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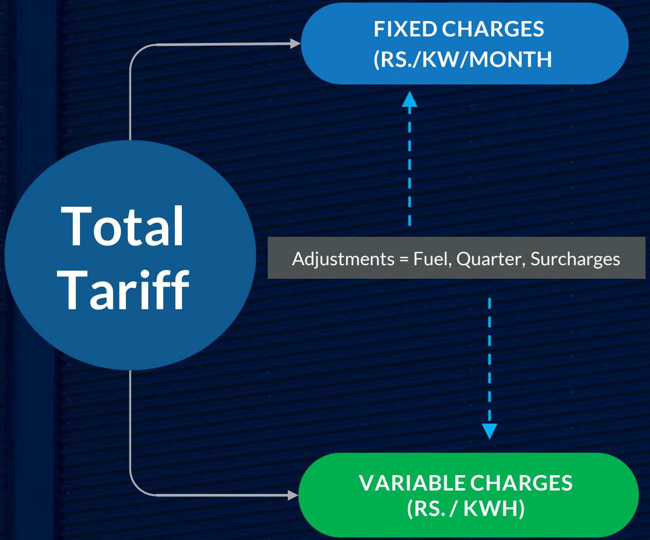
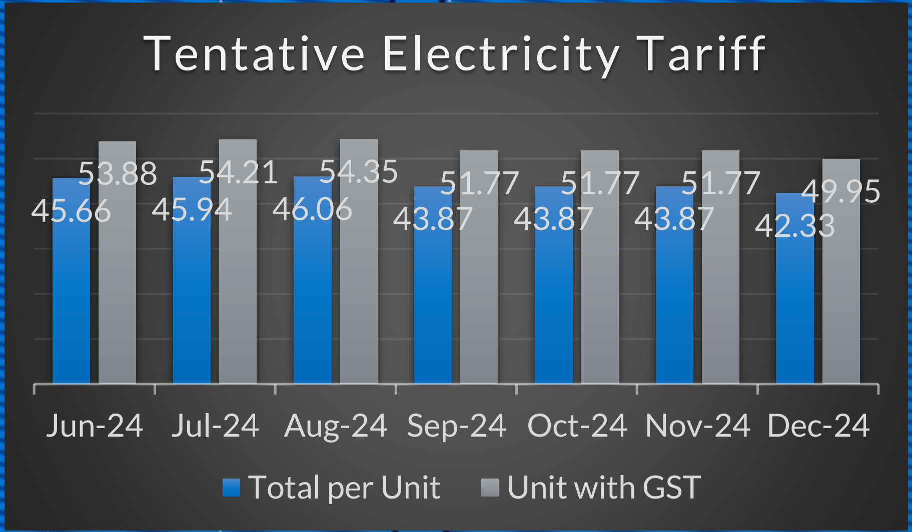


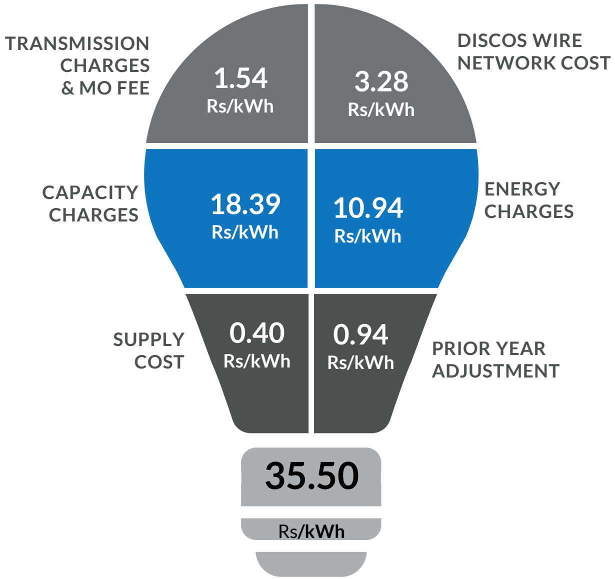
APPROVED CONSUMER END TARIFF FY 24-25 EFFECTIVE FROM 1ST JULY



NEPRA ORDER DATED 11TH JULY 2024

Total Tariff in Consumer Bills = Fixed Charges + Variable Charges + Fuel Adjustments + Quarterly Adjustments + Surcharges + Taxes

EXECUTIVE SUMMARY FY 24-25 TARIFF NOTIFICATION



TOTAL AVERAGE CONSUMER END TARIFF 35.50 PKR / UNIT

The total revenue requirement for DISCOs is 3,768 billion PKR, which translates to a tariff of 35.5 PKR per unit, based on projected sales of 106,153 GWh.

- ✓ NEPRA Authority has determined the base tariff for DISCOs & KE Consumers as 35.50 PKR/ Unit for fiscal year 2024-25. This is a 19% increase (Rupees 5.72) from the previous year applicable base tariff of 29.78 PKR per Unit.
- ✓ Fixed Charges have introduced in the Residential Category and **Fixed Charges for Industries have increased to 1,250 PKR / KW / Month**.
- ✓ The increase in base tariff and fixed charges will offset the reduction in tariff resulting from the decreased cross-subsidy from industrial tariffs. This will happen due to current economic conditions that have forced industries to operate at lower production capacities.
- ✓ With industries operating at an average production capacity of 50%, the impact of the new fixed charges will be around 5~6 PKR per unit.
- ✓ The unprotected category of residential consumers that have consumption greater than 300 units per month are likely to be hit badly with adjustment in Schedule of Tariffs.
- ✓ NEPRA has also revised the application of fixed charges on **25% of the sanctioned load** or the maximum demand indicator (MDI) as recommended in our last analysis.
- ✓ Increased fixed charges collection will have a positive impact on quarterly adjustments. This may result in lower tariffs from December 2024 or January 2025, once the final quarterly adjustments for the last fiscal year are completed.
- ✓ There is a potential for collecting approximately 32 billion PKR in fixed charges monthly, which represents about 16.8% of the total capacity cost of PPP.
- ✓ **CPPA is responsible for planning the reduction of capacity charges to benefit overall consumers. Underutilized capacities of HSD, RFO, RNG, and imported coal plants should be auctioned to consumers in the open market through the implementation of the CTBCM market. This approach can mitigate the impact on regulated consumers.**

