



Registrar

National Electric Power Regulatory Authority Islamic Republic of Pakistan

NEPRA Tower, Attaturk Avenue (East), G-5/1, Islamabad
Ph: +92-51-9206500, Fax: +92-51-2600026
Web: www.nepra.org.pk, E-mail: registrar@nepra.org.pk

No. NEPRA/R/ADG(Tariff)TRF-100/EV/

5469-72

April 15, 2025

Subject: **DECISION OF THE AUTHORITY IN THE MATTER OF MOTION AND POLICY GUIDELINES FILED BY THE FEDERAL GOVERNMENT FOR RATIONALIZATION OF TARIFF FOR ELECTRIC VEHICLE CHARGING STATIONS (EVCS)**

Dear Sir,

Enclosed please find herewith the subject Decision of the Authority alongwith dissenting note of Mr. Rafique Ahmed Shaikh, Member (NEPRA) (total 09 Pages).

2. The Decision is being intimated to the Federal Government for the purpose of notification in the official Gazette pursuant to Section 31(7) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 within 30 days from the intimation of this Decision. In the event the Federal Government fails to notify the subject tariff Decision within the time period specified in Section 31(7), then the Authority shall notify the same in the official Gazette pursuant to Section 31(7) of NEPRA Act.

Enclosure: As above

Secretary,
Ministry of Energy (Power Division),
'A' Block, Pak Secretariat,
Islamabad

Wasim Anwar Bhinder
(Wasim Anwar Bhinder)

Copy to:

1. Secretary, Cabinet Division, Cabinet Secretariat, Islamabad
2. Secretary, Ministry of Finance, 'Q' Block, Pak Secretariat, Islamabad
3. Chief Executive Officer, Central Power Purchasing Agency Guarantee Limited (CPPA-G), Shaheen Plaza, 73-West, Fazl-e-Haq Road, Islamabad

National Electric Power Regulatory Authority
(NEPRA)

**DECISION OF THE AUTHORITY IN THE MATTER OF MOTION AND POLICY
GUIDELINES FILED BY THE FEDERAL GOVERNMENT FOR RATIONALIZATION OF
TARIFF FOR ELECTRIC VEHICLE CHARGING STATIONS (EVCS)**

Islamabad

March , 2025



Background

1. The Federal Government through its Motion dated 24.01.2025 conveyed Policy Guidelines for rationalization of Tariff for Electric Vehicle Charging Stations (EVCS). The general provisions of the Policy Guidelines are listed below;
 - a) Proposed rationalization of the base rate of Rs.23.57/kWh for EVCS to encourage the development of charging infrastructure to meet the EV policy target set by GoP by 2030. The difference between the proposed and existing base tariff will be managed through a cross-subsidy mechanism. All existing taxes and adjustments applicable will continue to apply to EVCS.
 - b) Removal of the capped margin of Rs. 24.44/kWh allowing the market to determine the margin for EVCS.
2. The Ministry in the Motion submitted that the global transition towards sustainable energy underscores the critical importance of advancing the adoption of electric vehicles (EVs). EVs represent a cleaner and more efficient mode of transportation, offering an opportunity to reduce reliance on imported fuels and mitigate environmental degradation. However, the growth of Pakistan's EV sector has been limited due to structural and financial constraints, including challenging economic conditions and high energy prices. The development of EV charging infrastructure is pivotal to realizing the sector's potential. Yet the current tariff structure presents significant impediments for both investors and consumers.
3. It also submitted that according to the Federal Government's SRO Nos. 1025-1035 (1)/2024 dated July 12, 2014 read with SRO 1039 (1)/2024 dated July 14, 2024, the tariff for Electric Vehicle Charging Stations (EVCS) falls under the commercial category, with a base rate of Rs.45.55/kWh. This base rate includes a cross-subsidy of approximately Rs.10/kWh and after the application of around 43% taxes and further adjustments, the effective final tariff is approximately Rs.71/kWh.
4. The Ministry further stated that NEPRA has determined a margin of Rs.24.44/kWh for EVCS. As a result, the maximum tariff for EV charging has been set at approximately Rs.95/kWh, which is currently being charged to users. While this rate provides notable savings for EV users compared to conventional fuels, it does not offer a sustainable Return on Investment (ROI) for charging station operators. The resulting negative internal rates of return (IRR) discourage potential investors, hindering the development and expansion of charging infrastructure. Considering the above, the Federal Government approved the tariff reduction for EVCS and it was decided that policy guidelines be issued to NEPRA for approval and incorporation of proposed initiative in the regulatory framework.
5. In light of the above, a Motion has been filed by the Federal Government pursuant to Sections 7 and 31 of the Act, read with Rule 17 of the NEPRA (Tariff Standards and Procedure) Rules, requesting that the proposed amendments be incorporated into the respective schedules of tariffs and terms and conditions, accordingly.
6. Since the impact of any such decision is to be made part of the consumer end tariff, therefore, the Authority, in order to provide an opportunity of hearing to all the concerned and in the interest of natural justice, decided to conduct a hearing in the matter.



