

CHAPTER–IV

Compliance Audit observations relating to Public Sector Undertakings

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Important audit findings emerging from test check of transactions made by the Public Sector Undertakings are included in this Chapter.

Energy Department

Uttar Pradesh Power Transmission Corporation Limited

4.1 Audit of 'Planning and Implementation of Transmission Projects by Uttar Pradesh Power Transmission Corporation Limited'

Introduction

4.1.1 Government of India (GoI) formulated (February 2005) the National Electricity Policy (NEP) which aims at supply of reliable and quality Power of specified standards in an efficient manner and at reasonable rates. The policy emphasizes that the Central Transmission Utility (CTU) and State Transmission Utility (STU) have the key responsibility of network planning and development based on the NEP in coordination with all concerned agencies¹ as provided in the Electricity Act, 2003.

Uttar Pradesh Power Transmission Corporation Limited (Company) is entrusted with the business of transmission of electrical energy to various utilities with the help of its transmission lines and substations within geographical area of Uttar Pradesh. The Company was incorporated on 13 July 2006 under the Companies Act, 1956. The Company is under the administrative control of the Energy Department, Government of Uttar Pradesh (GoUP). GoUP notified (July 2007) the Company as STU.

The Transmission Projects² are constructed by the Company for catering the peak demand³, improving the quality of supply and reducing the line losses. The Company incurred total expenditure of ₹ 14,224 crore⁴ during the years 2018-19 to 2021-22 on construction of new transmission projects/ augmentation of existing capacity and system strengthening.

Process of transmission of Electricity

4.1.2 Transmission of electricity is defined as bulk transfer of power over long distances at high voltages, generally at 132 kV and above. Electric power generated at relatively low voltage in Power Generating Plants is stepped up to high voltage power before the same is transmitted through transmission lines. The sub-station (SS) is a station for transforming or converting electricity for the transmission or distribution thereof.

Transmission infrastructure of the Company

4.1.3 The transmission infrastructure of the Company during the period 2018-19 to 2021-22 is given in the **Table 4.1**.

¹ Central Transmission Utility, State Government, Generating Companies, Regional Power Committees, Central Electricity Authority, Licensees and any other person authorised by State Government in this behalf.

² Transmission projects include a transmission system comprising of specified transmission lines, sub-stations and associated equipment.

³ Peak demand is the highest power demand of an electrical grid over a specific period of time.

⁴ ₹ 3,735 crore in 2018-19, ₹ 3,975 crore in 2019-20, ₹ 3,785 crore in 2020-21 and ₹ 2,729 crore in 2021-22.

Table 4.1: Transmission infrastructure of the Company

Particulars/Years	2017-18	2018-19	2019-20	2020-21	2021-22
Length of transmission lines (in Ckm) at the end of the year	36,392.855	40,868.192	44,203.859	46,062.715	48,523.996
No. of sub-stations at the end of the year	528	555	576	599	614
Transformation capacity (in MVA) at the end of the year	1,02,458	1,11,191	1,22,130	1,29,047	1,38,966
Transmission Network availability (in per cent) during the year	99	99.01	99.47	99.46	99.52
Power Transmitted on UPPTCL Network (in MUs) during the year	1,14,321.13	1,11,745.04	1,16,731.81	1,19,091.97	1,24,736.93

Note: Ckm- Circuit Kilometer, MVA-Mega Volt Ampere, MUs- Million Units

Source: Data provided by the Company

It is evident from the above table that the Company constructed 12,131.141 Ckm transmission lines, 86 new sub-stations and added transformation capacity of 36,508 MVA during 2018-19 to 2021-22.

Organisational set up

4.1.4 The Management of the Company is vested with a Board of Directors (BoD) comprising of members appointed by the GoUP. The day-to-day operations are carried out by the Managing Director with the assistance of Director (Operations), Director (Works and Projects), Director (Commercial and Planning), Director (Finance), Director (Personnel Management and Administration) and three Directors nominated by GoUP/REC/PGCIL. At the Headquarters of the Company, there are five Design circles⁵ headed by Superintending Engineers engaged in designing of transmission projects, finalisation of contracts for procurement of material and award of works for execution of the transmission projects with the approval of the Store Purchase/Works Committees⁶. At the field level, there are 185 Divisions under 45 Circle offices engaged in execution of transmission projects and operation and maintenance of transmission system.

Audit Objectives

4.1.5 The audit was conducted with a view to ascertain:

- Whether the conceptualisation and planning of the projects was as per the requirements and their execution was done as per the set time frame.
- Whether projects were executed economically, efficiently, and effectively.
- Whether internal control and monitoring mechanism for implementation of projects was efficient and effective.

⁵ Electricity 765/400 kV Sub Station Design Circle, Electricity 765/400 kV Transmission Design Circle, Electricity Sub-Station Design Circle (ESDC)-I, Electricity Sub-Station Design Circle (ESDC)-II, Electricity Transmission Design Circle (220/132 kV line).

⁶ Directors Store Purchase/Works Committee (DSPC), Managing Director Store Purchase/Works Committee (MDPC) and Corporate Store Purchase/Works Committee with the assigned financial limit of ₹ 1 crore to ₹ 10 crore, between ₹ 10 crore to ₹ 35 crore and above ₹ 35 crore respectively.

Audit Criteria

4.1.6 Audit criteria were derived from the following sources:

- Electricity Act, 2003 and National Electricity Policy, 2005;
- Guidelines issued by Central Vigilance Commission (CVC);
- Manual on Transmission Planning Criteria of Central Electricity Authority (CEA);
- Uttar Pradesh Electricity Regulatory Commission (UPERC) Regulations, 2014 and 2019;
- Act, Rules and Directions of GoUP applicable in execution of Projects;
- Terms and Conditions of Tender and Agreement; and
- Orders and directions issued by UPPTCL.