INDUSTRIAL TARIFF FROM 1ST JULY 2024

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Sr. No.	Tariff Category	Existing		Approved from 1st July 2024			Percentage Increase / Decrease in Variable Charges	Increase in Fixed Charges
		Fixed Charges (Rs./kW/Month)	Variable Charges (Rs./kWh)	Fixed Charges (Rs./Connec/Month)	Fixed Charges (Rs./kW/Month)	Variable Charges (Rs./kWh)		
B	Industrial Tariff							
B1	Upto 25 kW (at 400/230 volts)							Introduction of Flat 1000 Rs. per Connection
	TOU - Peak	--	37.89	**1000**	--	**37.89**	0%	
	TOU - Off Peak	--	32.33		--	**31.20**	-3%	
B2	25-500 kW (at 400 Volts)							
	TOU - Peak	500	37.83	--	**1250**	**37.83**	0%	150% Increase
	TOU - Off Peak		32.12			**28.56**	-11%	
B3	For all Loads upto 5000 kW (at 11 kV)							
	TOU - Peak	460	37.83	--	**1250**	**37.83**	0%	172% Increase
	TOU - Off Peak		32.03	--		**29.39**	-8%	
B4	For all Loads at 132 kV							
	TOU - Peak	440	37.83	--	**1250**	**37.83**	0%	184% Increase
	TOU - Off Peak		31.93	--		**29.11**	-9%	

Revised Definitions and Terms & Conditions of Tariff on next Slide

All remaining tariffs shown in the end of presentation

NEW FIXED CHARGES FROM 1ST JULY 2024

NEPRA Determined		Approved
2000 PKR / kW / Month	→	1250 PKR / kW / Month
Min application on 50% Sanctioned Load		Min application on 25% Sanctioned Load

Updated Definitions as per NEPRA Orders.

"Sanctioned Load" where applicable means the load in kilowatt as applied for by the consumer and allowed/authorized by the Company for usage by the consumer.

"Maximum Demand" where applicable, means the maximum of the demand obtained in any month measured over successive periods each of 30 minutes' duration except in the case of consumption related to Arc Furnaces, where "Maximum Demand" shall mean the maximum of the demand obtained in any month measured over successive periods each of 15 minutes' duration.

"Fixed Charge" means the part of sale rate in a two-part tariff to be recovered on the basis of "Billing Demand" in kilowatt on monthly basis.

"Billing Demand" means the **25%** of the sanction load or Actual maximum demand recorded in a month, whichever is higher, except in the case of agriculture tariff D2 where "Billing Demand" shall mean the sanctioned load.

Provided that for the purpose of fixed charges sanctioned load means maximum demand recorded during preceding 60 months.

Provided further that in case of new connections or consumers who have renewed/revised their sanctioned load, the fixed charges will be charged on 25% of the sanctioned load or actual maximum demand recorded in a month, whichever is higher. However, upon establishment of MDI in next six months, the adjustment of fixed charges will be made accordingly by the DISCO."

Provided also that consumers having alternate/ dual source i.e. captive power, net metering etc. the existing mechanism of fixed charges shall remain the same i.e. the 25% of the sanctioned load or actual maximum demand recorded in a month, whichever is higher.

REFER TO THE FOLLOWING SLIDES FOR AN ANALYSIS OF THE REVISED FIXED CHARGES.

CONTACT US FOR CUSTOMIZED POWER INPUT COST ANALYSIS FOR YOUR INDUSTRY

Sanctioned Load Analysis and Adjustment

- ✓ **Review and Analysis**: We review and analyze your current sanctioned load to ensure it aligns with your actual consumption patterns.
- ✓ **Load Reduction Opportunities**: Identify opportunities to reduce sanctioned load without impacting your operations, thereby lowering your fixed costs.
- ✓ **Efficiency Improvements:** Analyze production processes to identify opportunities for efficiency improvements, potentially reducing overall energy consumption.

Energy and Fuel Source Optimization

- ➢ **Dispatch Strategy Development:** If you have access to multiple fuel sources like grid power, gas generators, and renewable solar, we develop a dispatch strategy for optimal cost management.
- ➢ **Comparative Analysis**: Conduct a comparative analysis of different energy sources **(grid power, gas generators, solar power)** to determine the most cost-effective mix.
- ➢ **Integration and Management Strategy:** Develop a strategy for integrating and managing multiple energy sources to minimize costs and maximize efficiency.

