National Electric Power Regulatory Authority
Islamic Republic of Pakistan

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No. NEPRA/DG(Tech.)/LAD-02/ 1297

January 24, 2025

Chief Executive Officer
Islamabad Electric Supply Company (IESCO)
Street No. 40, G-7/4, Islamabad

Subject: **Decision of the Authority in the matter of motion for leave for review filed by Islamabad Electric Supply Company Limited (IESCO) against NEPRA determination dated 11.05.2023 regarding IESCO's Distribution Integrated Investment Plan (DIIP) FOR FY 2023-24 to 2027-28**

Please find enclosed herewith the subject Decision of the Authority along with **Annexure-A & B** (total 25 pages) for information and further necessary action.

Enclosure: **As above**

(Wasim Anwar Bhinder)

Decision of the Authority in the matter of motion for leave for review filed by Islamabad Electric Supply Company Limited (IESCO) against NEPRA determination dated 11.05.2023 regarding IESCO's Distribution Integrated Investment Plan (DIIP) for FY 2023-24 to 2027-28

DECISION

1. The Authority shall dispose of the motion for leave for review (MLR) filed by Islamabad Electric Supply Company Limited ('IESCO' or 'Petitioner') against the decision of the Authority dated 11-05-2023 regarding approval of 5 years' Distribution Integrated Investment Plan (DIIP) for the Multi-Year Tariff ("MYT") control period from FY 2023-24 to FY 2027-28.

2. IESCO submitted DIIP for Multi Year Tariff (MYT) control period for FY 2023-24 to FY 2027-28 vide its letter dated 17-10-2022 which included CAPEX requirement for its distribution network to address system expansion, loss reduction measures, commercial improvement plans, financial improvement plan, etc. The Authority after following due process of law approved the DIIP of IESCO vide its determination dated 11-05-2023. The summary of the approved investments and losses targets are given below:

A. Investment Plan (Million Rs)

Head	Year 1	Year 2	Year 3	Year 4	Year 5	Total
STG	5,816	9,799	8,440	3,599	12,448	40,104
ELR	2,902	3,274	3,437	3,594	3,769	16,976
DOP	971	1,106	1,158	1,213	1,273	5,720
AMI	2,529	4,571	4,571	4,945	9,184	25,800
Transformer Monitoring System	1,109	691	979	597	765	4,141
Functional Improvement Plans	2,115	1,051	751	660	732	5,310
Safety Hazard	861	763	839	924	1015	4,403
GIS Mapping	52	106.25	106.5	46.75	47	358
T&P	613	705	810	932	1,072	4,131
Civil Works	660	180	185	180	270	1,475
Operational Vehicles	583.35	330	348.5	592.8	478.5	2333.15
Own Resources	**18,211**	**22,576**	**21,625**	**17,284**	**31,054**	**110,752**
Village Electrification	1,231	1,364	1,509	1,664	1,830	7,599
Deposit Works	4,120	4,521	4,958	5,439	5,964	25,001
Consumer Contribution	**5,351**	**5,885**	**6,467**	**7,103**	**7,794**	**32,600**
Grand Total	**23,562**	**28,461**	**28,092**	**24,387**	**38,848**	**143,351**

B. Losses Targets

Voltage Level	Year 1	Year 2	Year 3	Year 4	Year 5
Transmission Loss	0.99%	0.98%	0.98%	0.98%	0.98%
Distribution Loss	6.32%	6.32%	6.32%	6.30%	6.28%
T&D Loss Targets	7.31%	7.31%	7.30%	7.28%	7.26%

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3. IESCO being aggrieved with the above referred decision of the Authority, filed a MLR vide its letter dated 04-08-2023. The grounds taken by the Petitioner in its MLR were reviewed and following issues were framed for the hearing of stakeholders on subject matter:

    i. Whether the request of the Petitioner to review the allowed investment under STG head in light of updated project costs is justified? Whether the recurring escalation factors requested by IESCO are justified?
    ii. Whether the cost of Rs. 2,005 million of other charges which include Design Charges, Cost of Machinery & Equipment, cost of Consultancy for designing Multi-Circuit Towers/Poles and Environmental Management Cost / ELA Study @ 1.46% is justified?
    iii. Whether the claim of Rs. 473.6 million for Heavy trucks and Light vehicles and Rs. 743.9 Million for Vehicles under the Officer Transport Policy is justified?
    iv. Whether the reduction in scope of AMI project to the tune of 25% is justified? Whether the requested re-appropriation of investment for AMI project during MYT control period is justified?
    v. Whether the requested increase of Rs. 114 million for GIS Mapping is justified?
    vi. Whether the requested revision in T&D Losses is justified? IESCO is directed to quantify the impact of delay in energization of 500kV Chakwal Grid Station on its T&D losses.
    vii. Whether the request of IESCO for re- appropriation of investment under different heads and adjustment of investment plan/CAPEX on the basis of actual investments incurred quarterly/annually is justified?
    viii. Whether the charges/fees of Rs. 200 million required for hiring of the services of third party consultant/firm, as mentioned in para 18(i) of the determination of investment plan dated 11-05-2023, for review/verification by a third-party consultant/firm to be selected by the Authority on its approved TORs is justified or otherwise?
    ix. Any other issues(s) which may be considered by the Authority during the hearing.

4. The said hearing of IESCO was held on February 01, 2024. The issue wise submissions made by IESCO in its MLR and during the course of the hearing along with analysis and decision thereon by the Authority are detailed below.

Issue # 01: Whether the request of the Petitioner to review the allowed investment under STG head in light of updated project costs is justified? Whether the recurring escalation factors requested by IESCO are justified?

<u>Submission of the Petitioner</u>

5. The petitioner in its review motion has stated that as per subject determination Para No. 18 (iii), 'no re-appropriation shall be allowed to IESCO against the approved investments under different heads'. Moreover, according to Para No. 18 (iv), 'in case of any deviation under

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each head of investment for more than 5% of the approved investment plan due to any regulatory decisions/interventions, IESCO shall be required to submit the additional investment requirements for prior approval of the Authority'. Furthermore, in Para No. 18 (i), IESCO has also been directed to submit a quarterly progress report showing utilization of allowed investment, physical progress and analysis regarding the benefits accrued against amount incurred for each project highlighted under different heads.

6. Petitioner further submitted that the investment plan was prepared on the basis of reference prices within the period of March-2022 to June-2022. The prices of supplies and material related to STG, AMI System, ELR, ABC, DOP and other projects have been escalated significantly due to unprecedented inflationary impact resulted of economic crunch, Rupee-Dollar parity and delays in opening of Letter of Credits (LC's) by State Bank of Pakistan. Therefore, it is not possible to complete the projects within allowed limit and available finances. It is worth mentioning that the recent cost incurred on construction of Grid stations with 2 x 20 / 26 MVA PTF in IESCO has substantially increased from 284.6 million (Date of commencement = 27.01.2020) to 658.28 million (Date of commencement = 23.01.2023) without feeding transmission line. Similarly, cost of transmission line has also increased from 35 million/ kM to 50 Million/ kM.

