time increase the	grievous misgovernance in the Sector. Introduction of
	resources?	transmission capacity and upgrade the distribution system	many Surcharges in the Electric Power Sector is not only
		for the smooth and uninterrupted supply of the generated	promoting inefficiencies but also creating legal problems.
		power up to the consumer.	Whistleblower Pakistan has noted that even after
		Therefore it where to invest De 100 billion are the cost 10	burdening the country and the electricity consumers, the Pakistan Power Sector has not been able to clear the
		Therefore it plans to invest Rs. 496 billion over the next 10	
		years focusing on: GENERATION RS. 203 billion TRANSMISSION RS. 179 billion DISTRIBUTION Rs. 108	Circular Debt. Therefore it is high time, i.e. before giving this MYT to K-Electric, to revisit the Power sector
			Structure.
		billion	Structure.
		KE cannot solely focus on Generation:	
		ne cannot solely locas on concration.	

		Given the growing demand of Karachi there is a dire need	
		to invest in expanding generation capacity, however all	
ŀ		this investment in generation cannot be on KE's books	
		given the limited capital and borrowing capacity, therefore	
		KE has embarked on a plan where it is working on	
		expanding its generation portfolio by	
		a) projects on KE's own books- Investment of Rs. 148	
		billion	
		b) projects where KE shall acquire partial equity and is	
		directly involved in the development phase- Investment of	
		Rs. 14 billion	
1		c) projects being developed by external developers as pure	
		IPPs, where KE will provide bankable securities	
		Cap on power purchases by KE will be counterproductive	
		1	
		and prevent the utility from supplying sufficient power to	
		the citizens of Karachi, further exacerbating the demand	
		supply gap.	
22	Whether the	Any reduction of 650 MW from NTDC at this stage would	Gas-based generation in the K-Electric System is around
	plan of the	result in prolonged hours of load shedding across the city	75-80%, while this percentage in the CPPA System is
	Petitioner to	of Karachi and its industrial zones which would have a	around 30-35%. K-Electric could have generated the
İ	procure 650	negative impact on Pakistan's economy	cheaper electricity from available Gas if it would have
	MW from	In accordance with ECC's decision, NEPRA in its	inducted Power Plants of high efficiency. Unfortunately,
	CPPA-G till	determination dated September 29, 2008 stated that KE	K-Electric inducted Power Plants of low efficiency,
	2020 is	shall be treated at par with other DISCO's and shall be	therefore, it always wants to procure electricity from the
Ì	justified? What	charged on the basis of similar mechanism as approved for	CPPA System at a cheaper rate.
	should be the	XWDISCOs.	CITA System at a cheaper rate.
l	rates for these	 Accordingly NEPRA has approved KE's monthly and 	Whistleblower Pakistan is a consumer of K-Electric but at
	purchases i.e.	quarterly tariff determinations using the basket rate, as	the same time also comprises citizens of Pakistan. The
	Basket or	applicable for other DISCO's.	interest of Pakistan is therefore important for
	Marginal rates?	• As per the CCI decision of November 8, 2012	Whistleblower Pakistan. Financially it is not a wise
	K-Electric to	communicated to KE by MoW&P, it was decided to devise	decision that electricity is supplied to K-Electric at the
	respond this	modality for reducing sale of power from NTDC to KE	CPPA Basket rate. If at all it is necessary, then there
	issue in light of	through financing of oil bill to be provided to KE to support	should be one Basket with one Grid Company and one
	CCI decision	KE's generation.	System Operator so that the resources of the country are
	dated	Subsequently, KE & MoW&P engaged to resolve the	not wasted. The country is suffering from a financial loss
	J	37	

	November 08,	issue and a special sub-committee was also formed by	of Rs. 2 to 3 billion per month on this account.