Notu. S

7. The hearing was scheduled on 12.02.2025 at NEPRA tower and through ZOOM, for which notice of hearing / advertisement was published in newspapers on 01.02.2025 and also uploaded on NEPRA website. Individual notices were also served to the relevant stakeholders.
8. During the hearing, the MoE was represented by Additional Secretary MoE along-with his technical and financial team. Other participants included MD NEECA, M/s HUBCO Green, M/s Attock Petroleum, Arzachel Consultants, Mr. Arif Bilvani, and representatives of Media and General Public.
9. The MoE reiterated its submissions by stating that existing tariff of EVCS and the margin cap determined by the Authority, does not offer a sustainable Return for the EVCS, thus, hindering the development and expansion of charging infrastructure. The Ministry presented the following in this regard;

Sensitivity Analysis - EV Charging Stations		160 KW DCFC Charger	AC 11 kW (L2) Charger High Utilization	Swapping Station 2 Wheeler	Swapping Station 3 Wheeler
CAPEX incl. Infrastructure	Min. PKR	19.0	0.6	2.7	7.6
OPEX	Min. PKR/Year	8.1	2.7	2.8	4.0
Base Rate (QTA+DSS)	PKR	48.78	48.78	48.78	48.78
Taxes	%	43%	43%	43%	43%
Electricity Price for Station (Inc. Taxes)	Rs/kWh	70	70	70	70
EV Charging Margin	Rs/kWh	24	24	24	24
Electricity Price for Consumer	Rs/kWh	94	94	94	94
Discounted Payback	Yrs	8.3	NA	NA	NA
IRR	%	2%	Negative	Negative	Negative
Consumer Savings	%	23%	25%	73%	52%

10. The Ministry also submitted that at present, tariff for EVCS after including taxes/surcharges/QTAs, comes around Rs.94/kWh and EVCS sales has been recorded as 55,000 kWh for the FY 2024, as given below;

Tariff	Unit	Current Scenario
Base Tariff	Rs/kWh	45.55
Base Tariff (Inc. Adjustments)*	Rs/kWh	48.78
Taxes	(%)	43%
Margin (Regulated)	Rs/kWh	24.44
Final Rate	Rs/kWh	94

11. The Ministry also presented the following consumer savings in terms of Gasoline vs EVs;



Mali

Gasoline vs EV - Consumer Savings

	2-Wheeler		3-Wheeler	
	Level- 1	Gasoline	Level- 1	Gasoline
Expense (Rs/km)	2.1	7.7	5.9	12.1
Total Expense (Rs/Full Tank)	925	3,401	3,291	3,401
Saving w.r.t gasoline	2,477	-	3,509	-
% Savings	73%	-	52%	-

	Car				
	Level- 1	Level- 2	Level- 3	Gasoline (small car)	Gasoline (Big Car)
Expense (Rs/km)	6.1	19.0	19.0	14	25
Total Expense (Rs/Full Tank)	3,112	11,293	11,293	7,290	14,580
Saving w.r.t gasoline	4,178	3,287	3,287	-	-
% Savings	64%	25%	23%	-	-

*Electricity Prices for Level-1 and Level-2/3 has been assumed as 65 Rs/unit and 94 Rs/unit respectively

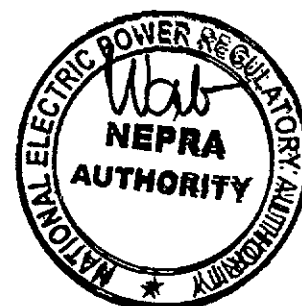
12. The Ministry submitted that existing rate and capping of margin, has not yielded any investment during past three years, however, the proposed scenario, would be a win win situation for both consumers as well as investors as given below;

Sensitivity Analysis - EV Charging Stations		160 KW DCFC Charger	AC 11 kW (L2) Charger High Utilization	Swapping Station 2 Wheeler	Swapping Station 3 Wheeler
CAPEX Incl. Infrastructure	Mln. PKR	19.0	0.6	2.7	7.6
OPEX	Mln. PKR/Year	5.9	1.8	2.0	2.6
Base Rate (QTA+DSS)	PKR	26.8	26.8	26.8	26.8
Taxes	%	43%	43%	43%	43%
Electricity Price for Station (Inc. Taxes)	Rs/kWh	38.2	38.2	38.2	38.2
EV Charging Margin	Rs/kWh	39	29	74	94
Electricity Price for Consumer	Rs/kWh	78	68	113	133
Discounted Payback	Yrs	3.8	4.5	3.9	3.2
IRR	%	22%	22%	21%	21%
Consumer Savings	%	37%	49%	67%	32%

13. The Ministry further stated that the proposed revised rate may result in increased sales for the EVCS, which would eventually lead to reduction in overall tariff by around Rs.0.07/kWh, in addition to savings in fuel import and CO2 emissions.