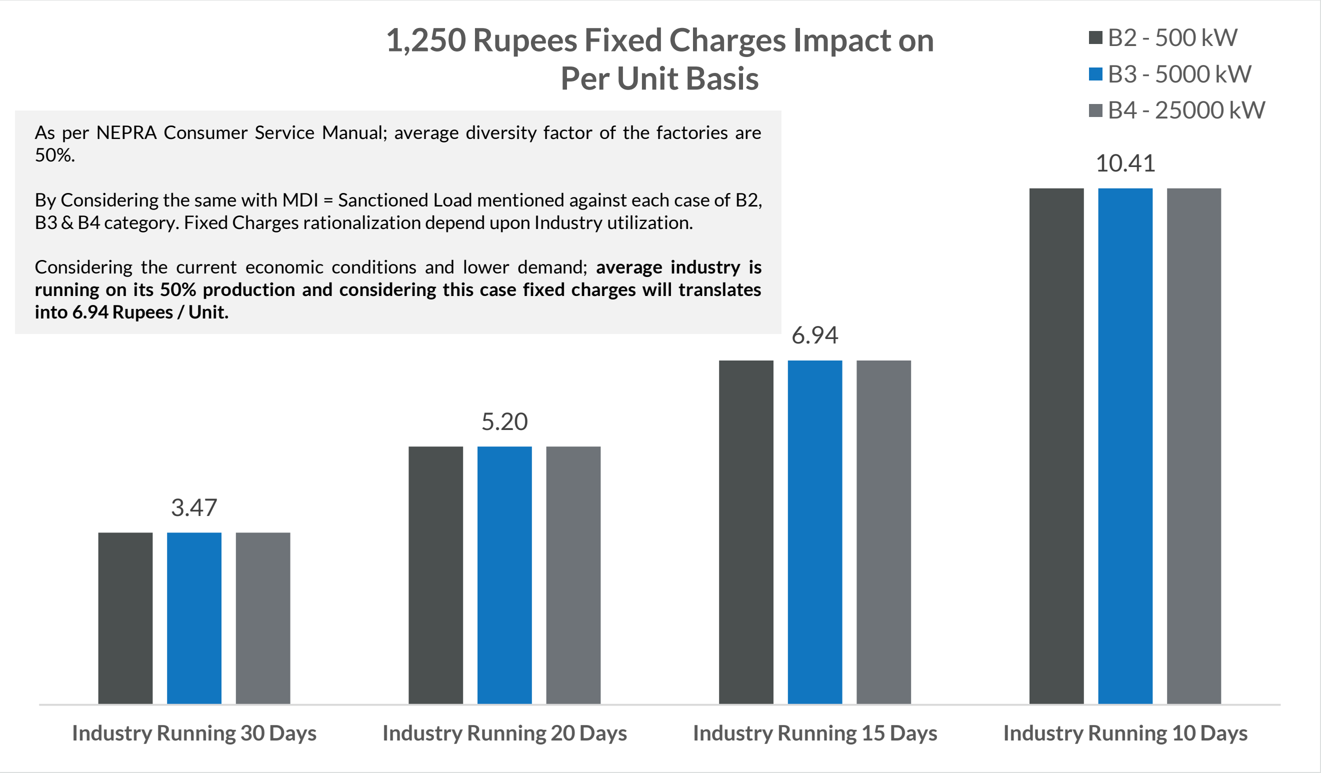
Fixed Cost Rationalization

- ✓ **Operational Schedule Analysis**: We analyze your operational schedule and energy usage to develop strategies for maximizing the utilization of fixed-cost energy inputs.
- ✓ **Operational Adjustments**: Recommend adjustments to spread fixed costs over a larger production volume, improving cost efficiency.

Cost-Benefit Analysis of Energy Investments

- ➢ **Investment Analysis:** Perform a cost-benefit analysis of potential energy investments, such as installing more efficient machinery or expanding renewable energy capacity.
- ➢ **Investment Recommendations:** Provide recommendations on the best investments to reduce long-term energy costs.

FIXED CHARGES – TWO PART TARIFF



As per NEPRA Consumer Service Manual; average diversity factor of the factories are 50%.

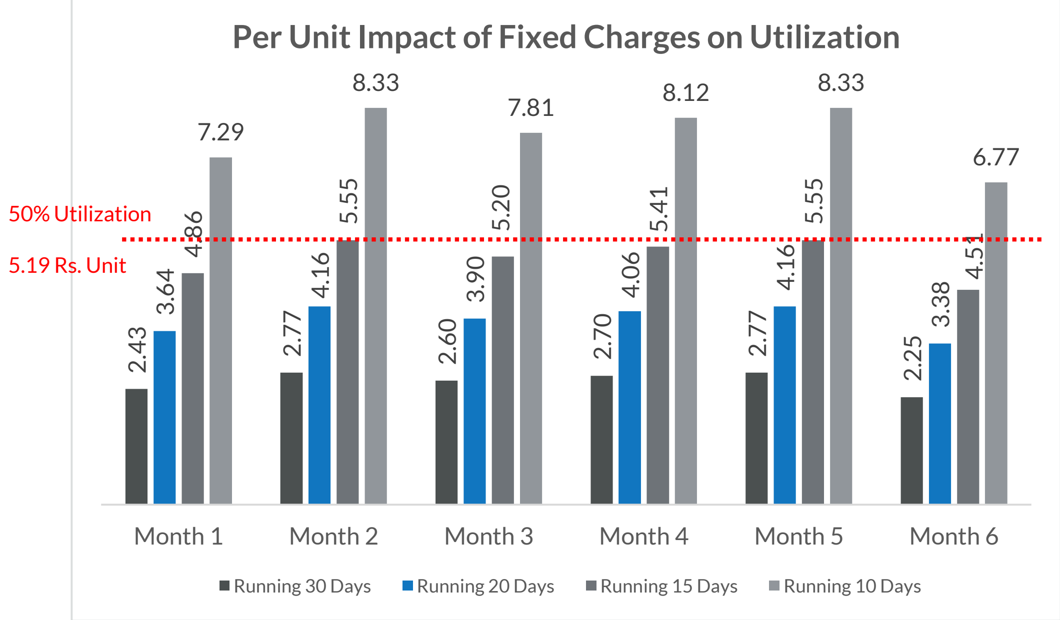
By Considering the same with MDI = Sanctioned Load mentioned against each case of B2, B3 & B4 category. Fixed Charges rationalization depend upon Industry utilization.

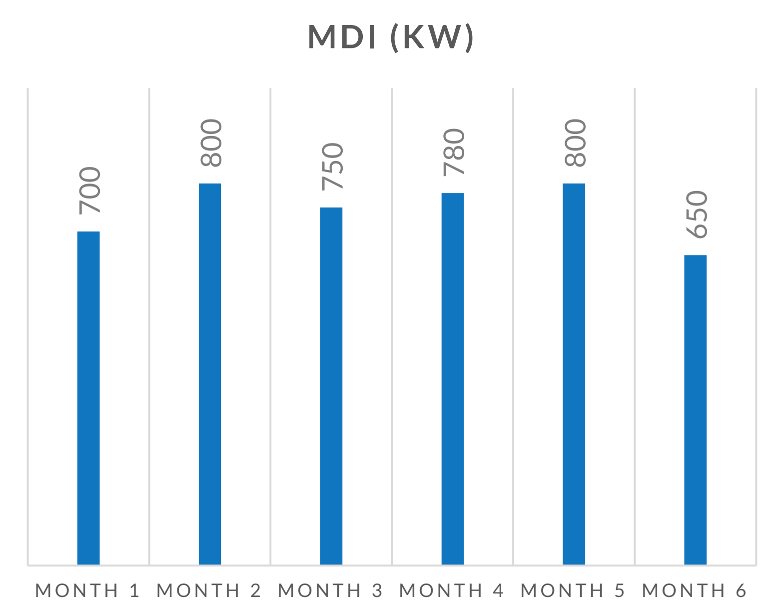
Considering the current economic conditions and lower demand; **average industry is running on its 50% production and considering this case fixed charges will translates into 6.94 Rupees / Unit.**

From the chart, it is evident that fixed charges can be optimized through strategic operational planning and effective control of Maximum Demand. By conducting thorough operational and tariff analysis, these charges can be reduced to as low as 3.5 Rupees per month, with the following slide demonstrating an even lower potential of 2.5 Rupees per month.

FIXED CHARGES BILLING SCENARIO 1

- Consider an Industry having Sanctioned Load of 1,000 kW. Diversity Factor Considered for energy calculations is 50%.
- Following chart is showing impact of new fixed charges on different months with different established MDI (Maximum Demand Indicator) and different utilization of Industry as per Market Demand.
- Running 15 Days a Month or on half of the production capacity is usual scenario now these days, which will have avg impact of 5.19 Rupees / Unit.