	2012.	Prime minister. Several meetings of the sub-committee	
		have been held and currently negotiations are going for	K-Electric is exploiting the situation and it is not even
		new power purchase agreement with NTDC/CPPA-G.	ready to accept the decision of CCI made in 2012. K-
1		As per the negotiations, KE expects the PPA to be	Electric, referring to the interim status quo Order of the
		extended for next 5 yeas and has included this assumption	High Court of Sindh passed 4 to 5 years earlier, is enjoying
1		in the business plan. Further, KE has planned to increase	the facility and causing loss to the country. Neither
1		the generation capacity and purchase of power and	Whistleblower Pakistan has the copy of the Order of the
1		targets to be self sufficient by FY 20 in this respect.	Court nor has the details as to who is pursuing the case. It
1		• It is important to understand that the fuel costs are pass	needs to be noted that the loss in the matter is of fatal
		through in KE's tariff and therefore if KE is able to supply	nature and so far more than Rs. 150 billion of country has
		cheap power, the end consumers benefit the most and not	gone into the drain on this account only.
	1		gone into the drain on this account only.
		the utility itself.	Whichloblower Dekisten maintains and reiterates its
		*U charled by a set of the transfer of a contract for a CEO MAN	Whistleblower Pakistan maintains and reiterates its
1		*It should be noted that matter of purchase from 650 MW	stance that there should be one National Grid Company
1		is sub-judice and the position taken by KE is entirely	and one System Operator. In case of more than one
		consistent with its legal position and rights under the law.	Generation Basket, there is no justification of
]			procurement of 650 MW electricity by K-electric on a rate
			at par with other DISCOs.
			K-Electric is using its consumers as a shield to hide and
			protect its inefficiencies.
23	Whether the	Pakistan has an evolving power market which needs to	To avoid legal implications in implementing the reforms
1	planned	address several hurdles especially the significant shortfall	required for the development of an Electricity Market, K-
}	purchases of K-	in supply, before it moves towards a competitive	Electric should not be given the MYT beyond 2019.
	Electric are in	structure.	Further, separate Generation Tariff be given to K-Electric
	line with the	KE is willing and open to play its role in facilitating the	for its three functions.
]	competitive	development of a competitive market.	
ĺ	market regime	For all the power purchases NEPRA approves the	
	(both	Generation License (GL) and tariff. The generation License	
	generation and	approved by NEPRA already includes a condition for	
	retail) being	compliance with Competitive Trading Arrangement clause.	
	envisaged by	• Further, recently NEPRA has approved several	
	NEPRA?	generation projects with overall capacity of over 10,000	
	HEI IVA:	MW with similar conditions and having duration longer	
		than or equal to 25 years. Accordingly, KE's business plan	
		envisages that future power purchases will follow the	

	<u> </u>	same process of generation license and tariff approval	
		with NEPRA.	
24	Whether the Petitioner's request to allow the supplemental charges i.e. WWF/ WPPF payable to IPP's, as a pass through item is justified?	NEPRA allows IPPs to pass through any additional costs e.g. corporate income tax, WPPF, WWF, PPFME payments, CLFME payments etc., to the off taker so that the returns for the sponsors are protected. • K-Electric's I-MYT incentivizes improvement in efficiencies through investments and operational effectiveness. However, there is absolutely no relationship between K-Electric's MYT and payment of pass through items as allowed to IPPs by NEPRA, the latter being a part of power purchases and not efficiency gains. • Given the status of K-Electric as a private entity with no support of government funding, K-Electric's capacity to fund its operations and run the utility on a sustainable basis will be significantly impacted if it is not in turn allowed to pass these costs on to its consumers. • The spirit of MYT will be defeated if any efficiency gains are lost through unjustified absorption of IPP related pass through payments by the utility. Therefore these supplemental charges i.e WWF/WPPF payable to IPPs	K-Electric has applied for distribution Tariff. NEPRA should give the same treatment to K-Electric in the matter of WWF/WPPF as it is giving to other DISCOs.