Scope and Methodology of Audit

4.1.7 The Audit was conducted from August 2022 to January 2023 covering the period from 2018-19 to 2021-22 (updated up to December 2022) in which records related to planning and execution of transmission projects at Headquarters of the Company and 28 field units (15.14 *per cent*) out of 185 field units were examined. Out of 86⁷ projects of construction of new sub-stations and its associated lines valuing ₹ 10,045.76 crore⁸ and 417 projects of augmentation of existing capacity and system strengthening valuing ₹ 3,411.50 crore⁸, Audit examined 20 projects⁹ of new sub-stations and lines valuing ₹ 3,051.73 crore (30.38 *per cent*) and 8 projects¹⁰ of augmentation valuing ₹ 44.95 crore (1.32 *per cent*) selected through stratified random sampling.

The audit objectives, criteria and methodology were discussed with the Management in an Entry Conference held on 8 July 2022. The audit findings were discussed with the Government and the Management in an Exit Conference held on 30 June 2023. The replies of the Management and the Government received in June 2023 have been suitably incorporated in the respective paragraphs.

Audit Findings

4.1.8 Audit findings emerged from the examination of records related to planning and implementation of transmission projects, internal control and monitoring are discussed below:

Planning of Transmission Projects

4.1.9 The transmission system is generally planned for evacuation of power from generating stations within the State, drawing power from Intra State Transmission System (ISTS) and handling the expected peak demand of

⁷ In case of five projects, the cost of elements (SS/line) which were executed through Tariff based competitive bidding mode have been excluded from total project cost for the purpose of sampling.

⁸ Approved cost of the projects by BoD.

⁹ 14 completed and six work in progress projects.

¹⁰ Five completed and three work in progress projects.

DISCOMs and Open Access Consumers¹¹. Further, the system may also be augmented considering the operational constraints in the transmission system and to improve the overall performance of the Grid. The Company, keeping in view the above-mentioned requirements, plans the State transmission network as per the Central Electricity Authority (CEA)'s transmission planning criteria, 2013.

The Planning wing of the Company, headed by Director (Commercial and Planning) is the nodal wing for the planning of projects and obtaining approval of Detailed Project Reports (DPRs) of the projects from Transmission Works Committee (TWC)¹² and Board of Directors (BoD) of the Company. The DPRs prepared by field units for the projects are vetted by the Director (Operations) and Director (Works and Projects) before approval by TWC and BoD. After approval from BoD, projects above ₹ 10 crore are submitted to UPERC for prior approval of capital investment and viability of project in compliance of UPERC's Regulations, 2014 and 2019 and thereafter, to GoUP for seeking investment approval¹³. Further, projects having capacity of 400 kV and above voltage level and projects having connectivity with Inter State Transmission System are submitted to CEA for approval of technical standards of the projects and its connectivity to inter-state grid. After all approvals, tenders are invited.

The deficiencies noticed in planning of transmission projects are discussed in succeeding paragraphs.

Delayed handover of site for construction of sub-station

4.1.9.1 As per guiding principles to be followed at the time of selection of land for construction of sub-station issued (February 2017) by UPPTCL, assessment of ownership of land, earth resistivity, approach road *etc.* should be ensured before selection of land. Further, another order (April 2019) stipulated that field offices, while identifying land for sub-station, should consider factors such as clear and lawfully valid title of land, avoidance of large-scale tree cutting or demolition of building, availability of smooth approach road to the site *etc.* before submitting, with all details, final proposal for acceptance of TWC.

Audit noticed that while submitting the proposals to TWC for construction of sub-stations, the field offices mentioned that the land for sub-station was identified/available. However, at the time of handover of land to the contractor after award of work, various discrepancies such as delay in demarcation, delay in obtaining NOCs from the Forest Department for cutting of trees, delay in shifting existing distribution lines and dispute on the selected land *etc.*, were noticed, due to which, land could not be timely handed over to the contractors.

Audit observed that land was handed over to the contractors after two months to 38 months from the date of award in case of nine sub-station projects as

¹¹ Open Access Consumers are those who consumes electricity through open access from a person other than distribution licensee of his area of supply.

¹² TWC committee comprised of Managing Director, UPPTCL (Chairman), Director (Work and Projects), Director (Operation), Director (Commercial and Planning), Director (Finance) and three invitees *viz.* Chief Engineer (Energy System, UPPTCL), Chief Engineer (PPMM, Uttar Pradesh Rajya Vidyut Utpadan Nigam Limited) and Chief Engineer (Panning, Uttar Pradesh Power Corporation Limited).

¹³ 30 per cent of the cost of project is provided by GoUP in the form of equity infusion.

detailed in **Appendix-4.1**. Delay in handover of land further led to delay in completion of projects.

The Government and Management in its reply stated (June 2023) that in the instances observed by Audit, delay had occurred in clearance/handover of land due to reasons beyond the control of the Company. However, at present, the projects are being approved by TWC only after confirmation of availability of suitable land.

The fact remains that there was delay in handing over the clear site to the contractor in the cases pointed out by Audit.

Recommendation 1:

The Company should ensure the availability of hindrance free land to avoid delay in the completion of the Projects.

Delay in applying for NOCs from the concerned authorities

4.1.9.2 As per Standard Operating Procedure (SOP) for submission and approval of route survey, profile, various crossings and statutory clearances, issued (October 2019) by the Company, it was required to apply for NOC within a period of 12 weeks from the date of award/allotment of line work.

Audit noticed that in case of 12 test checked transmission line works, Company applied for NOCs to concerned authorities (National Highways Authority of India, Indian Railways, Power Grid Corporation of India Ltd. etc.) with a delay of one to nine months from the prescribed timeline as per SOP (**Appendix-4.2**). The delay in applying and obtaining NOCs resulted in delay in the completion of projects.

The Government and Management stated (June 2023) that UPPTCL can apply for NOC only after approval of route survey profile when exact route and exact location of crossings etc. are finalised. The Company itself is trying to improve the time taken in obtaining the NOC.