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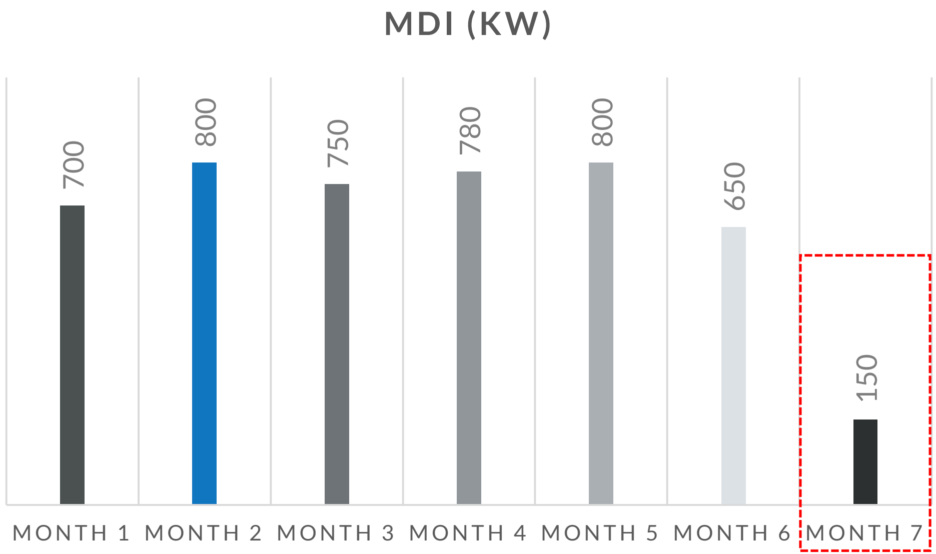
FIXED CHARGES BILLING SCENARIO 2

- Consider an Industry having Sanctioned Load of 1,000 kW. After Six Months, Maximum Demand Recorded so far will be considered as Sanctioned Load i.e. 800 kW in this case.
- On the 7 month, Industry is under shutdown due to no order / demand from market.
- Recorded MDI is 150 kW from usual auxiliary load. Auxiliary Energy consumed considered as 24,000 Units.
- Fixed Charges will be considered on suggested Billing Demand Definition - 25% of the Sanction Load or Actual Maximum Demand recorded in a month, whichever is higher.



Industry Shutdown In 7th Month

Fixed Charges Bill in 7th Month

Fixed Charges = 1,250 Rupees x (800 kW x 25%)
Fixed Charges = 250,000 PKR

Per Unit Impact of Fixed Charges = 10.42 Rupees/Unit

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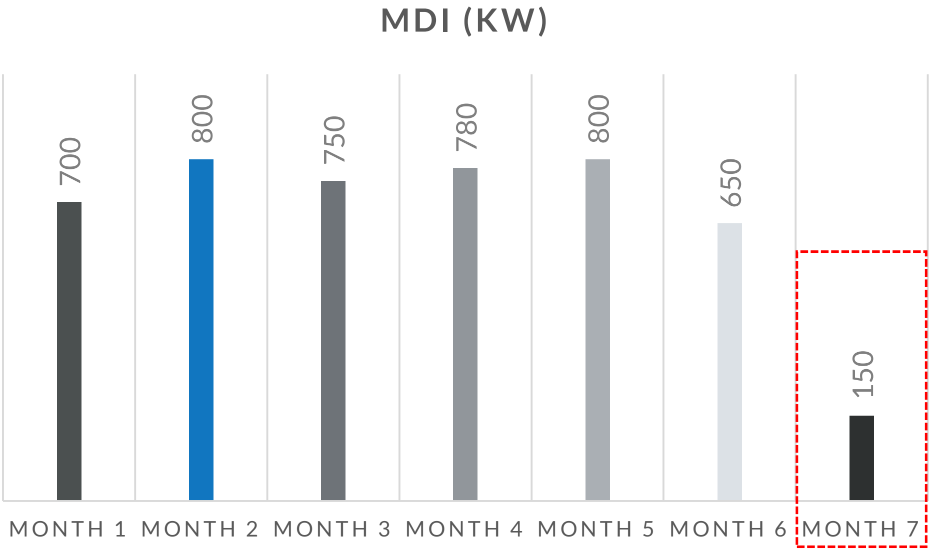
FIXED CHARGES BILLING SCENARIO 3

- Consider an Industry having Sanctioned Load of 1,000 kW. If the Industry is using **Captive or Alternate Resources** as well, its Sanctioned Load will remain the same i.e. 1,000 kW in this case.
- On the 7 month, Industry is under shutdown due to no order / demand from market.
- Recorded MDI is 150 kW from usual auxiliary load. Auxiliary Energy consumed considered 24,000 Units.
- Fixed Charges will be considered on suggested Billing Demand Definition - 25% of the Sanction Load or Actual Maximum Demand recorded in a month, whichever is higher.



Industry Shutdown In 7th Month

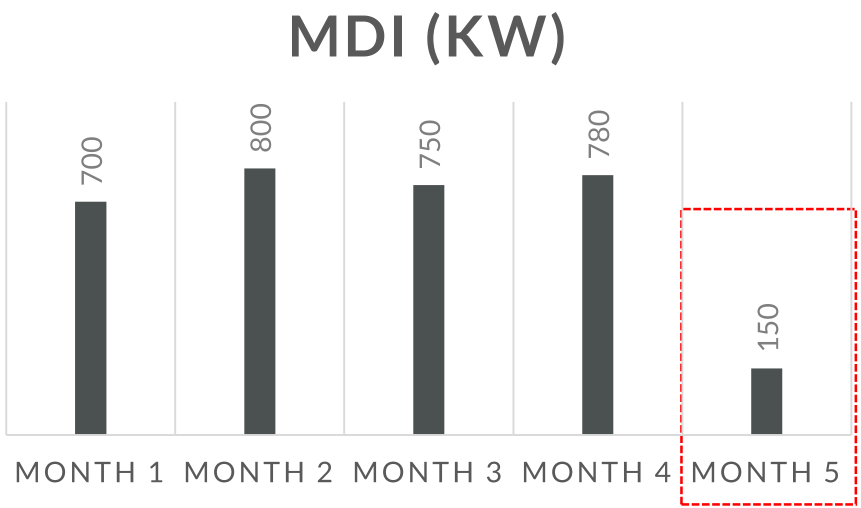
Fixed Charges Bill in 7th Month

Fixed Charges = 1,250 Rupees x (1,000 kW x 25%)
Fixed Charges = 312,500 PKR

Per Unit Impact of Fixed Charges = 13.02 Rupees/Unit

FIXED CHARGES BILLING SCENARIO 4

- Consider a new Industry having Sanctioned Load of 1,000 kW. And it has not crossed six months to establish its sanctioned load as per Maximum Demand. So its Sanctioned Load will be considered as i.e. 1,000 kW in this case.
- On the 5 month, Industry is under shutdown due to no order / demand from market.
- Recorded MDI is 150 kW from usual auxiliary load. Auxiliary Energy consumed considered 24,000 Units.
- Fixed Charges will be considered on Billing Demand Definition - 25% of the Sanction Load or Actual Maximum Demand recorded in a month, whichever is higher.