25	T&D losses is justified?	should be allowed as a pass through item in KE's tariff. KE's current losses are higher than NEPRA benchmark of 15%, however, as KE has applied for a continuation of all existing operational benchmarks KE is willing to take the challenge to maintain the T&D loss benchmark. Slide appended Challenges: Lack of good governance and urban planning resulting in expansion of illegal / unapproved areas within the city. (Multiple controls for eg. CDGK, SBCA, DHA, Clifton, each with its own parameters) • Urbanization/ influx settling in Karachi resulting in mushroom growth in the outskirts without planned infrastructure	T&D losses target of K-Electric should be continued to reduce by 2% annually till its loss level reaches the level of losses of IESCO, FESCO or GEPCO. For FY 16-17, T&D losses should be taken as 13%.

		• Limited access to certain areas due to law & order issues	
		• Loss reduction is mainly focused through CAPEX-based	
		projects which require more time to reap the desired	
		outcomes.	
26	Whether	Unique structure Unlike other Discos KE operates its own	Separate target of losses should be set for 220 & 132 KV
	separate target	transmission network, planning of which is dependent	voltage level.
	of losses	upon the load growth and location of load centers which	
İ	should be set	in-turn are governed under the Distribution (11kV) license.	
	for		
	Transmission	Operational interdependence Operationally the	
	(220 kV) and	performance of various voltage levels are dependent upon	
	Distribution	consumer demand, hence if the distribution (11kV) does	
	(132kV and	not perform optimally this would also affect the	
	below)	transmission's performance. This can also be seen in	
	segments?	instances of high or low demand, where the load	
		requirement of the distribution network determines the	
		transmission loss.	
		Thus transmission and Distribution loss target should be	
		kept bundled together	
29	Whether the	The number of new connections is purely related to the	The data for the past 10 years in respect of category-wise
1	planned	growth on the basis of new load growth	addition of new connections along with their sanctioned
	addition of		load should be obtained from K-Electric and provided to
	new	Additions through NC are estimated based on the	us for further comments. The details of category wise sale
	connection (i.e.	applications received and estimation of the new load	during the last 10 years should also be obtained from K-
	over 800,000	within that vicinity	Electric.
	Nos.), demand		
	in MW &	There is a major increase in residential category owing to	
	Energy sale in	mega residential housing schemes which are currently	
	GWh is	under development such as DHA City, Bahria Town, Malir	
	justified? K-	Housing Projects, Fazaia Housing Scheme to name a few	
	Electric may	Damand MM as already discussed in the Late	
	provide	Demand MW as already discussed in the business plan	
	consumer	slide earlier	
	category wise	Through transmission enhancement projects that will increase the grids capacity and reliability, new connections	
	details in this regard	can now be added	
	regaru	can now be added	

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	Units sent out are expected to increase at a CAGR of over 4% in the future Multi-stories, bounded societies and industries coming online in the next 5-7 years, coupled with an equally substantial organic growth , growth per capita consumption, will significantly contribute to increased Sent out	
What are the estimates of year wise improvements in the performance benchmarks of the Petitioner considering the projected business plan and proposed investments? The Petitioner may submit the detailed year wise analysis regarding improvement in its performance standards (i.e. T&D losses, LT/HT Ratio,	HT/LT Ratio: Our current HT/LT ratio is 1:2, which will be improved via managing distribution transformers by relocation of transformers at load centers, addition / augmentation / splitting of transformers, improving joints and connections etc. As Karachi is expected to grow vertically, we anticipate this ratio to improve to an optimum level over the time period. Overloading: Currently, out of 1,524 feeders, on an average only 15 feeders are overloaded above their designed capacity. Moving forward, we intend to add 1,000 new feeders over the control period, thereby reducing the overloading to negligible levels.	The data for the past 10 years in respect of Performance Standards (i.e. T&D losses, LT/HT Ratio, overloading, SAIFI, SAIDI etc.) should be obtained from K-Electric and provided to us for further comments.