The reply is not acceptable as the timeline stipulated in SOP was not followed by the Company which resulted in delay in obtaining NOCs and delayed completion of projects.

Recommendation 2:

The Company should apply for NOCs within the prescribed timeline to minimise delay in obtaining NOCs and completion of projects.

Procurement of Material

4.1.10 The Company itself procures major material viz. transformers and conductors for projects of construction of new transmission system and augmentation/strengthening of existing systems by inviting separate tenders and supplies these materials to the contractors executing the projects. The Company earlier adopted UPPCL's rules and regulations for procurement of major materials. However, it had formulated and implemented its own Work Procurement Policy from June 2022¹⁴.

¹⁴ Although, Work Procurement Policy was approved by Board of Director in January 2022, however first tender in accordance with new WPP was invited in June 2022.

The Company procured transformers and conductors by floating total 25 tenders¹⁵ valuing ₹ 2,289.09 crore during 2018-19 to 2021-22. Out of these 25 tenders, Audit scrutinised the records of nine¹⁶ tenders valuing ₹ 1,377.66 crore. The deficiencies noticed are discussed in succeeding paragraph:

Deficient tender conditions

4.1.10.1 Central Vigilance Commission (CVC) guidelines (December 2002) provided that prequalification criteria is a yardstick to allow or disallow the firms to participate in the bids and to avoid malpractices, favouritism and corruption in tendering, it is necessary to fix in advance the minimum qualification, experience and number of similar works of a minimum magnitude satisfactorily executed in terms of quality and period of execution.

Audit noticed that in case of three tenders¹⁷ related to procurement of ACSR Moose conductors, the Company incorporated financial prequalification criteria of Minimum Average Annual Turnover (MAAT) and Liquid Assets (LA) in the tender and awarded the contract based on the same. However, in case of four tenders¹⁸ related to procurement of transformers and in two tenders¹⁹ related to procurement of ACSR Zebra and Panther conductors, the Company did not incorporate the financial prequalification criteria of MAAT and LA in the tenders and awarded the contract without assessing the financial eligibility of the firms.

Thus, the Company had not uniformly adopted financial prequalification criteria in its material procurement tenders.

The Government and Management stated (June 2023) that neither the CVC guidelines nor UPPTCL's own approved specifications were violated as MAAT & LA *etc.* have never been a part of qualifying requirement in procurement of ACSR Panther and Zebra conductors and power transformers tenders of UPPTCL.

The reply is not acceptable as MAAT and LA prequalification conditions were not uniformly included in tenders for supply of materials. Further, after issuance of observation, the Company itself adopted (January 2022) uniform prequalification criteria for all tenders in its Standard Bidding Documents.

Execution of Transmission Projects

4.1.11 A transmission project consists of three components *viz.* the sub-station (SS), the feeder lines of SS and outgoing lines to feed other transmission/distribution SSs. The Company designed packages for implementation of transmission projects and allotted these to different turnkey contractors (TKCs) for execution of works of new SS. The work of augmentation of existing SSs were also executed by the Company by engaging contractors/firms.

For award of the projects, the Company invited open tenders and issued Letter

¹⁵ 14 tenders for procurement of transformers and 11 tenders for procurement of conductors.

¹⁶ Four tenders related to procurement of transformers and five tenders related procurement of conductors.

¹⁷ ETD 8-44/17, ETD 8-50/18 and ETD 8-62/21

¹⁸ ESD-521/2019, ESD-558/2020, SD-881/2020 and SD-882/2020

¹⁹ TD-430/18 and TD-447/19

of Intents (LoI) to the turnkey contractors/firms (L-1 bidder) after approval of the Store Purchase/Works Committee. After the issuance of LoI, the works were got executed by the concerned Electricity Transmission Divisions of the Company.

The deficiencies noticed in the award of projects and their execution are discussed below:

Delay in completion of transmission projects

4.1.11.1 The Company fixed the completion period for construction of 132 kV, 220 kV and 400 kV sub-stations (SSs) as 12 months, 18 months, and 24 months respectively from the date of award of work or date of handover of land, whichever was later and eight months to 23 months from the date of allotment in case of construction of transmission lines. Further, the Company fixed the completion period of one to eight months from the date of award in case of augmentation/system strengthening works.

Audit noticed that out of 20 test checked projects consisting of 20 SSs and 53 transmission lines, only four SSs and nine transmission lines were completed within their scheduled completion period. Further, 10 SSs and 33 transmission lines were completed with a delay of two to 24 months and one to 34 months respectively. Six SSs and 11 transmission lines were under progress, out of which five SSs and 10 transmission lines were running with a delay of 5 to 20 months and six to 25 months respectively from their scheduled completion period as of December 2022.

Moreover, in eight test checked works of augmentation/system strengthening, three works were completed within time, two works were completed with a delay of 14 to 24 months and three works were under progress, out of which two works were running with delay of five to 16 months as of December 2022.

The status of the delay in completion has been summarised in **Table 4.2** below.

Table 4.2: Delay in completion of test checked projects/works

Project category	Element	No. of cases (SS/Line)	No. of cases and delay in completion of projects in months from their scheduled date of completion			
			Completed Projects (SS/Line)		Work in progress Projects (SS/Line)	
			Within time	With delay (in months)	Within time	Running with delay (in months)
Sub-Stations and their associated lines						
132 kV	Sub-station	12	4	6 (5 to 24 months)	1	1 (5 months)
	Line	20	4	12 (1 to 34 months)	1	3 (6 to 19 months)
220 kV	Sub-station	5	0	3 (2 to 22 months)	0	2 (10 to 20 months)
	Line	13	1	10 (4 to 30 months)	0	2 (15 to 21 months)
400 kV	Sub-station	3	0	1 (20 months)	0	2 (8 to 18 months)
	Line	20	4	11 (8 to 28 months)	0	5 (18 to 25 months)
Total		20/53	4/9	10/33	1/1	5/10
Augmentation/System Strengthening works						
132 kV	Augmentation/ System strengthening Work	3	2	0	1	0
220 kV		3	1	2 (14 to 24 month)	0	0
400 kV		1	0	0	0	1 (16 months)
Line work		1	0	0	0	1 (5 months)
Total		8	3	2	1	2

Source: Information provided by the Company

The major reasons for delay as analysed by Audit were delay in handing over of clear site/hindrance free land, slow progress of work by TKCs, delayed supply of materials by the Company, right of way problems and delay in applying/obtaining NOCs for line works *etc.* which could have been controlled by better project management by the Company.