7. Petitioner mentioned that the Authority in its previous determination of its Multi-Year Consumer End Tariff Pertaining to FY 2015-2016 to 2019-20 (letter No. NEPRA/TRF-336/IESCO-2015/ 2689-2691), allowed IESCO vide para-No. 31.31 to true up the benefit of incremental investments and vice versa each year through the Prior Year Adjustment mechanism. Petitioner requested to relax the directions issued in Para 18 of the determination by allowing re-appropriation in different heads as well as the adjustment of investment plan / capital expenditures (CAPEX) on the basis of actual investments incurred quarterly / annually.

8. In addition to above, petitioner stated that as per para 4.14 of MYT Determination dated 11.5.2023, the Authority approved material cost for STG projects after deduction other material cost of Rs. 3,841 million on the pretext of duplication. Petitioner further stated that the average number of material items in grid station estimate is approximately 60 and Average number of material items in transmission line estimate is approximately 32. During the submission of cost estimates in DIIP the individual costs of major items was provided and a cumulative cost for the rest of all small items was given as miscellaneous material cost. The component wise cost breakup for miscellaneous material cost for each STG project to avoid any confusion regarding duplication of cost is given below:

Grid Station		**Transmission Lines**	
Major equipment	**Other material / equipment**	**Major equipment**	**Other material / equipment**
Power T/F Circuit Breaker CTs PTs MV Panels CP/RP Panels	Columns, Gantries Power Cables, Control Cables Grounding conductor Earthing rods, Catridges Bus bar material, etc.	Towers/Poles Conductor Earth Wire	Disc Insulators Suspension Fittings Tension Fitting Grounding Set PG Connectors Stock Bridge Damper, etc.

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9. Furthermore, Authority in the subject determination Para No. 4.15, allowed overhead & escalation factor of 8% for STG and 7% for others (excluding other functional plans) for all years i.e., 2023-24 to 2027-28. Application of plain escalation factor for all years is not justified since IESCO will not be able to meet its expenses, operational / business activities to ensure continuity of supply. In this matter, it is requested that recurring escalation should be taken during consideration of future investments as allowed by the Authority in the determination of the previous five year plan. During preparation of estimates, base year rates are utilized, therefore simple escalation does not capture forecasted capex requirements. Furthermore, it is apprised that IESCO has fully utilized all the allocated amount in the STG and other major investment heads previously allowed by the Authority. Keeping in view the abnormal fluctuation in dollar exchange rate, opening / closing policy of letters of credit (LCs) and various other economic factors; the inflation rate is quite high and unpredictable. Since base year rates (FY 2022-23) have been utilized for preparation of future estimates, therefore, it is submitted that recurring escalation factors used by IESCO are justified. The detail is as under:

Description	Details	2023-24	2024-25	2025-26	2026-27	2027-28
Escalation factor & other charges allowed by Authority in STG	Flat 8%	1.00	1.08	1.08	1.08	1.08
Escalation factor & other charges allowed by Authority in other projects	Flat 7%	1.00	1.07	1.07	1.07	1.07
Escalation factor requested in instant review by IESCO 5% for LCC & 3% for FEC	Factor	1.00	$(1+\%Esc)^1$	$(1+\%Esc)^2$	$(1+\%Esc)^3$	$(1+\%Esc)^4$
	LCC	1.00	1.05	1.10	1.16	1.22
	FEC	1.00	1.03	1.06	1.09	1.13

Analysis and decision of the Authority

10. The Authority observed that IESCO has primarily sought approval for the other material cost amounting to Rs. 3,841 million which had been previously rejected due to concerns of duplication as IESCO provided the individual costs for major items while presenting a cumulative cost for all the smaller items as 'other material' cost. Additionally, IESCO is requesting leniency concerning the reallocation of funds across various categories (re-appropriation), the adjustment of the investment plan and capital expenditures (CAPEX) based on actual investments made on a quarterly and annual basis, as well as the acceptance of recurring escalation factors.

11. The Authority expresses serious concerns regarding IESCO's failure to justify this cost, despite multiple requests for clarification made during the DIIP proceedings. This lack of explanation from has contributed to an increased duration of the Authority's involvement in the MLR proceedings and this will also lead to alterations in the uniform tariff as any thing allowed in MLR will impact the overall tariff.

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12. **Other Material Cost:** The Authority has noted that in the earlier submission of cost estimates for the DIIP, IESCO provided individual costs for major items while presenting a cumulative cost for all smaller items as 'other material' cost. Additionally, during the MLR proceedings, the petitioner submitted a detailed cost breakdown for miscellaneous materials associated with each STG projects to eliminate any potential confusion regarding duplication. IESCO further clarified that the 'other material' encompass the CAPEX requirements for various small components, including columns, gantries, power cables, control cables, grounding conductors, earthing rods, cartridges, bus bar materials, disc insulators, suspension fittings, tension fittings, grounding sets, PG connectors, stock bridge dampers, and others. Further, the execution of the projects is contingent upon these essential items. Moreover, petitioner provided the detailed BoQs for each grid station and transmission line projects which justify the need for all smaller items as mentioned above and included by IESCO in 'other material' cost.

    In light of the above, after a thorough review of the detailed information regarding other materials, the Authority found no instances of cost duplication and therefore is satisfied by the submission of the petitioner which has been supported with documentary evidences. Consequently, the Authority has decided to approve the cost of Rs. 3,841 million for 'other material' in the STG projects, as detailed below. The project wise cost breakup is given at **Annex-A.**

Million Rs.

Description	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	Total
other material cost for STG project	744	1,074	599	360	1,064	3,841

13. **Re-appropriation of Allowed Investments:** Regarding re-appropriation of the allowed investments under different heads, the Authority is of the opinion that this practice of DISCOs which was in field for a quite long time and the same has now been principally disallowed by the Authority because reappropriation diverts funds away from initial planned investment projects, which may leave them incomplete or hinder their intended impact. This can disrupt the organization's original goals and objectives. Moreover, the Authority has disallowed the re-appropriation in the approved investment plans in order to ensure fairness and prudent investments in the system as per system requirements. Therefore, the instant request of IESCO for re-appropriation of allowed investments has not been considered by the Authority.

14. **True up of the incremental investments:** As far as plea of IESCO regarding true up the benefit of incremental investments and vice versa each year through the Prior Year Adjustment mechanism is concerned the Authority is of the view that the allowed investment is subject to downward adjustment only which will be done keeping in view the recommendations of the third party audit/monitoring firm. Whereas, the incremental true up of the actual investment is not permitted. Further, IESCO has been allowed sufficient room to cater for price escalations as Authority has approved 5% escalation, 3% contingency & others and another 5% margin for deviation of investment in each head. Therefore, IESCO's request for allowing true up of the incremental investments is disallowed by the Authority.

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15. **Application of the recurring escalations:** The Authority notes that the escalation factor of 8% was approved for all DISCOs including IESCO in the Authority's decision dated 11-05-2023. In addition, a further variation of 5% under each head of investment is also allowed to DISCOs including IESCO to accommodate the impact of material cost inflation and escalations. Consequently, the total effective escalation factor permitted to IESCO in the investment plan amounted to 13%. Additionally, in the events where the escalations in the approved projects exceed these approved factors, DISCOs may request prior approval by providing adequate reasons and documentary evidences for the satisfaction of the Authority. Further, a comparison of recurring escalations and the existing escalation mechanism allowed by the Authority revealed that both has similar impact on an average. Therefore, the request of IESCO regarding application of recurring escalation factors has not been approved by the Authority and the Authority has decided to uphold its earlier decision dated 11-05-2023 regarding the escalation factors.