Industry Shutdown In 5th Month

Fixed Charges Bill in 5th Month

Fixed Charges = 1,250 Rupees x (1,000 kW x 25%)
Fixed Charges = 312,500 PKR

Per Unit Impact of Fixed Charges = 13.02 Rupees/Unit

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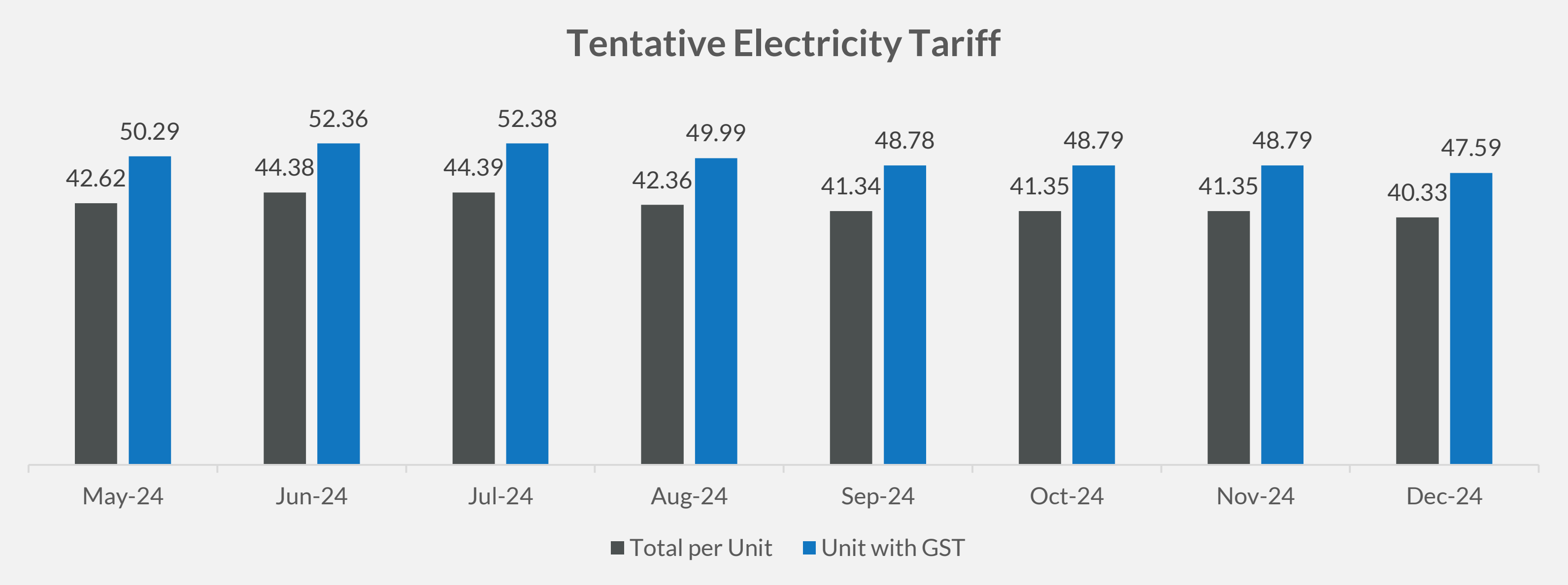
FIXED CHARGES BENEFIT IN BILLS

- ✓ Increased fixed charges collection will have a positive impact on quarterly adjustments.
- ✓ This may result in lower tariffs from December 2024 or January 2025, once the final quarterly adjustments for the last fiscal year are completed.
- ✓ These calculations assume a 70% utilization of certain fixed charges, approximately 4 Rupees per kWh.
- ✓ KE consumers will have to pay an extra 1.52 PKR surcharge, which is not considered in this illustration and will end in November 2024.



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*If the rupee devalues by more than 300 rupees against the dollar starting from January, it will lead to an increase in quarterly adjustments.

ANALYSIS OF INCREASED FIXED CHARGES

All data taken from NEPRA State of Industry Report 2023 & Presentation of Power Division for this year Tariff

- ✓ Do you know Total Peak Demand of all Distribution Companies recorded last year is **33,885 MW** but total sanctioned load to all different categories of consumers are **104,637 *MW***
- ✓ So potential of collection of amount on sanctioned load is almost 3 times the maximum demand of DISCOs that translated into generation requirement, that is due to diversity factor.
- ✓ **The total sanctioned load for Bulk Supply and Industrial consumers across all distribution companies is 24,112 MW. Assuming a collection rate of 1,250 PKR per kW per month on 60% of this load, this translates into 18 Billion PKR monthly.**
- ✓ Although we did not have complete segregated data of sanctioned load and number of customers in each category; but tentative total collection of fixed charges have potential of 32 Billion PKR Monthly; which is almost 16.8% of Total Capacity Cost of PPP