Audit further noticed that the Company had to pay transmission charges²⁰ amounting to ₹ 15.43 crore to Power Grid Corporation of India Limited (PGCIL) in June 2022 due to not timely completing the downstream line²¹ from PGCIL's 400/220 kV sub-station at Shahjahanpur which was to be completed in synchronisation with the commercial operation date (5 August 2016) of the sub-station.

The Government and Management stated (June 2023) that the delay in completion of projects was due to delay in handing over of clear site to contractors and delay in providing NOCs by the concerned authorities which were beyond the control of the Company. Further, Management stated that although an amount of ₹ 15.43 crore has been paid to PGCIL but the matter has been referred to APTEL.

The reply is not acceptable as delay could have been avoided by ensuring availability of clear site before start of work and timely applying for NOCs.

Award of work in violation of tender condition

4.1.11.2 As per prequalification criteria incorporated in the tender TD-434/2018, the Minimum Average Annual Turnover (MAAT) of the bidders was to be calculated on average of income as per profit and loss account of audited balance sheet of last three years.

Audit noticed that while evaluating the bids, the company calculated MAAT considering average income of best three out of last five years instead of average income of last three years and declared the successful bidder firm as eligible as its MAAT was arrived at ₹ 384.60 crore against requirement of ₹ 381.04 crore. However, average income of last three years of the firm was ₹ 348.06 crore only and thus the bidder was not meeting the MAAT criteria. Despite this, the Company awarded the tender to the firm.

The Government and Management stated (June 2023) that MAAT of the firm was ₹ 348.06 crore against the requirement of ₹ 335.53 crore and therefore, the firm met the MAAT criteria.

The reply is not acceptable as requisite MAAT considered in bid evaluation was ₹ 381.04 crore.

Award of line work despite quoting unrealistic rate for unrequired items

4.1.11.3 The Company invited (23 July 2018) tender for construction of 400 kV transmission line associated with 400 kV SS Bhaukhari, Basti and awarded the same to M/s RS Infra Project Pvt. Ltd. (Contractor) being L-1 bidder. On analysis of bids submitted for the work, it was noticed by Audit that for two items²² of steel to be used in towers for river crossing, L-1 bidder quoted unrealistically low rates of ₹ 928 per MT (High tensile steel) and

²⁰ The charges paid by UPPTCL in compliance of CERC order of January 2020 due to delayed completion of downstream transmission line.

²¹ 220 kV DC Shahjahanpur (PG)- Lakhimpur

²² (i) High Tensile Steel and (ii) Mild Steel for special river crossing towers.

₹ 885 per MT (Mild Steel) while for the same items, contractor quoted rates of ₹ 75,400 and ₹ 68,400 per MT, respectively in another tender invited on same date i.e., 23 July 2018 for another transmission line associated with the same SS. Other bidders also quoted the rates for the same items ranging between ₹ 69,960 and ₹ 80,758 per MT.

Audit noticed that items for which unrealistically low rates were quoted by L-1 bidder were not required in the execution of work as there was no river crossing in the line route as evident from the tower schedule of the work. It indicates that the contractor was aware of the fact that these items were not required to be supplied, therefore, by quoting unrealistically low rates for the same, it became L-1 bidder.

Audit further noticed that if these items would have been excluded in bid evaluation, the L-1 bidder would have shifted to L-3 and tender would have been allotted to L-3 bidder at a cost lesser by ₹ 1.01 crore.

Thus, due to deficiency in the tender evaluation, the contract was awarded at a higher cost by ₹ 1.01 crore resulting in loss to the Company.

The Government and Management stated (June 2023) that bid was evaluated for the package as a whole and lowest bidder has been finalised as L-1 bidder. Therefore, clarification was not sought from the bidder, regarding reasonability of individual items' rate. Further, as per earlier prevailing practice of UPPTCL, DPR of lines was prepared on per km basis without prior survey of the line route. However, in this case, no river crossing was found after detailed survey done by the firm, hence these items were not executed. At present, the Company has made it mandatory to finalise the DPR after proper survey.

Reply is not acceptable as reasonability of rates quoted for individual items as well as complete bid should be ensured by the Company which was not done. In the absence of the above, contract was awarded at higher rate.

Recommendation 3:

The Company should strive for timely completion of projects and exercise due diligence while evaluating the bids to avoid award of work to ineligible bidders.

Loss due to failure in recovery of cost of unutilised material lying with the Contractor

4.1.11.4 The work of construction of 400 kV Shamli-Aligarh DC line was awarded (November 2018) to M/s Simplex Infrastructures Ltd. (contractor) at contract value of ₹ 229.86 crore (revised to ₹ 273.77 crore) with scheduled completion period by July 2021. The required quantity of conductors for the work was to be supplied by the Company.

Agreement executed with Contractor provided that if the contractor shows negligence in execution of work and fails to comply with the notice within reasonable time after date of notice, the purchaser shall be at liberty to employ other workmen forthwith with extra cost of completion of work being recoverable from the earlier contractor. Agreement also provided that Contractor shall entirely be responsible for proper handling and storage of all material supplied by the Company in his custody.