Issue # 2: Whether the cost of Rs. 2,005 million of other charges which include Design Charges, Cost of Machinery & Equipment, cost of Consultancy for designing Multi-Circuit Towers/Poles and Environmental Management Cost / ELA Study @ 1.46% is justified?

<u>Submission of the Petitioner</u>

16. Petitioner stated that the amount of Rs. 2,005 million under "other charges" mentioned in Para 4.14 table, includes Design Charges, Cost of Machinery & Equipment, cost of Consultancy for designing Multi-Circuit Towers/Poles and Environmental Management Cost / EIA Study @ 1.46% approved as part of 7th STG by IESCO Board of Directors. Further, petitioner mentioned that these costs were not part of individual project estimates therefore added at the end under "Other charges" head. Moreover, above charges were claimed as part of STG investment and these charges have not been claimed elsewhere in the investment plan and are therefore justified. Break up of charges is given below:

(Million Rs.)

Description		2023-24	2024-25	2025-26	2026-27	2027-28	Total	Remarks
Other Charges	Engineering & Design Charges	143	279	234	106	31	794	-
	Consultancy for designing of Multi circuit Towers/Pole	50	100	0	0	0	150	For new grid stations in Islamabad along with 220kV Zero point, towers will be designed to carry both 220kV and 132kV lines due to ROW issues. These towers are not included in current specifications.
	Cost of Machinery & Equipment	128	152	115	46	17	457	List of all the equipment, machinery and vehicles approved for STG projects is attached for reference.
	Environmental Management Cost/ EIA @	97	149	123	54	182	605	As per statutory requirements including approval from concerned Environmental

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	1.46%							Protection Agencies.
	Total Other Charges	**418**	**680**	**472**	**206**	**230**	**2,005**	

17. In addition, the petitioner further claimed that Authority has disallowed the Misc., Authority supervisory & Contingency Charges (Overhead) to the tune of Rs. 911 Million. The detail of overhead charges calculation as provided by the petitioner is given below:
    - Miscellaneous charges: @ 1% of the project cost for unforeseen requirements.
    - Contingency charges: @ 1% of the project cost for physical and price contingencies. The purpose is to compensate for the uncertainty time estimates, as well as unpredictable risk exposure.
    - Authority Supervisory charges: @ 0.5% of the project cost.

18. Further, the petitioner informed that the execution cost of most of the sub-projects has increased and escalated beyond 5%. Therefore, the updated cost of major sub-projects: Grid stations, Transmission lines etc. is requested to be allowed for the first year. The list of major sub-projects with updated cost as provided by petitioner is given below:

Million Rs.

Sr.	Name of Grid Station	IESCO's Original Cost	Allowed by NEPRA	Requested for Review
1	Construction of 132 kV Shakrial	1,331	1,095	1,340.40
2	Construction of 132 kV Khanpur	598	492	602.30
3	Construction of 132 kV Kallar Kahar	471	418	511.70
4	Construction of 132 kV Rewat RCCI-II	572	504	617.00
5	Feed for Rawat-II/ RCCI from In-Out from Old Rawat to KRL Kahuta	207	196	240.00
6	Feed for Khanpur Chakwal District from Chakwal to CS Shah	34	32	39.20
7	Feed for Shakrial Rawalpindi from Tramari Grid Station	316	211	258.30
8	Feed for Kallar Kahar from CS Shah to NP Sethi	19	18	22.03
9	Double Circuit from 220/132kV Bahria Town Phase-VIII to Adyala Circuit	443	424	519.04
10	Conversion from 66kV to 132KV SDT T/Line Lakarmar to Pindigheb	323	312	382.00
11	Reconducting of Kahuta City - Mang-Plandari-Tararkhal	138	137	167.71
12	Remodeling of New Wah to Bahter More to Fateh Jang	1,002	959	1,174.00
13	Reconducting of Zero Point to I-8	294	270	330.52
14	Reconducting of Nilore-KRL Kahuta	131	116	142.00
Total		**5,879**	**5,184**	**6,346**

Analysis and decision of the Authority

19. The Authority noted that IESCO previously claimed a cost of Rs. 2,005 million under the head of Miscellaneous Charges for STG projects. However, this claim was not approved by the Authority, as IESCO failed to provide the necessary cost breakdowns, details, and justifications to meet the Authority's satisfaction. Now IESCO in the instant review has once

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again claimed the cost of Rs. 2,005 million in the head of Miscellaneous Charges and clarified that the amount will be utilized for purchase of equipment & machinery/vehicles (Rs. 457 million), engineering & design charges (Rs. 794 million), consultancy for design of multi circuit towers/pole (Rs. 150 million), environmental management cost (Rs. 650 million) and Authority supervisory & Contingency Charges (Rs. 911 million) for STG projects.

20. **Equipment, machinery and Vehicles for STG projects:** The Authority has noted that IESCO has claimed a cost of Rs. 457 million for the purchase of equipment, machinery and operational vehicles which will be utilized for construction, testing and commissioning of the approved grid station and transmission line projects included in the DIIP. Furthermore, Authority found that petitioner has provided complete BoQs along with costing for testing equipment, plant & machinery and operational vehicles in its review motion. Moreover, Authority is of the view that the testing equipment, plant & machinery and operational vehicles are critical for construction and commissioning of grid stations and also necessary for preventive maintenance and upkeep of the grid station equipment. Therefore, the Authority has decided to approve the cost of Rs. 457 million for equipment, machinery and operational vehicles for STG projects. The details of the approved cost and quantities are attached as **Annexure-B.**

21. **Engineering & Design, Consultancy, Environmental Management Cost & Contingency Charges:** The Authority is of the opinion that an amount of Rs, 2,540 million under the head of Escalation and others has already been approved in the DIIP of IESCO which include Engineering & Design Charges, Consultancy, Environmental Management Cost, Authority supervisory & Contingency Charges, as shown below.

FY	No/km	Requested Amount (Million Rs)	Rationalized Cost @ 8% escalation & others (Million Rs)
132 kV Grid Station (No)	19	15,180	13,019
Conversion to 132 kV	1	445.21	355
Extension of T/F Bays	11	1,729.49	1,566
Augmentation	12	1,176.12	1,035
New Transmission Line	885	16,389.45	15,401
Remodeling/Reconductoring	299	5,313.18	5,016
Extension of Line Bays	39	1,005	1,005
Capacitor Banks (MVAR)	187	167	167
Other Charges	-	2,005	0
Total	-	43,410	37,564
Escalation & Other	-	8,116	2,540
Grand Total	-	51,525	40,104

22. Further for ease of license the escalation and other costs which include Engineering, Design, supervision, contingency, admin & management including environmental management cost are bifurcated as under:

Million Rs.

Head	Amount
Escalation	1,587
Other costs Engineering, Design, supervision, contingency, admin & management including environmental management	952
Total Escalation and others	**2,540**

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23. In addition, it is also clarified that since the claimed cost of 'other material' for STG projects has been approved by the Authority this will also result in increase of escalation and others cost at the already decided factor of 3% of contingency and others and 5% for escalation, which shall be trued up during 3rd party audit/monitoring.

24. Therefore, the request of IESCO for allowing Rs. 1,548 million for Engineering, Design, supervision, contingency, admin & management including environmental management cost has not been approved by the Authority.