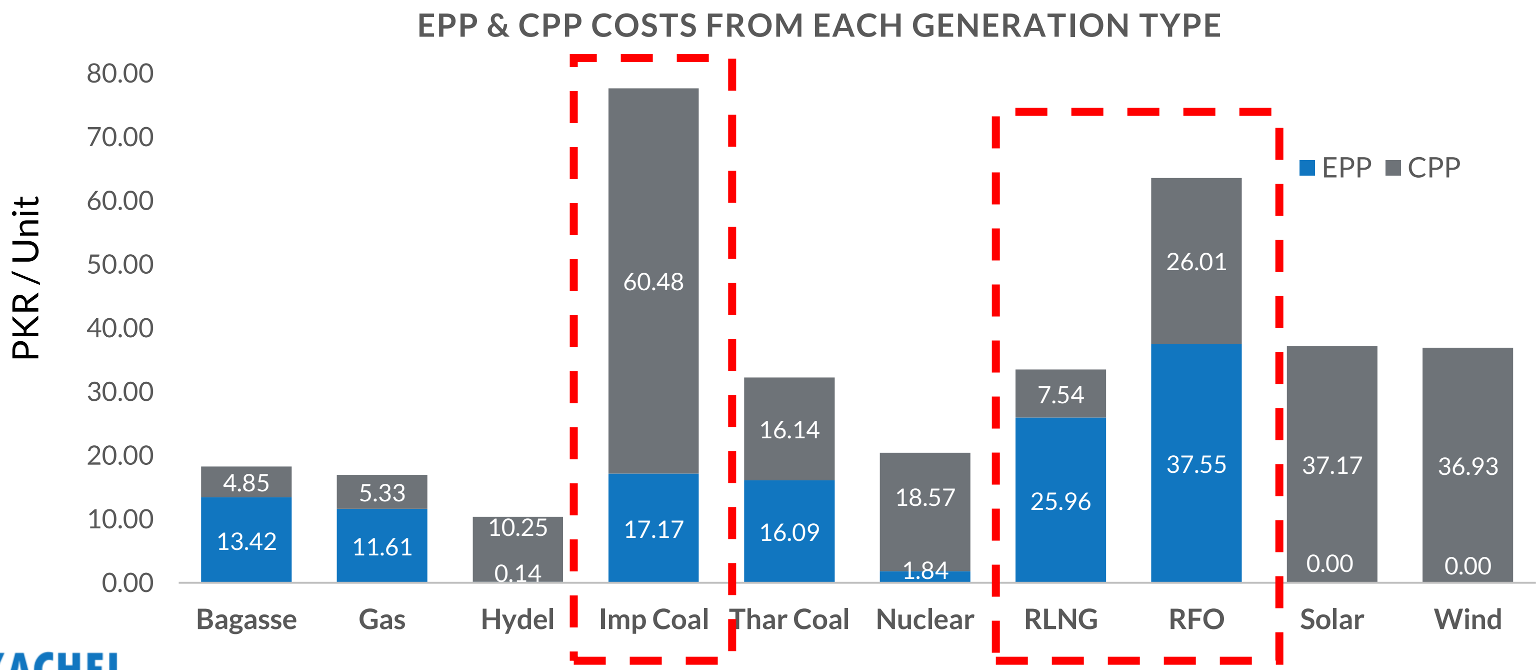
Industries and consumers need relief in electricity bills!!

How will government lower the capacity impact and reduce the tariff?

See in next slides

HOW TO LOWER IMPACT OF CAPACITY CHARGES

From the NEPRA Approved PPP for FY 24-25 it is clear that **Imported Coal, RLNG, RFO and HSD** Plants are under utilized and their capacities are free. HSD plants are even not considered for Dispatch.
These plants capacities shall be auctioned for the consumers in open market by implementation of CTBCM market.
By this way impact can be reduced on regulated consumers.



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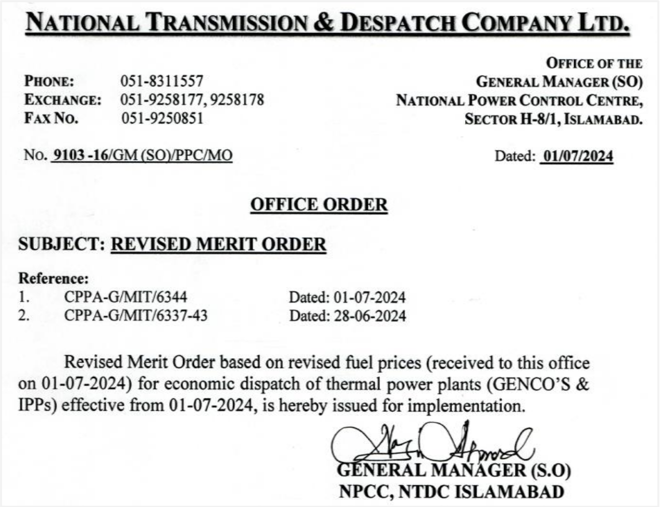
HOW TO LOWER IMPACT OF CAPACITY CHARGES

- ✓ Average basket marginal cost (Fuel + Variable O&M Cost) is 9.39 Rupees / kWh.
- ✓ If there higher marginal cost plants exit from National Grid. It will help to reduce burden on regulated consumers.
- ✓ Plants with specific costs above 34 Rupees per unit, primarily those operating on RFO, RLNG, and HSD, are mostly set to retire in the near future. These plants should be allowed to participate in the open market.
- ✓ For national grid obligations, peak hour monthly auctions should be conducted, with the lowest bidders being accepted on a take-and-pay basis.
- ✓ **Its responsibility of Market Operator (MO) i.e. CPPA to move forward and plan to start auctioning of extra idle capacity market to lower burden on regulated consumers.**
- ✓ Power Division and other decision makers can take decision on Marginal Prices of Power Plants, for e.g.:
  - ✓ **Less than 12 Rupees/Unit:** Capacity remains in the National Grid Pool.
  - ✓ **Between 13 to 34 Rupees/Unit:** Partial auction for wheeling is allowed, applicable to most plants using imported coal and RLNG.
  - ✓ **Above 34 Rupees/Unit:** As most of these plants are nearing retirement, their PPAs will be terminated. These plants will transition to a "Take & Pay" basis and be allowed to directly participate in the market.

POWER PLANTS
MERIT ORDER LIST 01-JULY-2024



NATIONAL TRANSMISSION & DESPATCH COMPANY LTD.

PHONE: 051-8311557
EXCHANGE: 051-9258177, 9258178
FAX NO. 051-9250851

OFFICE OF THE
GENERAL MANAGER (SO)
NATIONAL POWER CONTROL CENTRE,
SECTOR H-8/1, ISLAMABAD.

No. 9103-16/GM (SO)/PPC/MO

Dated: 01/07/2024

OFFICE ORDER

SUBJECT: REVISED MERIT ORDER

Reference:
1. CPPA-G/MIT/6344 Dated: 01-07-2024
2. CPPA-G/MIT/6337-43 Dated: 28-06-2024

Revised Merit Order based on revised fuel prices (received to this office on 01-07-2024) for economic dispatch of thermal power plants (GENCO'S & IPPs) effective from 01-07-2024, is hereby issued for implementation.