The Company issued 1,837.198 km moose conductor to the contractor for execution of the work. The contractor could not execute the work on time and due to repeated failure, the contract was terminated (February 2020). However, termination was put on hold on the request of the contractor but due to slow progress of the work, the contract was finally terminated (July 2022) after a lapse of more than two years from the date of first termination. Further, the work was awarded (January 2023) to new contractor (JV of M/s K. Ramchandra Rao and M/s Utkarsh India) and the Company finalised total recovery of ₹ 42.77 crore (₹ 24.76 crore for completion of balance works and ₹ 18.01 crore for liquidated damages) from the previous contractor (M/s Simplex Infrastructures Ltd.) against which total amount of ₹ 46.10 crore {encashed Bank Guarantee (BG): ₹ 25.28 crore, retention money: ₹ 18.62 crore, billed but not paid: ₹ 1.36 crore and work executed but not billed: ₹ 0.84 crore} was available with the Company.

Audit noticed that at the time of termination of the contract, the Company did not reconcile the status of material issued to the contractor and material utilised. The Company later reconciled and found that 314.45 km conductor valuing ₹ 12.83 crore was lying with the Contractor but failed to recover the same from the Contractor even after lapse of one year from termination of the contract.

As the Company failed to perform reconciliation at the time of termination of contract, the Company suffered loss of ₹ 9.50 crore (after deducting the available amount of ₹ 3.33 crore²³) on account of cost of unutilised conductor.

The Government and Management stated (June/July 2023) that available amount of ₹ 61.05 crore (₹ 46.10 crore + BG of ₹ 14.95 crore pertaining to other work) would be used for any pending recovery to be made from the defaulted firm. Therefore, UPPTCL incurred no loss.

Reply is not acceptable as available BG was not encashed till July 2023 and chances of encashment are remote in view of bankruptcy of the contractor. Further, the fact remains that adjustment of cost of unutilised material from the available amount was still pending (July 2023).

Short recovery of Performance Bank Guarantee

4.1.11.5 GoUP order (June 2012) regarding fixing the limit for acceptance of tender stipulated that in case of quoting of bids by the bidder up to 10 *per cent* below the estimated cost, Performance Bank Guarantee (PBG) may be obtained at the rate of 0.50 *per cent* on every one *per cent* below the estimated cost. In case the rate quoted by bidder is more than 10 *per cent* below the estimated cost, PBG may be obtained at the rate of one *per cent* on each one *per cent* below the estimated cost. This order has been adopted by the Company in its board meeting held in June 2017.

Audit noticed that the Company did not include the above provision in the tenders floated for execution of works and only included the clause for recovery of PBG at the rate of 10 *per cent* of the contract value. Audit further noticed that in case of three tenders of sub-stations issued during December 2018 to May 2019, the bidders had quoted rates ranging between 23 and 36 *per cent* below the estimated cost and submitted PBG at the rate of 10 *per cent* only. Thus, due to non-inclusion of the provision for recovery of

²³ (₹ 46.10 crore - ₹ 42.77 crore).

PBG as per GoUP order in the tenders, the Company could not recover PBG amounting to ₹ 16.53 crore (**Appendix-4.3**) from three TKCs which led to undue favour to the contractors.

The Government/Management stated (June 2023) that the GoUP order adopted by the Company is applicable exclusively for civil contracts only and not applicable to tenders for sub-stations and associated civil work.

The reply is not acceptable as the Company, while adopting the GoUP order, has not excluded its application on tenders of SSs work.

Excess payment to contractor due to not deducting royalty from the bills

4.1.11.6 GoUP, for ensuring the payment of royalty on minerals used in public construction works, directed (October 2015) that while receiving supply of minerals to be used in public construction works, it should be ensured²⁴ that transportation of mineral was made after deposit of royalty. In those cases, where supply of material was made without depositing royalty, the amount of royalty should be deducted from the bills before making payment to supplier.

Uttar Pradesh Minor Mineral (Concession) Rules, 1963 (as amended from time to time) provides applicable rates of royalty on minor minerals. As per these Rules, royalty on coarse sand and stone ballast was fixed at ₹ 150 and ₹ 160 per cubic meter, respectively.

Audit noticed that in case of 32 completed civil works, 52,223.80 cum coarse sand and 91,391.54 cum stone blast were supplied by 28 suppliers. The Company neither deducted royalty while making final payments to the suppliers nor verified the deposit of royalty through the online portal. Due to this, the Company made payment to suppliers without deducting royalty amounting to ₹ 2.01 crore (**Appendix-4.4**) which should have been deducted and deposited to treasury by the Company. This resulted in loss to the exchequer to the same extent.

The Government and Management accepted the observation and stated (June 2023) that four firms have submitted eMM-11. Reminder notices to remaining firms have been issued for submitting eMM-11 and action will be taken for recovery accordingly.

Short/non-deduction of liquidated damages from the bills of contractors

4.1.11.7 The terms and condition of Letter of Intent/Agreement executed with the TKCs stipulated that in case of delay in completion of sub-station/lines beyond contractual completion period, liquidated damages at the rate of 0.5 per cent per week of delay subject to maximum of 10 per cent of aggregate contract value shall be deducted from the contractor's bills. The conditions further stipulated that if the bidder fails in due performance of his contract within the time fixed by the contract or any extension thereof, the bidder agrees to accept a reduction of contract value by half per cent per week reckoned on the contract value of such portion only of the plant as cannot in consequence of the delay be used commercially and efficiently during each week between appointed or extended time as the case may be subject to maximum limit of 10 per cent of the contract value.

²⁴ By obtaining Form MM-11 (eMM-11 from July 2017) from the supplier.

Audit found that 29 SS/line works were commercially put to use with a delay ranging from five to 129 weeks due to delayed completion by the contractors.