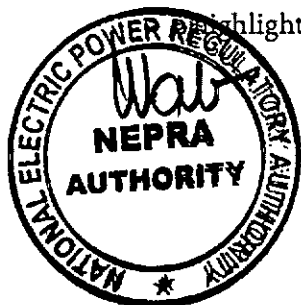
Total Projected Sales	GWh	814
Gross Subsidy	Bln. PKR	9.85
	Rs/kWh	22.0
Incremental Sales Impact	Rs/kWh	0.18
Gross subsidy on other consumers	Rs/kWh	0.11
Net Impact	Rs/kWh	0.07

- 645 Mln. USD per annum savings in terms of fuel Import
- 1,613 Mln. Kg per annum savings in terms of CO₂ Emissions.



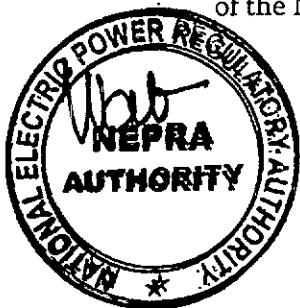
Math' 7

14. The MoE accordingly requested for rationalization of the base rate of EVCS to PKR 23.57/kWh. The difference between the proposed and existing base tariff will be managed through a cross-subsidy mechanism and all existing taxes and adjustments will continue to apply to EVCS. The MoE also reiterated its request for removal of the capped margin of Rs.24.44/kWh, allowing market to determine the margin for EVCS. It also requested that the proposed amendments be incorporated into the respective schedules of tariffs and terms and conditions accordingly.
15. While responding to the queries of the Authority regarding role of NEECA in the establishment of EVCS and monopolistic behaviors of the investors, MD NEECA explained that NEECA would act as a facilitator for establishment of EVCS in terms of time frame and interaction with DISCOs. On the issue of monopolistic behavior, it was explained that NEECA Electric Vehicles Charging Infrastructure Regulations have been established to regulate and promote Electric Vehicle Charging Stations (EVCS) and Battery Swapping Stations (BSS) across Pakistan. NEECA, as the governing authority, will oversee installation, inspection, and enforcement activities to ensure compliance. The regulations aim to encourage the adoption of electric vehicles by streamlining processes and fostering a supportive ecosystem, through one-window operation for ease of business. It was also highlighted that there are several things in the Regulation which addresses such concerns e.g. it would be ensured that information provided by EVCS in not asymmetry and each EVCS would have to ensure internet connectivity for 90% of the time. EVCS would be required to communicate real time rates that are being charged from the EV users and would also have a mechanism for advance reservations by EV users. It was also submitted that presently market is open and the goal is to incentivize the investors for maximum installation of EVCS. However, there would always be limitations in terms of space, and load management, therefore, the sweetest spot would be availed by the investor at higher price and lesser sweet spot would be left for others, and this is how the market works. Any monopolistic behavior in initial stages would also be an incentive for the installation of EVCS. MD NEECA further stated that for the purpose of scrutiny of application, a committee has been formulated with representation from concerned DISCO/ Electric Power Supplier and District Administration etc. The committee shall within fifteen (15) working days ascertain whether; the application is complete and if so, "Certificate of Registration" will be issued accordingly.
16. While responding to the query of the Authority, the MoE submitted that for EVCS, being a consumer of DISCO/ SOLR, rate needs to be determined by the Authority, however, the rate to be charged from EV user needs to be deregulated.
17. Various commentators raised their concerns during the hearing. Mr. Arif Bilvani submitted that the existing legal framework does not permit resale of electricity. It was also submitted that instead of adjusting the difference between the proposed and existing base tariff for EVCS through cross subsidy from Industrial, Commercial or Domestic consumers, the Federal Government should consider removal of taxes to lower EVCS rates. The MoE while responding to the points of Mr. Bilvani submitted that taxes collected by the Federal Government are utilized for providing subsidy to vulnerable consumers. It further stated that reduction in rates for EVCS would result in increased demand to 814 M kWhs, which would contribute to recovery of extra capacity charges, thus, effectively lowering consumer tariff.
18. M/s Arzachel Consultants, appreciated the efforts of the MoE for reduction in rates, but highlighted concerns regarding multiple NOCs from NEECA and approvals of equipment