GENERAL MANAGER (S.O)
NPCC, NTDC ISLAMABAD

INDUSTRIAL TARIFF FROM 1ST JULY 2024

Sr. No.	Tariff Category	Existing		Approved from 1st July 2024			Percentage Increase / Decrease in Variable Charges	Increase in Fixed Charges
		Fixed Charges (Rs./kW/Month)	Variable Charges (Rs./kWh)	Fixed Charges (Rs./Connec/Month)	Fixed Charges (Rs./kW/Month)	Variable Charges (Rs./kWh)		
B	Industrial Tariff							
B1	Upto 25 kW (at 400/230 volts)	--	34.33	1000	--	31.95	-7%	Introduction of Flat 1000 Rs. per Connection
	TOU - Peak	--	37.89	1000	--	37.89	0%	
	TOU - Off Peak	--	32.33		--	31.20	-3%	
B2	25-500 kW (at 400 Volts)	500	33.83	--	1250	31.88	-6%	150% Increase
	TOU - Peak	500	37.83	--	1250	37.83	0%	150% Increase
	TOU - Off Peak		32.12			28.56	-11%	
B3	For all Loads upto 5000 kW (at 11 kV)	460	34.55		1250	32.15	-7%	172% Increase
	TOU - Peak	460	37.83	--	1250	37.83	0%	172% Increase
	TOU - Off Peak		32.03	--		29.39	-8%	
B4	For all Loads at 132 kV	440	34.05	--	1250	31.58	-7%	184% Increase
	TOU - Peak	440	37.83	--	1250	37.83	0%	184% Increase
	TOU - Off Peak		31.93	--		29.11	-9%	

Fixed Charges

NEPRA Determined

2000 PKR / kW / Month

Min application on 50% Sanctioned Load

Approved

1250 PKR / kW / Month

Min application on 25% Sanctioned Load

RESIDENTIAL & COMMERCIAL TARIFF FROM 1ST JULY 2024

For 3 months July 2024 till September 2024, Residential Consumers having consumption 1-100 Unit & 101-200 Units will be charged lower rates of 7.74 & 10.06 PKR/Unit respectively for protected category and 16.48 & 22.95 PKR/Unit respectively for unprotected category.

Sr. No.	Tariff Category	Existing		Approved from 1st July 2024			Percentage Increase / Decrease in Variable Charges	Increase in Fixed Charges
		Fixed Charges (Rs./kW/Month)	Variable Charges (Rs./kWh)	Fixed Charges (Rs./Connec/Month)	Fixed Charges (Rs./kW/Month)	Variable Charges (Rs./kWh)		
A-1	**Residential Tariff**							
a)	For Sanctioned Load less than 5 KW							
1	Upto 50 Units – Lifeline	--	3.95		--	3.95	0%	
2	51-100 Units - Lifeline	--	7.74		--	7.74	0%	
3	001 - 100 Units - Protected	--	7.74		--	11.69	51%	
4	101 - 200 Units - Protected	--	10.06		--	14.16	41%	
	Residential Un Protected							
5	001 - 100 Units	--	16.48		--	23.59	43%	
6	101 - 200 Units	--	22.95		--	30.07	31%	
7	201 - 300 Units	--	27.14		--	34.26	26%	
8	301 - 400 Units	--	32.03	200	--	39.15	22%	200 Rupees Flat
9	401 - 500 Units	--	35.24	400	--	41.36	17%	400 Rupees Flat
10	501 - 600 Units	--	36.66	600	--	42.78	17%	600 Rupees Flat
11	601 - 700 Units	--	37.8	800	--	43.92	16%	800 Rupees Flat
12	Above 700 Units	--	42.72	1000	--	48.84	14%	1000 Rupees Flat
b)	**For Sanctioned Load 5 kW & above**							
	TOU - Peak	--	41.89	1000	--	48.00	15%	1000 Rupees Flat per Connection
	TOU - Off Peak	--	35.57		--	41.68	17%	
A-2	**Commercial Tariff**							
1	For Sanctioned Load less than 5 KW	--	37.75	1000	--	38.59	2%	1000 Rupees Flat
2	For Sanctioned Load 5 kW & above	500	39.43		1250	40.91	4%	150% Increase
	TOU - Peak	500	41.35	--	1250	44.97	9%	150% Increase
	TOU - Off Peak		35.38	--		36.30	3%	

BULK SUPPLY & AGRICULTURE TARIFF FROM 1ST JULY 2024

Sr. No.	Tariff Category	Existing		Approved from 1st July 2024			Percentage Increase / Decrease in Variable Charges	Increase in Fixed Charges
		Fixed Charges (Rs./kW/Month)	Variable Charges (Rs./kWh)	Fixed Charges (Rs./Connec/Month)	Fixed Charges (Rs./kW/Month)	Variable Charges (Rs./kWh)		
C	Bulk Supply Tariff							
C1	For Supply at 400/230 Volts							
a)	For Sanctioned Load less than 5 kW	--	38.43	2000		44.55	16%	Flat 2000 Rs. per Connection
b)	For Sanctioned Load 5 kW and upto 500 kW	500	37.93	--	1250	41.78	10%	150% Increase
	TOU - Peak	500	41.35	--	1250	47.47	15%	150% Increase
	TOU - Off Peak		34.75	--		38.70	11%	
C2	For Supply at 11 kV & 5000 kW	460	37.73	--	1250	41.72	11%	172% Increase
	TOU - Peak	460	41.35	--	1250	47.47	15%	172% Increase
	TOU - Off Peak		34.55			37.18	8%	
C3	For Supply 132kV and above	440	37.63		1250	41.92	11%	184% Increase
	TOU - Peak	440	41.35	--	1250	47.47	15%	184% Increase
	TOU - Off Peak		34.45	--		36.91	7%	
D	Agriculture Tariff							
D1	For all loads	200	24.1	--	400	30.05	25%	100% Increase
D2	For all loads - Time of Use							
	TOU - Peak	200	24.1	--	400	30.69	27%	100% Increase
	TOU - Off Peak		24.1	--		29.85	24%	

PREPAID TARIFF FROM 1ST JULY 2024

For the first time in Pakistan, Regulator has introduced Prepaid Tariff

NEPRA Order Extract: To promote the pre-paid metering, the Authority has decided to allow a flat variable rate (Rs./kWh) for pre-paid consumers along-with fixed charges, as mentioned in the SoT attached with the instant decision. No monthly FCAs or quarterly adjustments shall be charged from the pre-paid metering consumers. However, regarding applicable Federal and Provincial taxes, duties or surcharges, DISCO shall ensure to recover the same from pre-paid metering consumers, as the same are not part of NEPRA determined tariffs.