25. **Revised costs for 1st year STG projects.** It is noted by the Authority that IESCO has not provided any justification/details for cost revisions. Further, its noted that IESCO has applied a flat 22% increase on all first year projects without any proper justification and rationale for this flat increase on all projects. Furthermore, the Authority has also allowed an amount of Rs. 3,841 million in the head of the STG projects as well. Therefore, the Authority directs IESCO to make efforts to bring the cost within the allowed deviation range of 5% and hence the request of IESCO for revision in the cost of 1st year projects is not approved.

Issue # 3: Whether the claim of Rs. 473.6 Million for Heavy trucks and Light vehicles and Rs. 743.9 Million for Vehicles under the Officer Transport Policy is justified?

Submission of the Petitioner

26. Petitioner submitted that the Heavy Trucks (Rs. 170 million) and Light Vehicles (Rs. 303.6 million) cost claimed by IESCO mentioned in Para 12.5 in the "Others" column pertains to the field offices related to PD (Construction) and Operation formations of IESCO to ensure continuity of supply.

(Million Rs.)

Description	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Heavy Trucks	51	25.5	34	34	25.5	170
Light Vehicles	46	55.2	69	69	64.4	303.6
Total	97	80.7	103	103	89.9	473.6

27. Moreover, petitioner apprised that 60% of the trucks are more than 20 years old and uneconomical and need immediate replacement. Therefore, it is requested that Rs. 473.6 million may be allowed for Heavy Trucks & Light Vehicles for Operational duties. These vehicles are requested for PD (Construction) IESCO who is responsible for construction of 11kV lines and projects. Further, there is no duplication of cost.

28. In addition to above, Rs. 743.5 million have been deducted against Officers Transport Policy. It is submitted that Rs.743.5 million requested for Field vehicle's of SDOs & XENs (Rs. 389.5 M) which will not required after adoption of VMS (Vehicle Management System). The break up of deducted amount is as under:

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(Million Rs.)

Description	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Jeeps (4x4) / Double Cabin (2x4)	104.5	57	38	104.5	85.5	389.5
Coasters	28	42	0	42	28	140
Suzuki Vans	0	7	2.8	28	26.6	64.4
Hiace / SUVs	37.5	37.5	30	22.5	22.5	150
Total	**170**	**143.5**	**70.8**	**197**	**162.6**	**743.9**

29. Petitioner further submitted that jeeps are field vehicles for SDOs/XENs authorized under WAPDA transport rules – 2007. Considering that jeeps are costly and double cabins are viable/cheaper option, the same were included as part of estimates. As mentioned above "Officers transport policy, if adopted, the cost of Jeeps / Double cabin head will reduce. Unfortunately, cost of Jeeps/double cabin was also deducted during approval of DIIP, which are necessarily required by IESCO to carry out its operational / business activities and ensure continuity of supply. Therefore, in the absence of transport policy, Rs.389.5 million is requested to be approved against vehicles i.e. Jeeps/double cabin for field offices, otherwise it will severely impact the performance of the Company; SAIFI, SAIDI & other parameters. Furthermore, Coasters, Hiace and Vans are Service Utility vehicles used for transport of IESCO Headquarters and Circle staff, Training Center, Team field visits and IESCO School etc.

30. Petitioner, stated following objective of the officer transport policy:

    i. To increase the effectiveness and quality of services rendered by the officers now possessing fuel efficient and reliable vehicles by virtue of this Policy;
    ii. To curtail un-necessary transport expenditure and to restrict / limit the running and maintenance expenditure of these vehicles;
    iii. To eliminate the misuse of the official vehicles.
    iv. To overcome the shortage of vehicles and drivers,
    v. To provide a regular mechanism for replacement of old vehicles with new ones after every five years; and

31. A Schedule indicating the number of vehicles and their make/model is as follows:

(Rs)

Sr.	VEHICLE CC	TOTAL COST PER VEHICLE	NO OF OFFICERS	TOTAL AMOUNT REQUIRED
1	1000	4,027,370	216	869,911,920
2	1300	4,764,530	101	481,217,530
3	1300	4,764,530	28	133,406,840
4	1300	4,764,530	14	66,703,420
	TOTAL		359	**1,551,239,710**

32. To observe the austerity measures regarding monetization of vehicles; the overall investment/capital outlay will be recovered through following inflows:
    a. 60% of the cost i.e. Rs. 931 million will be borne by employees

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b. 40% of the cost i.e. Rs. 620 million will be borne by employer (40% the cost of vehicles to be borne by IESCO will be covered / adjusted against the value of scrap of off-Road vehicles and will not affect the revenue collection of IESCO)

33. IESCO further mentioned that a detailed financial model has been developed based on technical evaluation and input provided by the Transport Directorate. The model depicts that the total outflow during the five years period will be Rs. 620 million and the total inflow during the five years period will be Rs. 3,122 million.

RECOVERY PLAN	1ST YEAR	2ND YEAR	3RD YEAR	4TH YEAR	5TH YEAR
COST OF SALE OF 170 VEHICLES	150.000				
10% ANNUAL DEPRECIATION ALLOWED BY NEPRA	155.124	155.124	155.124	155.124	155.124
ANNUAL SAVING AFTER ADOPTION OF POLICY	203.124	203.124	203.124	203.124	203.124
Tax Depreciation Arbitrage	67.479	57.357	48.754	41.440	35.224
ANNUAL RECOVERY FROM EMPLOYEES	186.149	186.149	186.149	186.149	186.149
TOTAL INFLOW	**761.875**	**601.754**	**593.150**	**585.837**	**579.621**
PROGRESSIVE RECOVERY =>	761.875	1363.629	1956.779	2542.616	3122.237

34. The project Payback Period is 2.63 years; the model depicts the following @ discount rate of 20%:

DESCRIPTION	VALUE
Total Outflows	1,613 million
Total Inflows	3,875 million
Profitability Index	2.4
Payback Period	2.63 Year

35. Savings in O&M due to introduction of VMS (in Rs.)

Sr.	Description	Before	After	Net Savings
1	Annual savings under the head of Payroll (Driver)	259,672,200	71,784,000	187,888,200
2	Annual savings under the head of Payroll (Conveyance allowance)	21,307,000	-	21,307,000
3	Annual savings under the head of Running & Maintenance	43,999,560	42,336,000	1,663,560
4	Annual savings under the head of POL	198,170,376	205,070,400	(6,900,024)
Total		523,202,136	320.078.400	203,123,736

36. Savings in CAPEX due to introduction of VMS:

Sr.	Description	Unit	2023-24	2024-25	2025-26	2026-27	2027-28	Total
1	Jeeps (4x4) / Double Cabin (2x4)	MRs.	104.5	57	38	104.5	85.5	389.5
		No	11	06	04	11	09	41

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37. Following safety valves and internal controls have been made part of the proposed policy:

  i. All the Field and staff cars/SUVs currently included in the fleet of IESCO will be auctioned within 120 days of the return back of last vehicle spare under this policy through a competitive and transparent process to avoid any misuse of the policy.

  ii. No driver will be provided and all future hiring of driver required invariably will stand obviated till the adjustment of spared drivers under this policy;

  iii. There will be shift from unscertain expenditure to fairly certain expenditure which can improve decision making and internal controls;

  iv. Due to eradication of unwarranted expenditures and mitigation of risk of any irregularities, huge savings is expected which would exceed the inflows currently envisaged in the Model;

  v. Redemption policy is conclusively in favor of IESCO.