Arif Bilvani

- specifications by NEECA as well as Electrical Inspector Directorate, which may result in more stoppage rather than facilitation. Therefore, the process needs to be more simplified.
19. M/s Attock Petroleum submitted that they are already operating various fuel stations, where separate transformers and other backup facilities are already available, for which required NOCs are already in place from the concerned Authorities. Therefore, it should be allowed to install EVCS on such sites by simply obtaining separate connection from DISCOs/ SoLRs, rather than obtaining any further NOCs, which may discourage investments. It was further highlighted that CAPEX for establishment of EVCS is around Rs.40-45 million, as against cost of Rs.19 million, shown in presentation, therefore, the Payback period & IRR as shown in presentation are correct.
 20. Mr. Naveed Ahmed representing HUBCO Green endorsed removal of cap on EVCS margin, to bring competition.
 21. On the concerns of Mr. Shahid ABN News, regarding waiting time for charging on highways, CPPA-G responded that EV consumer would have facility for advance booking of charging slot.
 22. The Authority has carefully considered the submissions made by the Federal Government in the Motion & during hearing and comments from the stakeholders. The Authority noted that the purpose of rationalization of tariff for EVCS, as highlighted by the Ministry, is to encourage development of charging infrastructure to meet EV policy target set by the GoP by 2030. The tariff rationalization, however, has been proposed through a cross-subsidy mechanism. The Authority observed that as per the applicable tariff for the FY 2024-25 vide decision dated 11.07.2024, subsequently modified vide decision dated 13.07.2024, rate for electricity supplied to EVCS by the DISCOs/ SoLRs is Rs.45.55/kWh and margin has been capped at Rs.24.44/kWh. While setting up the tariff for the FY 2024-25, total sales of 42,485 kWhs were projected for EVCS, thus, total revenue assumed from EVCS @ Rs.45.55/kWh, was estimated as Rs.1.935 million. As 09 months of the FY 2024-25 have already lapsed, therefore, the projected revenue for the remaining period of FY 2024-25 (approx.03 months), at existing rate of Rs.45.55/kWh, would be around Rs.0.484 million (=10,621 kWhs x Rs.45.55).
 23. By revising the rate downward to Rs.23.57/kWh, w.e.f. April 2025, the projected revenue would be around Rs.0.250 million, thus, there would be a shortfall of around Rs.0.233 million for the 03 months period of FY 2024-25. Based on projected sales of 29,668 GWhs for the remaining 03 months of FY 2024-25, the tariff impact works out as Rs.0.000008/kWh. In view thereof, the Authority does not see any reason not to allow revision of applicable tariff for EVCS. Accordingly, the applicable tariff for EVCS is hereby revised as Rs.23.57/kWh from the existing rate of Rs.45.55/kWh for the remaining period of FY 2024-25. All existing taxes & adjustments as applicable, will continue to apply to EVCS. For the FY 2025-26, the issue of cross subsidy would be discussed at the time of determination of uniform Tariff, considering its impact on other consumers.
 24. However, keeping in view negligible impact of this downward revision in rates, which shall not impact tariff of any other consumer category, the Authority does not see any justification to revise the Schedule of Tariffs for the FY 2024-25, determined vide decisions dated 14.06.2024 and 11.07.2024, subsequently modified vide decision dated 13.07.2024. Accordingly, the request of the Ministry to issue revise Schedules of Tariffs is not acceded to.