Sr. No.	Tariff Category	Approved from 1st July 2024		
		Fixed Charges (Rs./Connec/Month)	Fixed Charges (Rs./kW/Month)	Variable Charges (Rs./kWh)
	Pre-Paid Supply Tariff			
1	Residential	1000	--	49.98
2	Commercial - A2	--	1250	47.10
3	General Services - A3	1000	--	51.30
4	Industrial	--	1250	44.46
5	Single Point Supply	--	1250	54.85
6	Agriculture Tubewells - Tariff D	--	400	37.36

TARIFF RATIONALIZATION – BULK & INDUSTRIAL CONSUMERS

Why tariffs at different Voltage levels should be different ??

Because of different infrastructure costs, less losses on higher voltages and O&M costs.

Network UoSC

Use of System Charges

X RS/KWH

Y RS/KWH

Z RS/KWH

400 V DISCOs

11 kV DISCOs

CHARGES TO MAINTAIN 11KV NETWORK

Customers taking supply at 11kV have to pay X+Y+Z rupees per unit

132 KV DISCOs

CHARGES TO MAINTAIN 132KV NETWORK

Customers taking supply at 132kV have to pay X+Y rupees per unit

220 KV NTDC

CHARGES OF NTDC + MO + SO

Customers taking supply at 220kV have to pay X rupees per unit

Same goes for % of Losses

220 kV Losses < 132 kV Losses < 11 kV Losses

The addition of X+Y+Z is a simplified illustration for the common consumer. Actual calculations vary based on the real flow of electrons, losses at each level, and other influencing factors.

TARIFF RATIONALIZATION – BULK & INDUSTRIAL CONSUMERS

Type of Connection	Description of Connection	Suggestions
400 Volts – Low Voltage B2 – Industrial Consumers	Consumers are connected to Low Voltage and all O&M till PMT (transformer) and losses shall be on DISCOs Part	In all countries, including neighboring India and Bangladesh, higher voltage tariffs are substantially lower than low and medium voltage tariffs.
11 kV – Medium Voltage B3 – Industrial Consumers C2 – Bulk Consumers	Consumer will maintain its Sub Station and bear all O&M expenses. Consumer bear all medium (11kV) and low voltage wire losses internally.	To incentivize customers to invest in substations and 11kV equipment, the tariff should be lower from Low voltage consumers. Although specific distribution loss segregation for medium voltage (MV) and low voltage (LV) is not provided, and LV incurs the most losses, assuming a 40% share of MV in losses, *the tariff for B3 & C2 should be approximately 2 to 2.5 PKR per unit lower than that for Low Voltage Consumers.*
132 kV – High Voltage B4 – Industrial Consumers C3 – Bulk Consumers	Consumer will maintain its own Grid Station and bear all O&M expenses. Consumer bear all (132kV) Power Transformer and (11kV) medium and low voltage wire losses internally.	To incentivize customers to invest in grid stations and 132/11kV equipment, the tariff for High Voltage Users should be lower than those for Medium and Lower Voltage. The O&M costs of DISCOs and the impact of 11% distribution losses should be subtracted. *Analysis indicates that the B4, C3 tariff should be 4 to 5 PKR per unit lower than the other consumers.*

WHAT WE DO

Our team at Arzachel can help transform your project idea into a well-defined project layout, meticulously assessing various realization concepts. We conduct thorough investigations into the technical feasibility and financial viability of projects, laying the groundwork for potential project funding commitments.

Studies and Expert Appraisals

ENERGY MARKET ANALYSES

Comprehensive insights and research to identify market trends and opportunities, particularly focusing on CTBCM, to support informed decision-making.

FEASIBILITY STUDIES

Rigorous assessments of project viability, considering technical, economic, and logistical aspects to determine potential success.

POWER PURCHASE AGREEMENTS PPA ADVISORY SERVICES

A comprehensive range of Power Purchase Agreement (PPA/EPA) advisory services tailored to meet diverse client needs.

POWER PLANTS TARIFF STUDIES

We specialize in comprehensive tariff studies for power plants, with a focus on integrating renewable energy sources to optimize cost-efficiency, ensure regulatory compliance, and provide market-driven insights for informed decision-making.

TECHNO-ECONOMIC ANALYSES

Detailed evaluations of the technical and economic aspects of projects, providing a holistic understanding of their feasibility and profitability

ELECTRIC GRID, TRANSMISSION AND DISTRIBUTION INFRASTRUCTURE DESIGN

Comprehensive planning, design, and engineering of electric grid systems, including high-voltage transmission lines, substations, and robust distribution networks, to ensure efficient and reliable power delivery to end-users.

ABOUT US

At Arzachel, we are passionate team of experienced industry professionals with the vision to provide top-notch consultancy services to various industries. Our team has a diverse range of project experience in the power sector, having worked with top organizations such as NTDC, KE, WAPDA, DISCOs, SEC, DEWA, etc. We have also undertaken a number of industry and renewable energy projects. Our team of experts bring a wealth of knowledge and hands-on experience in the fields of power generation, transmission and distribution, renewable energy, project management, and energy market services. We are committed to provide innovative and effective solutions to our clients' most complex challenges, while maintaining the highest standards of quality and professionalism. With a proven track record of successful project delivery, we strive to exceed our clients' expectations and deliver value that makes a difference.

Our company name, "Arzachel," is a tribute to the renowned astronomer and astrologer from the Islamic Golden Age, al-Zarqālī, whose Latinized name was "Arzachel." Our name reflects the symbol of expertise and ingenuity of our ancestors, who were known for their ability to provide insightful solutions in their field. At Arzachel, we strive to embody those same qualities in our work, providing innovative and effective solutions to our clients' most complex challenges. By drawing inspiration from the past and leveraging modern technologies, we aim to continue the legacy of excellence that our name represents.

ARZACHEL

EMPOWERING YOUR ENERGY STRATEGY, TOGETHER.

ARZACHEL

Empowering Your Energy Strategy, Together

Contact us:

Arzachel Pvt. Ltd.

Pakistan: Ground Floor, Building # 57-C, Main 24th Commercial Street, Phase 2 Extension, DHA, Karachi.

info@arzachel.org

+92-313-1327000

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