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	estimates of year wise improvements in the performance benchmarks of the Petitioner considering the projected business plan and proposed investments? The Petitioner may submit the detailed year wise analysis regarding improvement in its performance standards (i.e. T&D losses,	4% in the future Multi-stories, bounded societies and industries coming online in the next 5-7 years, coupled with an equally substantial organic growth, growth per capita consumption, will significantly contribute to increased Sent out Slide appended What are the estimates of year wise improvements in the performance benchmarks of the Petitioner considering the projected business plan and proposed investments? The Petitioner may submit the detailed year wise analysis regarding improvement in its performance standards (i.e. T&D losses, LT/HT Ratio, overloading,

	etc.)		
31	Whether the	KE is charging industrial consumers on the basis of TOU	K-Electric has again flouted the direction of the Authority
	Petitioner has	rates.	with respect to the installation of TOU meters and is
	installed TOU	With respect to residential and commercial consumers,	charging its consumers on the basis of TOU rates. For the
	meters and is	KE has shared its concerns with NEPRA and submitted a	same Units the consumers of electricity in Karachi are
	charging its	report with a detailed analysis to a committee formed for	paying more and thus being discriminated due to the
	consumers on	this purpose and decision from NEPRA is pending to date.	non-following of the direction of NEPRA by K-Electric.
	the basis of	KE's concerns are as follows:	
	TOU rates?	a) Certain commercial entities work during the day and do	Whistleblower Pakistan has already provided its detailed
		not fall under the peak and off peak hours. Therefore	comments in the matter under para J of Report I
		there should be a way to exclude them from TOU tariff.	submitted vide its letters dated 15.03.2016 and
		b) Implementation of TOU tariff should not impact the	12.07.2016. The detailed comments of Whistleblower
		revenue of KE and hence KE suggests that a quarterly	Pakistan should also be considered here as well.
		adjustment mechanism be developed to account for any	
		increase/decrease in determined revenues of KE due to	
		ToU implementation.	
32	Whether	Meter rent is recovered as a cost for replacement of meter	
	separate	which is changed after certain period of time as per utility	
1	charging of	practice. Cost for replacement of meter is fully borne by	
	Meter Rent	KE in case of any discrepancy which is not attributable to	
	from the	consumer, in compliance with NEPRA approved Consumer	
	consumers is	Service Manual.	
	justified?	• NEPRA, under the tariff determination of 2002, has also	
		recognized meter rent as part of KE's revenue and shown	
		in the P&L of the said determination.	
		• KE is also responsible for the maintenance of meter and	
		to keep it in perfect running condition.	
33	Whether	Bill Collection charges are similar in nature to other	The separate charging of Bank Collection charges by K-
	separate	supplementary items added in the KE consumer bill such	Electric from its consumers is not justified at all. K-Electric
	charging of	as GST, Income Tax Electricity Duty, PTV License Fee etc.	has again flouted the direction of the Authority with
	Bank Collection	KE has no control over how much amount to be charged	respect to not charging of Bank Collection charges.
	Charges from	as these are approved in the past by the State Bank of	
	the consumers	Pakistan in its capacity to regulate provision of banking	Whistleblower Pakistan has already provided its detailed
	is justified?	services to members of the public. These are essentially a	comments in the matter under para Q of Report I
		pass through item.	submitted vide its letters dated 15.03.2016 and
		Bank charges related to processing of payment and	12.07.2016. The detailed comments of Whistleblower
		reporting to KE are already being borne by KE and are not	Pakistan should also be considered here as well.