Analysis and decision of the Authority

38. With respect to procurement of heavy trucks and light vehicles, the Authority noted that a cost of Rs. 457 million has already been allowed to IESCO under the head of equipment, machinery and operational vehicles as discussed at para 20 above. Therefore, the Authority directs IESCO to manage the procurement of operational vehicles as per the need from already allowed amount.

39. With regard to vehicles, under officer transport policy, the Authority noted that:
    - As per assumption sheet IESCO stated that around 168 vehicle to be disposed off having disposal value of around Rs.200 million, however, for working IESCO is using disposal value of Rs.150 million for 170 vehicles, which needs explanation. Further, as per the financial model provided by IESCO, inflows from sale of scrap have been considered in year "0" and outflow for cost of new vehicles has been assumed under year "1". Thus, IESCO would first sale its old vehicles, in order to procure new vehicles in year "1". Therefore, IESCO should ensure any gain on disposal of assets in its books of account.
    - IESCO has proposed recovery of 60% of cost of vehicles to be paid by its employees in a period of five years. However, no recovery of cost of funds for this 60% outflow has been assumed from employees.
    - Recovery of annual insurance cost to be borne by Employees i.e. 60% of the cost, has been included in the model, only in one year, and no such contribution assumed from employees for the reaming period. We are of the view that 60% of the total insurance cost for the five year period, needs to be passed on to the employees and the working needs to be aligned accordingly.
    - While calculating the impact of RORB, avg. RAB concept was not considered, which resulted in extra amount shown as RORB, therefore, working needs to be aligned accordingly.
    - IESCO being a regulated entity is allowed return and depreciation on cost basis on its RAB. Therefore, tax depreciation arbitrage concept cannot be termed as savings from

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the consumer point of view. Further, as per the financial statement of IESCO for the FY 2023, IESCO has charged provision of minimum tax based on Turn over, thus, in the given scenario the tax saving concepts may not be relevant.

- IESCO has also reported "Saving in Investment Plan due to adoption of policy", however, no workings / justification for the proposed savings has been submitted.

40. The Authority disallows the Officer Transport Policy of IESCO keeping in view the above observations and the fact that Federal Government has announced austerity measures as well.

Issue # 4: Whether the reduction in scope of AMI project to the tune of 25% is justified? Whether the requested re-appropriation of investment for AMI project during MYT control period is justified?

Submission of the petitioner

41. Petitioner in its review motion has stated that the investment plan was submitted in NEPRA during Oct-2022. Authority allowed the requested investment in its determination in May-2023. The AMI contract was signed on 1st Sep, 2022 with M/s KT-KAIFA for execution of Project. Afterwards, detail execution plan was finalized in Dec 2022. As per agreed timelines and limitations regarding disbursement of ADB loan within validation period i.e. Nov-2025, IESCO has submitted the re-appropriation within the approved cost so that the entire loan may be utilized within stipulated time period. For the purpose, IESCO has updated physical and financial implementation timelines in-line with the requirements of the loan. In this regard, the detail of allowed cost and requested re-appropriation is given below:

(Million Rs.)

Description	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Allowed	2,529	4,571	4,571	4,945	9,184	25,800
Request in Instant Review for Re-appropriation	9,536	12,821	2,951	490.30	0.39	25,800
Difference	7,007	8,250	-1,620	-4,454	-9,184	0

42. The requested component wise cost break-up is as under:

(Million Rs.)

Description	Source	2023-24	2024-25	2025-26	2026-27	2027-28	Total
LCC (Taxes and Duties)	funding through Own Resources	1,695	3,808	800	-	-	6,303
FCC (AMI Metering for two Circles as per original scope including MDMS and CIS / Billing for entire Company)	ADB Loan	7,840	9,014	2,151	490.30	0.39	19,497
Total	-	**9,536**	**12,821**	**2,951**	**490.30**	**0.39**	**25,800**

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43. In addition to above, petitioner stated that the scope of work has been updated as per new timelines since the ADB loan will expire by Nov-2025. Therefore, physical and financial implementation timelines have been updated in-line with the requirements of the loan. Now, due to change in exchange rate, the total number of meters have been reduced to 14,25,000/- to remain within allowed cost. It is apprised that during the first year, the hardware & billing system will be installed and commissioned. The installation of AMI meters will be completed within three years' as per agreed project execution schedule. The benefits / savings and loss reduction are assessed to remain the same as originally submitted. Accordingly, the revised plan is being submitted for approval of the Authority. The year wise detail is as under:

Numbers

Description	**2023-24**	**2024-25**	**2025-26**	**2026-27**	**2027-28**	**Total**
Allowed in DIIP	0.0	530,345	530,345	200,000	600,000	**1,860,690**
Request in Review for Revised scope	146,000	637,500	623,500	0.00	0.00	1,407,000

Analysis and decision of the Authority

44. The Authority observes with concern that the petitioner, in its review motion has requested a reduction of 25% in the scope of AMI project, despite the availability of sufficient funding under the ADB financed initiative to execute the project in entirety. Moreover, the AMI project is very critical to modernize the distribution system infrastructure in IESCO and this project will be an example for other DISCOs as well.

45. Keeping in view the importance of this project, the Authority has decided to disallow the request of IESCO for reduction of the scope of AMI meters and Authority decided to maintain its earlier decision dated 11-05-2023. Further, the Authority decided to allow taxes/duties for AMI project as per actual subject to provision of documentary evidence to the satisfaction of the Authority.

46. Furthermore, the Authority directs IESCO to address all the issues pertaining to implementation of full scope of AMI meters i.e. 1,860,690 AMI meters with relevant forums including Planning Commission to revise the PC-I.

Issue # 05: Whether the requested increase of Rs. 114 Million for GIS Mapping is justified?

Submission of the Petitioner

47. IESCO claimed that the Authority has allowed an investment of Rs. 358 million under GIS mapping head against Rs. 497 million demanded by IESCO for the control period. Moreover, in the determination, Rs. 66 million have been deducted on account of duplication of cost. In this matter, it is submitted that separate budget is required for software and hardware requirements for GIS mapping and study based planning using GIS Maps with Modern Planning Tools. Moreover, GIS mapping & HT / LT analysis are performed in separate

POWER REGULATORY NEPRA AUTHORITY NATIONAL ELECTRIC POWER REGULATORY AUTHORITY sections requiring separate equipment. For example, the analysis section requires simulation software like SynerGEE® and hardware like printers etc., therefore the cost is not duplicate and is separate and justified. The year wise detail is as under:

(Million Rs.)

Description	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Allowed	52	106.25	106.5	46.75	47	**358**
Request in Instant Review	67	152	127	62	65	**472**
Difference	15	46	20	15	18	**114**

48. IESCO has submitted that the amount of software deducted in investment plan is required for transitioning from conventional planning to study based planning by integrating GIS mapping with modern planning tools. For this IESCO will require simulation software licenses and it will Purchase of Eight (8) No. licenses of Engineering tool (SynerGee & ArcGIS); Two (02) for head office/planning department and one for each circle. Further, IESCO provided following component wise breakup of cost for GIS project:

Million Rs.