As per terms and condition of the Agreement, liquidated damages were to be deducted from the bills of contractors for delayed completion of work. Audit, while considering the actual completion date as date of energisation in case of line works and date of charging of first transformer in case of SS works, noticed that LD amounting to ₹ 63.39 crore (**Appendix-4.5**) was short/not deducted by the Company from the bills of the contractors for delays attributable to them. Thus, undue favour was extended to contractors to the same extent.

The Government and Management stated (June 2023) that in case of line works, LD are being deducted at the rate of 0.5 *per cent* per week only after delay of 20 weeks and the final adjustments are being made from 10 *per cent* retention money. Further, in case of SSs, LD are being adjusted from 10 *per cent* retention money deducted from the bills of contractor after completion of works and as per decision of time extension committee. Hence, it will be adjusted from retention money after completion of works.

The reply is not acceptable as LD amount has been calculated by Audit after considering time extension granted by the Company and as per terms and conditions of the agreement, LD was deductible from contractors' bills but in 12 cases, LD was not deducted by the Company from the contractors' bills and in 17 cases, LD was short deducted by the Company. Further, retention money deducted from the contractors' bills was also released by the Company in six cases.

Excess payment to contractors

4.1.11.8 As per Uttar Pradesh Minor Minerals (Concession) (thirty-ninth amendment) Rules, 2016, royalty is to be levied on supply of earth at the rate of ₹ 30 per cum. Further, GoUP exempted the levy of royalty on supply of earth w.e.f. 27 March 2018.

The Company prepares Schedule of Rates (SOR) on a yearly basis (generally applicable from the month of April of the concerned year) and estimates were prepared on the basis of SOR applicable at that time. In case works were awarded at the rates of SOR, which were inclusive of any royalty payable, and during execution of contract rate of royalty was revised, the payment of royalty to the contractor should have been made at the revised rates.

Audit noticed that in 14 civil works, estimates were prepared on the basis of SOR of 2016-17 and 2017-18 in which item rate for supply of earth was inclusive of royalty. These works were awarded/executed during March 2018 to June 2020 after GoUP notification of March 2018, therefore, royalty on earth work was not payable to the contractors. The Company, however, in violation of the above order, paid royalty amounting to ₹ 58.98 lakh to the contractors against supply of earth resulting in excess payment to the contractors to the same extent.

While accepting the observation, the Government and Management stated (June 2023) that ₹ 9.13 lakh has been recovered from three concerned firms. Reminder notices have been issued to remaining firms and action will be taken accordingly.

Debt equity ratio for financing of transmission projects not maintained

4.1.11.9 As per directions of Appraisal and Evaluation Committee of GoUP, financing of the transmission works shall be done from Institutional loan and Government equity in the ratio of 70:30. UPERC also determines transmission tariff considering 70 *per cent* loan and 30 *per cent* equity. Further, GoUP in its sanction order also provided that financial support in the form of equity shall not be utilised for any purpose other than that sanctioned for.

The company submits the proposal for the construction/augmentation of the sub-stations to GoUP to get the Government equity and after the approval of the projects, 30 *per cent* equity is given in advance by GoUP.

During the scrutiny of sampled projects of new sub-stations, it was noticed that the Company has not maintained ratio of loan and equity in three completed projects even after lapse of six to 16 months after completion and handing over of these projects to the Company as per details given in **Table 4.3**.

Table 4.3: Statement showing debt equity ratio of three completed projects

(₹ in crore)							
Sl. No.	Name of Project	Actual Expenditure including Interest during construction (IDC)	Actual loan drawn (as of December 2022)	Equity utilised	Loan/debt in percentage	Actual equity in percentage	Date of handing over of Project
1	2	3	4	5=3-4	6=(4/3) x 100	7=100- col.6	8
1	132/33 kV SS Tiloj	23.13	15.66	7.47	68	32	08.12.2021
2	132/33 kV SS Kaiserganj	71.34	42.60	28.74	60	40	06.06.2022
3	132/33 kV Bharwan,	21.27	19.01	2.26	89	11	10.08.2021

Source: Information provided by the Company

It is evident from the table above that in two completed projects, the Company utilised equity in excess of 30 *per cent* of GoUP share and in one case, utilisation of equity was less than 30 *per cent* and loan portion was not proportionate to the prescribed share of 70 *per cent*.

The Government and Management stated (June 2023) that on completion and capitalisation of projects, debt-equity ratio of 70:30 is ensured. Accordingly, the loan amount will be claimed in due course after completion of these projects.

The reply is not acceptable as the above three projects have already been completed and taken over by the Company during August 2021 to June 2022, however, debt equity ratio of the same was not maintained even after lapse of six to 16 months from the date of taking over of the projects.

Deprivation of revenue due to not complying with the UPERC Regulations

4.1.11.10 As per UPERC Regulations, 2014 and 2019, the Company was required to submit Capital Investment Plan (CIP) for ongoing projects and new projects (greater than ₹ 10 crore) to UPERC for prior approval. In case CIP is not submitted, the Commission may disallow the inclusion of Capital expenditure for determining transmission tariff of that year.

Audit noticed that the Company failed to take prior approval of UPERC in the years 2018-19 and 2019-20 for the execution of schemes having capital expenditure of more than ₹ 10 crore. Resultantly, UPERC while determining (January 2019 and August 2019) transmission tariff for the above-mentioned years, had disallowed 30 *per cent* of the projected total capital investment by the Company amounting to ₹ 3463.95 crore due to non-compliance of provisions of Regulations. Further, UPERC, while finalising (November 2020 and June 2021) the true up for 2018-19 and 2019-20, finally disallowed 25 *per cent* of the capital investment made by the Company amounting to ₹ 1,836.94 crore resulting in disallowance of return on investment²⁵ of ₹ 144.75 crore.

Thus, due to not complying with the Regulations, the Company was deprived of revenue amounting to ₹ 144.75 crore as true-up was done at lower side for the years 2018-19 and 2019-20.