Matu JS 1

25. The Authority also noted that various commentators have raised concerns regarding requirement of multiple NOCs to setup EVCS. The Authority understands that in order to foster the development of charging infrastructure, the process for establishing EVCS needs to be simplified.
26. Regarding removal of capped margin for EVCS, the Authority understands that the same was introduced to prevent potential issues like cartelization and price manipulation during the early stages of EV infrastructure development. The intent was to protect consumers from excessive tariffs while still allowing for private sector competition, encouraging price reduction within a set ceiling. However, despite this approach, as mentioned by the Ministry of Energy (MoE), there hasn't been significant investment in the EVCS sector over the past years. This may suggest that the price cap might have been a factor limiting the incentives for investment, besides other factors, as also presented by the MoE during hearing. The Authority also noted that generally commentators supported removal of cap on EVCS margin, and endorsed that rate for EV users needs to be deregulated, to bring competition.
27. Accordingly, in light of the policy guidelines, submissions of the Federal Government, and comments of stakeholders, the Authority has decided to remove the cap in margin of EVCS, allowing the market to determine the margin for EVCS.
28. In view of the above discussions, the following amendments are made in the already determined / applicable schedule of tariff and terms and conditions of tariff determined vide decisions dated 14.06.2024 and 11.07.2024, subsequently modified vide decision dated 13.07.2024, and notified vide SRO dated 12.07.2024, subsequently modified vide SRO dated 14.07.2024;
- In Annex-II of each DISCO, issued vide decisions dated 14.06.2024 and 11.07.2024, the rate of Electric Vehicle Charging Stations (EVCS), under column **"Total Tariff-Variable Charge (Rs./kWh)"**, may be read as **Rs.23.57/kWh**.
 - In Annex-III of each DISCO, issued vide decisions dated 14.06.2024 and 11.07.2024, the rate of EVCS under column **"Total Variable Charge (Rs./kWh)"**, may be read as **Rs.23.57/kWh**.
 - In Annex-A, issued vide decisions dated 11.07.2024, rate of Electric Vehicle Charging Stations (EVCS) for **each DISCO along-with uniform national average determined variable tariff with PYA may be read as Rs.23.57/kWh**.
 - In Annex-A-I, issued vide decisions dated 11.07.2024 and 13.07.2024, rate of Electric Vehicle Charging Stations (EVCS) appearing under **"column C and E"**, may be read as **Rs.23.57/kWh**.
 - In Annex-B, issued vide decisions dated 11.07.2024, rate of Electric Vehicle Charging Stations (EVCS) for **each DISCO along-with uniform national average determined variable tariff with PYA may be read as Rs.23.57/kWh**.
 - In Annex-B-I, issued vide decisions dated 11.07.2024 and 13.07.2024, rate of Electric Vehicle Charging Stations (EVCS) appearing under **"column C and D"**, may be read as **Rs.23.57/kWh**.



Handwritten signature

- vii. In Annex-C, issued vide decision dated 11.07.2024, under column "NEPRA Determined (Jan-Mar. 23)-Variable Charge (Rs./kWh)", the rate for EVCS may be read as Rs.23.57/kWh.
- viii. In Annex-C, issued vide decision dated 11.07.2024, under column "Applicable Uniform Variable Tariff (Rs./kWh)-Oct. 2024 Onward", the rate for EVCS may be read as Rs.23.57/kWh.
- ix. Clause 3 under "A-2 Commercial" of Part-II of "Terms & Conditions of tariff" (Annex-V) of all XWDISCOs issued vide decision dated 14.06.2024, be replaced with following;
- ✓ The Electric Vehicle Charging Station (EVCS) shall provide "charging service" to Electric Vehicle as per the applicable tariff for EVCS. The EVCS shall be billed by DISCOS under A-2(d) tariff. However, monthly FCAs either positive or negative shall not be applicable on EVCS.
- x. Considering uniform tariff regime across the country, the aforementioned changes in the Terms & Conditions of tariff, shall also be applicable for K-Electric.
29. The instant decision is intimated to the Federal Government for notification in terms of Section 31(7) of the Act.

AUTHORITY

Mathar Niaz Rana (nsc)
Member

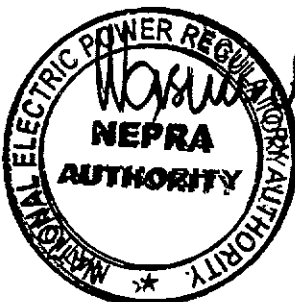
Rafique Ahmed Shaikh
Member

Engr. Maqsood Anwar Khan
Member

Amina Ahmed
Member

*The matter of cross subsidy
is addressed in para 23 of the
determination.*

Waseem Mukhtar
Chairman



Dissenting Note of Member (Technical)

Dissenting Opinion on the Majority Decision Regarding the Subsidized Tariff for Electric Vehicle (EV) Charging Stations

While I recognize the importance of promoting the adoption of electric vehicles (EVs) in Pakistan as part of our broader goal for sustainable energy, I must respectfully dissent from the majority decision to impose the financial burden of subsidizing EV charging stations on the general consumer base.

In my view, it is inequitable to shift the cost of incentivizing one sector onto all consumers, particularly when a significant portion of the population neither has access to nor the ability to utilize EV technology. Subsidies should be funded through mechanisms that do not impose an undue burden on existing consumers, such as government grants or external funding sources. I firmly support a Cost of Service Tariff structure, and any subsidy provisions should be limited to assisting low-income residential consumers, rather than being broadly allocated to incentivize specific businesses or consumer categories.

For these reasons, I respectfully dissent from the majority decision, *as a matter of principle.*

1
12