Description	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Project Cost	40	88	71	56	5	260
Upgradation of Data Center	0	38	30	0	0	68
SynerGee Licensing Cost	4	4	4	4	4	20
Arc GIS Licensing Cost	2	2	2	2	2	10
Infrastructure Development for sustainability of	21	20	20	0	54	115
Total	**67**	**152**	**127**	**62**	**65**	**473**

Analysis and decision of the Authority

49. The Authority noted that a cost of Rs. 424 million was claimed by IESCO in investment plan for GIS mapping and the Authority approved Rs. 358 Million, thereby deducting Rs. 66 million on account of duplication. Rs. 25 Million was duplicated for procurement of hardware including plotters, computers and GPS devices. Whereas, rest was for procurement of software.

50. The submission of IESCO have been reviewed by the Authority and it is found that the amount of software deducted in investment plan is necessary for transitioning from conventional planning to study based planning by integrating GIS mapping with modern planning tools. Further, as per information provided by IESCO it is noted by the Authority that total eight (8) No. of licenses of Engineering tool (SynerGee & ArcGIS) will be required. Two (02) for head office/planning department and one for each circle will be required. Therefore, the Authority has approved a cost of Rs. 30 million for procurement of software (Synergee and ArcGIS) which are to be employed in head office and each operational circle to ensure integrated distribution system planning, as per following details.

Description	2023-24	2024-25	2025-26	2026-27	2027-28	Total
SynerGee Licensing Cost	4	4	4	4	4	20
Arc GIS Licensing Cost	2	2	2	2	2	10

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51. Furthermore, the remaining cost is claimed for the purpose of infrastructure development for sustainability of the project which is new cost and it was not part of original submission of investment plan. Therefore, this cost is outside the scope of review and the same is not considered by the Authority.

Issue# 6: Whether the requested revision in T&D Losses is justified? IESCO is directed to quantify the impact of delay in energization of 500kV Chakwal Grid Station on its T&D losses.

<u>Submission of the petitioner</u>

52. IESCO, during the FY 2021-22, achieved 8.17% T&D loss against the target loss of 8.15%. Similarly, IESCO achieved 8.06% T&D loss against the target loss of 7.80% for the FY: 2022-23. However, during determination of investment plan, the target for the first year i.e. FY: 2023-24 has been reduced to 7.31%, an extreme reduction of 0.75%. Whereas the ground position is that the two main projects are delayed i.e. 500kV Chakwal is delayed by NTDC and only database / billing centre is being installed under the AMI project during the first year. In view of above and others detailed hereafter, it is requested to allow the following projected losses:

Description	2023-24	2024-25	2025-26	2026-27	2027-28
Allowed % T&D Losses in DIP	7.31	7.31	7.3	7.28	7.26
% T&D Losses request in MLR	7.96	7.86	7.66	7.46	7.26

52. The component wise break-up of requested losses is as under:

Description	2023-24	2024-25	2025-26	2026-27	2027-28
% Transmission Losses	0.99	0.98	0.98	0.98	0.98
% Distribution Losses	6.97	6.88	6.68	6.48	6.28
% T&D Losses	7.96	7.86	7.66	7.46	7.26

53. Moreover, in para 15, Authority recognizes that "IESCO is implementing AMI program and other loss mitigation/anti-theft measures in the instant MYT to curb non-technical loss". In this regard, it is submitted that AMI implementation will reduce the administrative part of the T&D loss of IESCO but it will take at-least 3 years to get the complete benefit / impact of AMI. During the first year, only the data centre and billing system shall be installed. And from second year onwards, installation of more than one million AMI meters shall commence and shall be completed within three years' time as per loan condition. Therefore, appropriate loss targets practically achievable and in-line with the approved plan are requested especially for the first three years. The revision in target of line losses is requested keeping in view following factors:
    i. Replacement of sluggish meters is another component which contributes towards administrative losses in IESCO. The replacement of such meters has already been started by IESCO and 68,571 meters have been replaced, but the replacement process will be completed over next five years as it involves replacement of another 412,695 meters. The purchase of meters is slow due to sudden increase in dollar rates and acute shortage of manpower hampers the replacement process.

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ii. The construction of 500kV Chakwal Grid Station by NTDC is delayed and the impact of its energization on IESCO losses is now expected by FY: 2028-29. (Approximately, 0.60% reduction in T&D Losses)

iii. Execution of 7th STG projects has also been lethargic due to aforementioned reasons; non-opening of LCs, uncertain dollar rates etc.

Analysis and decision of the Authority

54. It is noted by the Authority that IESCO has requested re-appropriation of allowed losses targets while remaining within the approved target of 7.26% by June 2028. Moreover, the reason for the requested re-appropriation are two main projects are delayed i.e. 500kV Chakwal is delayed by NTDC and for AMI project only database / billing centre is being installed under the AMI project during the first year.

55. It is also observed by Authority that IESCO in its investment plan submitted following bifurcation of Technical Losses and Non-Technical Losses. Further the Authority considered the submission of IESCO and allowed Technical Losses as requested without any reduction. However as per practice the Non-Technical Losses/administrative losses were disallowed by the Authority, as shown below:

Description	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
Technical Loss requested in investment plan	7.31%	7.31%	7.30%	7.28%	7.26%
Non- Technical Losses requested in investment plan	0.47%	0.45%	0.44%	0.44%	0.44%
Overall Losses Requested in investment plan	7.78%	7.76%	7.74%	7.72%	7.70%

56. Since, the requested technical losses has already been allowed to IESCO without any reduction and keeping in view the fact that managing non-technical losses is the responsibility of IESCO thus Authority has decided to maintain its decision dated 11-05-2023 and did not consider the request of IESCO for re-appropriation of losses targets.

Issue # 7: Whether the request of IESCO for re- appropriation of investment under different heads and adjustment of investment plan/CAPEX on the basis of actual investments incurred quarterly/annually is justified?

Submission of the petitioner

57. It is submitted by the petitioner that the investment plan was prepared on the basis of reference prices within the period of March-2022 to June-2022. The prices of supplies and material have escalated significantly due to unprecedented inflationary impact of economic crunch, Rupee-Dollar parity and delays in opening of Letter of Credits (LC's) by State Bank of Pakistan etc. Therefore, it is not possible to complete the projects within allowed limit and available finances. In view of above arguments, it is requested to relax the directions issued in Para-18 of the determination by allowing re-appropriation in different heads as well as the

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adjustment of investment plan / capital expenditures (CAPEX) on the basis of actual investments incurred quarterly / annually.

Analysis and decision of the Authority

58. Regarding re-appropriation of the allowed investments under different heads, the Authority is of the opinion that this practice of DISCOs which was in field for a quite long time and the same has now been principally disallowed by the Authority because reappropriation diverts funds away from initial planned investment projects, which may leave them incomplete or hinder their intended impact. This can disrupt the organization's original goals and objectives. Moreover, the Authority has disallowed the re-appropriation in the approved investment plans in order to ensure fairness and prudent investments in the system as per system requirements. Therefore, the instant request of IESCO for re-appropriation of allowed investments has not been considered by the Authority.

59. As far as plea of IESCO regarding true up the benefit of incremental investments and vice versa each year through the Prior Year Adjustment mechanism is concerned the Authority is of the view that the allowed investment is subject to downward adjustment only which will be done keeping in view the recommendations of the third party audit/monitoring firm. Whereas, the incremental true up of the actual investment is not permitted. Further, IESCO has been allowed sufficient room to cater for price escalations as Authority has approved 5% escalation, 3% contingency & others and another 5% margin for deviation of investment in each head. Therefore, IESCO's request for allowing true up of the incremental investments is disallowed by the Authority.