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24	NA (In called on the called	charged to consumers.	K Standard S
34	Whether the	The payment of interest on security deposit is not	K-Electric is entitled to collect Security Deposit from its
	non-payment	mandated by law as it is neither covered under the	consumers at the rate determined by NEPRA and notified
	of interest on	Companies Ordinance, 1984 nor NEPRA Act, 1997 read	by the Government. But K-Electric is not entitled to use
	consumer's	together with CSM, terms and condition of tariff and/or	the amount collected under the head of Security Deposit
	security	Electricity Act, 1910.	for any other purpose. This means that K-Electric must be
	deposits is	• Furthermore, it has been observed that no other	depositing this amount in the Banks and earning the
	justified?	DISCO/Telco or other utility in Pakistan is paying interest	profit on this amount. Therefore, the profit earned on the
		on security deposit. In these circumstances, in accordance	amount of Security Deposit is the right of those
		with the approval of the KE Board of Directors in 2012, KE	consumers whose Security Deposits are earning this
		discontinued payment of 5% interest on security deposits.	profit.
			Whistleblower Pakistan has already provided its detailed
i			comments in the matter under para O of Report I
			submitted vide its letters dated 15.03.2016 and
			12.07.2016. The detailed comments of Whistleblower
			Pakistan should also be considered here as well.
35	What is the	New connections costs are calculated as per prudent	As per the law, NEPRA is required to determine the
	basis of	utility practices in accordance with NEPRA's consumer	charges in respect of new connections for all categories
	amount being	service manual chapters 2 & 5, and clause 3(3) NEPRA ECR	and those charges should have been notified in the
	charged in	2003. Further cost sharing policy was recently introduced	Gazette. Unfortunately, NEPRA did not perform its duty
	respect of new	in line with NEPRA directives communicated vide letter	and therefore K-Electric is charging rates of its own
	connections by	dated 05-04-16.	choosing. All DISCOs, except K-Electric, are in the public
	K-Electric from	All cost estimates issued are prepared in line with	sector while K-Electric is in the private sector. It is a fact
	different	prudent utility practices and include cost of material	that maximizing profit is one of the main objectives of all
	categories of	(including meter), labor and transport, store and	private companies.
	consumers	procurement, and supervision charges.	
			NEPRA should determine these rates, charges etc. for all
26			DISCOs immediately.
36	What are the	KE is providing power to these consumers on domestic	Uniform Policy needs to be developed in the matter. The
	concerns of the	tariff in line with terms and conditions of tariff and	Policy should be developed in consultation with relevant
	Petitioner on	currently has no concerns on the same.	stakeholders.
	the application		
	of domestic		
	tariff for		
	Government		
	office,	12	

	educational		
	institutions and		
	religious		
İ	institutes?		
37	Whether the proposed category wise consumer end tariff is purely cost reflective? Whether the existing terms & conditions of consumer categories (including life line) are needed to be revised?	KE had submitted cost of service study with respect to NEPRA's directive based on which schedule of tariff was based previously. KE has a performance based tariff where the only adjustments made to schedule of tariffs are made with respect to fuel prices (uncontrollable costs) and O&M (adjusted with CPI-X). Therefore, the schedule of tariff should continue.	The Tariff to be determined by NEPRA should be cost reflective. Any Cost of Service study, if conducted earlier, should be provided to us and also be shared with all relevant stakeholders through NEPRA and K-Electric websites.
38	What will be the mechanism for inter DISCO wheeling?	Currently there is no tie line between KE and any other DISCO for the mechanism of inter-DISCO wheeling. KE will adhere to the guidelines given by NEPRA in future regarding inter-DISCO wheeling mechanism.	It is difficult to expect K-Electric to follow the NEPRA Guidelines which do not suit its business. NEPRA has neither the will nor the courage to regulate K-Electric. NEPRA appears to be there only to protect K-Electric at the cost of consumers. K-Electric is in consistent breach of NEPRA's applicable documents but NEPRA is not ready to take action against K-Electric: rather, it is extending its favors to K-Electric on many issues. Giving heat rates of Open Cycle while Plants are running on Combined Cycle Mode is another big favor of NEPRA to K-Electric.