The Government and Management stated (June 2023) that as per Regulations 2014, CIP was part of business plan, hence, not submitted separately. Further, disallowance of 25 *per cent* investment in true up order for FY 2018-19 and 2019-20 has been challenged in APTEL and final order is awaited.

The reply is not acceptable as the main reason for disallowing the capital investment was not obtaining prior approval of UPERC and not following the directions of the Commission in this regard.

Recommendation 4:

The Company should follow the provisions of UPERC Regulation/directions while submitting the proposals for determining the transmission tariff.

Internal control and Monitoring mechanism

4.1.12 The deficiencies noticed in internal control and monitoring mechanism are discussed below:

Shortage of manpower

4.1.12.1 In any Company, every post has different job responsibilities so that the posted officers/officials may perform their work efficiently. The internal control in the Company weakens when the job responsibilities of different posts are performed by one officer holding multiple charges.

Audit noticed that the internal control system was not adequate due to shortage of manpower, as summarised in **Table 4.4** below:

Table 4.4: Sanctioned strength and Person in position

Post	Sanctioned Strength	Person in Position	Shortage (in per cent)
General Manager	1	0	1 (100)
Sr. Account Officer	9	0	9 (100)
Accountants	186	158	28 (15)
Superintending Engineer	70	47	23 (33)
Executive Engineer	270	250	20 (7)
Assistant Engineer	760	651	109 (14)
Junior Engineer	1603	1356	247 (15)

²⁵ Return on Equity and interest on loan.

Due to shortage of manpower the officials were having more than one charge in Headquarters and field units of the Company.

No reply was furnished by the GoUP and Management.

Internal Audit

4.1.12.2 Internal Audit is an important element of Internal Control. The Company did not have its own Internal Audit Wing (IAW) till July 2020 and the work of Internal Audit was conducted by appointing empaneled Chartered Accountant (CA) firms. Further, the Company created its own IAW in July 2020.

It was observed that the Internal Audit Reports did not include detailed technical audits or comments on propriety of expenditure. Audit also found that Internal Audit of Planning Wing, Project Control and Monitoring Unit and five design circles situated at headquarters of the Company was not covered under the purview of IAW/CA firms, hence could not be conducted till date (December 2022). As a result, the overall internal audit mechanism was ineffective.

Audit further noticed that manpower strength of IAW was not commensurate with the size and volume of business of the Company as only 12 out of total 189 units²⁶ were audited by IAW each year during 2020-21 and 2021-22 and audit of remaining units were conducted by CA firms.

The Government and Management accepted the observation and stated (June 2023) that due to lack of manpower, adequate manpower could not be deployed for internal audit. Further, as suggested by the audit, all five Design Circles as well as Project Control & Monitoring Unit will be taken under the purview of Internal Audit from the Financial Year 2023-24.

Monitoring Mechanism

4.1.12.3 An effective monitoring mechanism plays a vital role in efficient implementation and execution of the projects as well as in efficient operation of the transmission system.

Audit noticed that the Management had failed to take necessary steps in timely handing over of land for construction of SSs, in applying for NoCs, in execution of projects and in effecting recovery from the contractors as discussed in earlier paragraphs (**Paragraphs 4.1.9.1, 4.1.9.2, 4.1.11.1 and 4.1.11.4**). These indicated deficient monitoring on the part of the Management.

The Government and Management stated (June 2023) that during 2022-23, 40 new and 58 existing SSs have been energised with transmission capacity of 18,553 MVA which was possible by the rigorous and effective monitoring only by the management.

The reply is not acceptable as during the period of audit (2018-22), shortcomings in the execution of projects, as observed in the paragraphs mentioned above, indicates lack of proper monitoring.

²⁶ 185 field units and four headquarters' units.

Conclusion

The Company neither ensured timely handing over of clear site for construction of sub-stations nor applied for NOCs within prescribed time resulting in delay in completion of projects. The Company did not incorporate uniform prequalification criteria in tenders. Further, lack of due diligence in scrutiny of bids which led to award of work to ineligible bidder. The Company did not ensure payment of royalty to the authorities by contractors on minor minerals used in its construction works as per the applicable acts/rules. Failure in seeking prior approval from UPERC led to capital investment being disallowed in true-up petitions.

Audit Paragraphs**Paschimanchal Vidyut Vitran Nigam Limited****4.2 Failure to recover Electricity Duty**

Paschimanchal Vidyut Vitran Nigam Limited (PVVNL) failed to levy Electricity Duty amounting to ₹ 3.94 crore in electricity bills of JP Sports International Limited after expiry of the exemption period resulting in non-recovery and deposit of the same in the State exchequer.

Section 3(1) of the U.P. Electricity (Duty) Act, 1952, stipulates that electricity duty shall be levied for and paid to the State Government on the energy sold by a licensee to a consumer determined at such rate or rates as may from time to time be fixed by the State Government by notification in the Gazette.

Further, Para 2 (v) of Government Order (GO) dated 22 May 2009²⁷ related to policy formulation for exemption of tax/duties/levies to large scale projects stipulated that exemption of Electricity Duty (ED) would be provided to large scale integrated development projects on self-generation of electricity or purchase of electricity in the project area for a period of 10 years from date of issue of GO.

M/s JP Sports International Limited (Consumer) established a Mega Project in the district Gautam Buddh Nagar on 1,000 hectare land for Sports core activities. Paschimanchal Vidyut Vitran Nigam Limited (PVVNL) sanctioned electricity connection of 30,000 kVA to the Consumer in November 2010 and the connection was released on 27 October 2011 under High Voltage (HV)-1 category. Further, PVVNL extended the benefit of exemption of ED to the Consumer as per above GO.