Issue # 08: Whether the charges/fees of Rs. 200 Million required for hiring of the services of third party consultant/firm, as mentioned in para 18(i) of the determination of investment plan dated 11-05-2023, for review/verification by a third-party consultant/firm to be selected by the Authority on its approved TORs is justified or otherwise?

Submission of the petitioner

60. IESCO management during the course of hearing supported the Authority's initiative for appointment of third party to carry out audit/monitoring of IESCO's allowed investment plan.

Analysis and decision of the Authority

61. It is noted by the Authority that IESCO has supported the Authority's decision for third party audit and inclusion of fee of Rs. 200 million for hiring of the third-party consultant firm during the course of hearing. Therefore, an amount of Rs. 200 million has been included in the investment plan for the purpose of third-party audit / monitoring. The hiring of the third party, formulation of detailed ToRs and mechanism for third party will be specified by NEPRA.

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Order of the Authority

62. In view of the foregoing, the decision of the Authority dated 11-05-2023 is partially modified to the extent of approval of following additional costs:

Million Rs.

Description	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Total
Other material for STG project	744	1,074	599	360	1,064	3,841
Machinery, Equipment & Operational Vehicles	128	152	115	46	17	457
SynerGee License	4	4	4	4	4	20
Arc GIS License	2	2	2	2	2	10
Third Party Audit / Monitoring	40	40	40	40	40	200
Grand Total Allowed	**918**	**1,272**	**760**	**452**	**1,127**	**4,528**

AUTHORITY

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Engr. Maqsood Anwar Khan
Member

Mathar Niaz Rana (nsc)
Member

Amina Ahmad
Member

Waseem Mukhtar
Chairman

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Annexure A

Sr. No.	Name of Grid Station	Proposal	Voltage (KV)	Allowed in MLR Million Rs.
1	Shakrial	N	132	237
2	Khanpur	N	132	106
3	Kallar Kahar	N	132	54
4	Rewat RCCI-II	N	132	68
			FY 2023-24	**465**
5	Ghourghushti	N	132	68
6	I-10/II	N	132	289
7	Cabinet Islamabad	N	132	68
8	Liagat Bagh	N	132	239
9	Lilla			67
			FY 2024-25	**733**
10	Burhan-II	N	132	48
11	Sawan-II	N	132	69
12	Simly Dam	N	132	69
13	Gaggan	N	132	74
14	Chakwal-II	N	132	74
			FY 2025-26	**333**
15	Rajjar-II	N	132	75
16	Attock-II	N	132	100
17	Fatehjang-II	N	132	74
18	Jhelum Cantt-II	N	132	74
			FY 2026-27	**322**
19	Golra Road	N	132	312
			FY 2027-28	**312**
	New Grid Stations			**2,165**

FY 2027-28

20	Fathepur	Con	132.00	90
	Conversions			**90**
21	Pinanwal	Ext	132.00	15
	FY 2023-24			**15**
22	Murree	Ext	132.00	15
23	KTM	Ext	132.00	30
	FY 2024-25			**45**
24	Bahtar More	Ext	132.00	15
25	Baragowa	Ext	132.00	13
	FY 2025-26			**28**
26	Adyala	Ext	132.00	31
27	G-9	Ext	132.00	31
28	Kahuta City	Ext	132.00	15
29	Islamgarh	Ext	132.00	28
30	Nilore	Ext	132.00	42
31	Trarkhel	Ext	132.00	28
	FY 2027-28			**175**

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	Extensions			**264**
32	Mirpur	Aug	132.00	4
33	NPF	Aug	132.00	21
34	E-8	Aug	132.00	4
	FY 2023-24			**30**
35	Basal	Aug	132.00	21
36	Plandri	Aug	132.00	21
37	Dandot	Aug	132.00	21
38	Chakri	Aug	132.00	21
	FY 2024-25			**85**
39	Kallar Syedan	Aug	132.00	8
40	Danda Shah Bilawal	Aug	132.00	20
41	Khuiratta	Aug	132.00	20
42	F-6	Aug	132.00	7
	FY 2025-26			**56**
43	Kallar Syedan	Aug	132.00	29
	FY 2027-28			**29**

	Augmentations			**199**
Sr. No.	**Name of Grid Station**	**Proposal**	**Voltage (KV)**	**Allowed in MLR Million Rs.**
1	Feed for Rawat-II/ RCCI from In-Out from Old Rawat to KRL Kahuta	132	D/C	12
2	Feed for Khanpur Chakwal District from Chakwal to CS Shah	132	D/C	2
3	Feed for Shakrial Rawalpindi from Tramari Grid Station	132	D/C	105
4	Feed for Kallar Kahar from CS Shah to NP Sethi	132	D/C	1
5	Double Circuit from 220/132kV Bahria Town Phase-VIII to Adyala Circuit	132	D/C	19
6	Conversion from 66kV to 132KV SDT T/Line Lakarmar to Pindigheb	132	SDT	11
	FY 2023-24			**150**
7	132kV Sambli Bheramal (BMP) to Murree (for 2nd source to Murree)	132	SDT	16
8	Second Circuit Stringing from Hattian to Bagh to Rawla Kot using SDT Towers	132	SDT	10
9	Feed for Ghourghushti In- Out From Faqirabad to Gondal Circuit	132	D/C	14
10	Feed for 132kV I-10-II GS, near Islamic University (In-Out from 132kV Pirwadhai - H-11 Line)	132	D/C	8
11	Cabinet Islamabad/ Sarai Kharbuza In Out from Sangjani to D-12 Circuit	132	D/C	14
12	Feed for Liaqat Bagh 132kV Cantt-II GS, Nr.	132	D/C	10

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	Liaqat Bagh to Existing 132kV Cantt GS for Ring Circuit			
13	Feed for Lilla In - Out from Dandot to Pinanwal Circuit.	132	D/C	19
14	2nd Circuit Stringing of Fateh Jang to Basal	132	S/C	21
15	Stringing of 2nd Circuit from Taman to DS Bilwal	132	S/C	14
16	Feed for 132kV Cantt-II GS, Nr. Liaqat Bagh (from In-Out 132kV Satellite Town - MES Line)	132	D/C	10
	FY 2024-25			**136**
17	Feed for Burhan-II In-Out From New Wah to Burhan Circuit	132	D/C	6
18	Feed for Sowan – II In-Out from Giga to Chaklala Circuit	132	D/C	12
19	Feed for Simly Dam from University to Bahria Enclave	132	D/C	12
20	Feed for Gaggan In-Out from Adyala to Chakri Road Circuit	132	D/C	12
21	Chakwal – II In-Out From Chakri to Chakwal Circuit	132	D/C	30
22	Dispersal of Power from 220/132 kV Zeropoint In-Out G-13 to Zeropoint Circuit	132	D/C	15
23	Dispersal of Power from 220/132 kV Zeropoint In-Out NUST to H-11	132	D/C	15
24	Dispersal of Power from 220/132 kV Zeropoint In-Out Zeropoint to Express Sangjani Circuit	132	D/C	5
25	Dispersal of Power from 220/132 kV Zeropoint In-Out Zeropoint to Satelite- MES Circuit	132	D/C	20
	FY 2025-26			**127**
26	Feed for Rajjar – II (In-Out from Mangla to Rajjar Circuit)	132	D/C	7
27	Feed for Attock-II(In-Out from Attock - Gondal Circuit)	132	D/C	11
28	Feed for Fateh Jang-II (In-Out From Basal to Jand Circuit)	132	D/C	6
29	Feed for Jehlum Cantt-II (In -Out from Rawat to Sanghoi Circuit)	132	D/C	5
30	In-Out from Rawala Kot to Minhasa Circuit	132	D/C	9
	FY 2026-27			**38**
31	Dispersal of Power from 500/220/132 kV Chakwal (In-Out from Existing 132kV Chakwal to DG Khan Cement Line)	132	D/C	74
32	Dispersal of Power from 500/220/132 kV Chakwal (In-Out from Existing 132kV Chakwal to Pakistan Cement Line)	132	D/C	74