Audit noticed (April 2022) during the Audit of Electricity Distribution Division, Greater Noida of PVVNL that as per GO benefit of exemption of ED was available to the Consumer up to May 2019 only but PVVNL continued to extend the benefit of exemption of ED even after May 2019 and had not levied ED in the bills of Consumer for the period from June 2019 to November 2022. As a result, ED amounting to ₹ 3.94 crore (**Appendix-4.6**) could not be recovered from the Consumer and remitted to the Government due to failure on the part of PVVNL.

In reply, Government and Management stated (May 2023) that mistakenly ED could not be included in the bills of Consumer after May 2019 and after being pointed out by the Audit, ED amounting to ₹ 3.94 crore has been included in the bill of consumer in December 2022. It was also stated that electricity connection of the consumer was disconnected in March 2023 due to failure to pay the due amount and action for recovery is being taken.

Fact remains that ED amount has still not been recovered from the Consumer (May 2023).

²⁷ Issued by Infrastructure and Industrial Development Department, Government of Uttar Pradesh.

Madhyanchal Vidyut Vitran Nigam Limited

4.3 Loss of ₹ 2.79 crore due to not levying of Protective load charges

Madhyanchal Vidyut Vitran Nigam Limited had not levied protective load charges of ₹ 2.79 crore for 24 hours' roster free power supply to a consumer resulting in loss to the Company to that extent.

Clause 4.27 of the Electricity Supply Code, 2005 provides that licensee may grant protective load in exceptional cases, to be specified in agreement to the consumer, who opt for twenty-four hours supply of power. Further, Para 9 of the Rate Schedule²⁸ provides that consumers getting supply on independent feeder at 11 kV and above voltage, emanating from sub-station, may opt for facility of protective load and avail supply during the period of scheduled rostering imposed by the licensee except under emergency rostering. An additional charge at the rate of 100 *per cent* of base demand charges shall be levied on the sanctioned protective load per month as protective load charges.

Audit noticed (February 2022) that Electricity Distribution Division-III, Bahraich, Kaisarganj (Division) of Madhyanchal Vidyut Vitran Nigam Limited (Company) released (19 January 2021) electricity load of 4,450 kVA to M/s Ritvik Steel Private Limited (Consumer). The consumer further, requested (21 January 2021) the Division to provide 24 hours roster free power supply²⁹ stating that the arc furnace took one to two hours to restore its position in case of power cut which led to loss to the firm as well as loss of revenue to the Company. The Division forwarded (27 January 2021) the request of the Consumer to the Head office of the Company for necessary action. The Director (Technical) of the Company recommended (08 February 2021) to the State Load Despatch Centre (SLDC) for supplying 24 hours' roster free power supply to the Consumer under Industrial Investment and Employment Promotion Policy (Industrial Policy), 2017³⁰ of GoUP. Accordingly, the Consumer was extended 24 hours power supply with effect from 10 February 2021.

Audit observed that the consumer was not eligible for 24 hours' roster free power supply under the said Industrial Policy, 2017 as the Policy intended to identify and provide industrial clusters having minimum specified load with independent feeders and exempt these from power cuts. However, there was no industrial clusters identified and approved for Bahraich District, the location of the consumer. Further, the Company also confirmed (February 2023) that 24 hours' roster free power supply can be provided to the industries situated outside industrial clusters after sanction of protective load as per Clause 4.27 of the Electricity Supply Code, 2005 for which charges were recoverable as per applicable Rate Schedule. Thus, the consumer should have been given 24 hours' roster free power supply only after proper sanction of protective load and recovery of protective load charges. But, the Company, in violation of provisions of Supply Code and Industrial Policy, continued 24 hours' roster free power supply to the consumer without recovering prescribed charges.

²⁸ Applicable for 2020-21 and 2021-22.

²⁹ 18 hours' supply was being provided to the consumer by the Division.

³⁰ Policy intends to identify and provide industrial clusters having minimum specified load with independent feeders and exempt these from power cuts.

Thus, due to improper provision of 24 hours' roster free power supply to the Consumer without recovery of protective load charges at the applicable rate of ₹ 290 per kVA on the billed demand ranging from 3,337.50 to 4,458 kVA³¹, the Company suffered loss of revenue of ₹ 2.79 crore (**Appendix-4.7**) during March 2021 to May 2023.

Management and Government stated (March and May 2023) in their reply that as per Board of Directors (BoD) of UPPCL decision, 24 hours' roster free power supply would be provided to those 11 kV rural feeders on which industrial load ranged between 50 and 75 *per cent* out of total connected load on that feeder. Further, the consumer was getting supply at 33 kV independent feeder, hence total load of the consumer comes under Industrial category.

The reply is not acceptable as the Company provided 24 hours' roster free power supply to the Consumer under Industrial Policy, 2017 and thus, the decision of BoD of UPPCL was not applicable in this case. Further, the consumer was not eligible for 24 hours' roster free power supply under Industrial Policy as the consumer was not located in an industrial cluster.

Audit Impact

In the following case recovery was made at the instance of audit:

Madhyanchal Vidyut Vitran Nigam Limited

4.4 Recovery of Protective load charges amounting ₹ 2.66 crore at the instance of Audit

Para 10 of General Provisions of Rate Schedule effective from 12 October 2014 stipulates that consumers getting supply on independent feeders at 11 kV and above voltage, emanating from sub-station, may opt for facility of protective load and avail supply during the period of scheduled rostering imposed by the Licensee, except under emergency rostering. An additional charge at the rate of 100 *per cent* of base demand charges fixed per month shall be levied on the contracted protective load each month.

After being pointed out by Audit in September 2022, that the protective load charges were not levied in the bills of two consumers³², the Executive Engineer, Electricity Distribution Division-I, Gonda charged the arrear of protective load charges amounting to ₹ 2.66 crore in the bills of December 2022 for both the connections and recovered the same from the consumers in April/May 2023.

³¹ As per Rate Schedule, an additional charge at the rate of 100 *per cent* of base demand charges was leviable on the sanctioned protective load per month as protective load charges.

³² Railway Flash Butt Plant and Railway NER Colony.