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33	Dispersal of Power from 500/220/132 kV Chakwal (In Out from Existing 132kV Chakwal-II - Chakri Line)	132	D/C	11
34	Dispersal of Power from 500/220/132 kV Chakwal Construction of Double Circuit using existing 66kV Right way of 132kV Chakwal to CS Shah	132	D/C	38
35	Dispersal of Power from 500/220/132 kV Chakwal Construction of Double Circuit using existing 66kV Right of way NPS for Talagang	132	D/C	38
36	Dispersal of Power from 500/220/132kV Islamabad-West (In-Out from 132kV D-12 to E-8 line)	132	D/C	14
37	Dispersal of Power from 500/220/132kV Islamabad-West (In-Out from 132kV Tarnol & F-11 line)	132	D/C	28
38	Dispersal of Power from 500/220/132kV Islamabad-West to 132kV Bahter More to New Wah GS	132	SDT	4
39	Dispersal of Power from 220/132kV New Kamra (In-out on 132kV Kamra -Sanjwal line)	132	D/C	10
40	Dispersal of Power from 220/132kV New Kamra (In-Out on 132kV Faqirabad - Gondal line)	132	D/C	6
41	Dispersal of Power from 220/132kV New Kamra (In-Out on 132kV Gondal -Jhangeria Circuit	132	D/C	6
42	Dispersal of Power from 220/132kV New Kamra to 132kV Burhan-II	132	D/C	4
43	I-11 to KTM Feed for Golra Road Rawalpindi	132	D/C	8
44	132kV SDT Line feed for 132kV Fateh Pur GS from Khui Ratta	132	D/C	7
45	Baragowa from 132kV Khan Pur Grid Station to remove the Island Position during (N-1)	132	SDT	18
46	Baragowa from 132kV Khan Pur Grid Station to remove the Island Position during (N-1)	132	SDT	18
47	N.P. Sethi from 132kV Pakistan Cement Grid Station to remove the Island Position during (N-1)	132	SDT	13
FY 2027-28				**374**
New Transmission Line				**824**
	Reconducting of Kahuta City- Mang-Plandari-Tararkhal	132	Rehab	1
	Remodeling of New Wah to Bahter More to Fateh Jang	132	Rehab	43
	Reconducting of Zero Point to I-8	132	Rehab	25

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	Reconducting of Nilore-KRL Kahuta	132	Rehab	15
FY 2023-24				**84**
	Reconductoring of Talagang to Chakwal	132	Rehab	0
	Burhan to AWC to CDA Pump to Sangjani Circuit and one circuit In-Out at Taxila Grid Station	132	Rehab	43
	Gondal to Faqirababd (Gondal - Ghurgushti & Ghurgushti to Faqirabad)	132	Rehab	32
FY 2024-25				**75**
	Burhan to Kamra	132	Rehab	31
	Faqirabad-Sanjwal-Kamra	132	Rehab	26
FY 2025-26				**56**
	Choa Saiden Shah (CSS) to Dandot	132	Rehab	10
	Single Circuit 132 KV Nilore to 132 KV Bharakahu on Rail Conductor	132	Rehab	8
	Single Circuit 132 KV Nilore to 132 KV B. Enclave on Rail Conductor	132	Rehab	20
	Single Circuit 132 KV University to 132KV Simly Dam on Rail Conductor	132	Rehab	26
	Single Circuit 132 KV University to 132 KV Barakahu on Rail Conductor	132	Rehab	3
	In-Out arrangement of 132kV Islamgarh to Mirpur	132	Rehab	4
	Stringing of Second Circuit 132 KV Lakar Mar – 132 KV Tamman	132	Rehab	13
FY 2027-28				**84**
Rehabilitation of T/Lines				**299**
Grand Total				**3,841**

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Annexure - B

Equipment, Machinery and Operational Vehicles	Qty.	Cost (Rs)
Equipment		
Phase sequence indicator	2	427,120.00
Primary Current injection test sets	1	2,839,600.00
Secondary injection relay test set	1	6,708,240.00
HV Insulation resistance tester (15KV with adjustable selection of at least 5KV, 10KV & 15KV)	1	3,003,710.00
DC Earth Fault Detection Test Set (1000 V DC with adjustable selections of al-least 250 V 500 V & 1000 VDC)	1	4,086,110.00
Clip on digital ammeter/voltmeter	2	138,700.00
Dielectric testing set for insulating oil	1	8,835,000.00
Dew point (SF6) last set/SF6 Gas Purity Test Set	1	2,115,440.00
Circuit breaker analyzer	1	12,805,050.00
Contact resistance measurement test set	1	4,027,810.00
C & DF test set	1	13,531,965.00
Test equipment for verification of magnetization characteristics of CTs as per NTDC Specifications P-191 2007	1	10,030,360.00
CT and VT polarity tester	1	493,675.00
Hi-Pot Test Set (160kV DC) with Test Leads complete with banana plugs	1	17,024,650.00
Winding/Oil Thermometer Test Set	1	10,590,600.00
Single phase Variac	1	971,075.00
Three phase Variac	1	2,168,450.00
Battery ground test set multiamp BGL or approved equivalent (DC Ground Fault Detector)	1	5,241,480.00
Battery impedance tester	1	4,643,180.00
Multi Phase TTR test sot	1	5,259,470.00
Microprocessor based universal relay testing set with Laptop	1	25,589,350.00
Sweep frequency response analyzer	1	12,516,250.00
Industrial Vacuum cleaner	1	188,325.00
Dissolved Gas Analyzer	2	16,000,000.00
Machinery		
All Terrain Crane 30 Ton	1	75,000,000.00
Transformer Oil Regeneration Plant	1	38,025,316.00
Oil Dehydration Plant	1	23,500,000.00
Crane mounted Truck (GSC)	2	17,529,966.00
Unimog Crane (GSC)	2	50,471,832.00
Vehicle		
Single Cabin Pickups for Line and Maintenance Staff (GSO)	7	22,429,911.00
Mini Trucks (GSO)	3	6,321,792.00
Mini Trucks s(GSC)	2	4,214,528.00
Single Cabin Pickups for Project Staff (GSC)	6	19,225,638.00
Double Cabin Pickups for Project Staff (GSC)	4	25,516,000.00
Master Trucks (GSC)	2	5,792,000.00
Total (Rs.)	-	**457,262,593.00**

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