



कार्यालय  
Office of the  
प्रबन्ध निदेशक  
MANAGING DIRECTOR  
पश्चिमांचल विद्युत वितरण निगम लि.,  
Paschimanchal Vidyut Vitran Nigam Ltd.  
विक्टोरिया पार्क, मेरठ  
Victoria Park, MEERUT-250001  
CIN- U31200UP2003SGC027458

ई-मेल

No. 8642 /PVVNL/MRT/COM/UPERC/

Dated : 07 FEB 2026

**Subject:-** Response to the replies of 2<sup>nd</sup> information Requirement/Discrepancies/Data Gaps in the Petition No. 2318 of 2025 dated 28<sup>th</sup> November, 2025 of True-Up (FY 2024-25), Annual Performance Review (FY 2025-26). Aggregate Revenue Requirement (FY 2026-27) of PVVNL.

**The Secretary**  
**Uttar Pradesh Electricity Regulatory Commission**  
**Vibhuti Khand, Gomti Nagar**  
**Lucknow-226010,**

**Ref:- 1. UPERC/Secy/D(T)/2026-1225 dated 05 January 2026.**

This is with reference to your above-mentioned letter directing submission of replies to 2<sup>nd</sup> Information Requirement/Discrepancies/Data Gaps in the Petition No. 2318 of 2025 dated 28<sup>th</sup> November, 2025 of True-Up (FY 2024-25). Annual Performance Review (FY 2025-26). Aggregate Revenue Requirement (FY 2026-27) of PVVNL.

The Licensee hereby submits the point-wise replies to the queries/information required by the Hon'ble Commission along with all the Annexures, wherever required. Some Annexures are very heavy and required huge quantum of papers for print outs. As such the same are up-loaded in soft copies.

**Enclosure as above 06 (1+5 copies) + 1-CD (soft copies)**


  
(Sanjay Jain)  
Director (Commercial)

No. /PVVNL/MRT/COM/UPERC/

Dated :

Copy forwarded for information & necessary action: -

1. Managing Director, UPPCL, Lucknow.
2. Managing Director, PVVNL, Meerut.
3. Director (Commercial), UPPCL, Lucknow.
4. Chief Engineer (RAU), UPPCL, Lucknow.

  
(Sanjay Jain)  
Director (Commercial)

**Reply to 2<sup>nd</sup> Information Requirement / Discrepancies/ Data Gaps in the Petition  
No. 2318 - 2025  
Dated: - January 5, 2025  
Of  
True-Up (FY 2024-25), Annual Performance Review (FY 2025-26), Aggregate Revenue  
Requirement (FY 2026-27) of PVVNL for the control period from FY 2025-26 to FY  
2029-30**

- Petitioner to submit the details of Smart meters installed under the Roll Out plan approved by the Commission for EESL as the implementing agency for each DISCOM separately.

**Smart meters installed & operationalized under EESL**

<b>FY</b>	<b>Number</b>	<b>Rate (Rs./meter/month inclusive of Tax)</b>	<b>Amount paid to EESL during the year (Rs Cr)</b>
2017-18			-
2018-19			
2019-20			
2020-21			
2021-22			
2022-23			
2023-24			
2024-25			
2025-26			
2026-27 (Estm.)			
<b>Total</b>			

Copy of all contracts/agreements with EESL to be enclosed. Petitioner to submit a duly certified summary of all the bills in an Excel sheet, along with a summation for each Discom year-wise.

**Response:** It is submitted that the smart meters installed under the Roll-out Plan approved by the Hon'ble Commission, with EESL as the implementing agency for PVVNL, are provided as below. The rate contracts/agreements executed with EESL are enclosed as **Annexure-A**, and the financial year-wise summary of bills, in Excel format, is enclosed as **Annexure-B**.

**Smart meters installed & operationalized under EESL**

<b>FY</b>	<b>Number</b>	<b>Rate (Rs./meter/month inclusive of Tax)</b>	<b>Amount paid to EESL during the year (Rs Cr)</b>
2017-18	-	-	<b>NIL</b>
2018-19	8,086	101.421	0.34
2019-20	1,55,018	101.421	6.30
2020-21	1,80,907	101.421	17.40
2021-22	1,83,664	101.421	12.64
2022-23	1,87,354	101.421	25.74
2023-24	1,87,776	101.421	15.90
2024-25	1,79,825	101.421	26.08
2025-26	1,79,288	101.421	17.64
2026-27 (Estm.)*	1,79,288	101.421	21.82
<b>Total Amount Paid</b>			<b>143.86</b>
*Smart meter installation work is ongoing under the RDSS scheme, and all EESL smart meters are planned to be replaced with AMISP meters. It is assumed that the replacement of all EESL smart meters will be completed by March 2027.			

2. Petitioner to submit the details of Smart meters installed under the RDSS scheme in the following format for the years from FY2022-23 to FY2026-27 (Estm.):

## 2.1 Number of smart meters installed & operationalised

[illegible]

### 2.2 Rate (Rs./meter/month inclusive of Tax)

[illegible]

### 2.3 Total Cost (Actual Billed Cost inclusive of Tax)

[illegible]

**Response2.1:** - It is submitted that the installation of smart meters under the RDSS scheme commenced in FY 2024-25. The year-wise details of the number of smart meters installed and operationalized in PVVNL are provided in Table 2.1 below

**Table 2.1 Number of smart meters installed & operationalised**

<b>FY</b>	<b>Single phase</b>	<b>Three Phase</b>	<b>LT-CT</b>	<b>HT-CT/PT</b>
FY-2022-23	0	0	0	0
FY2023-24	0	0	0	0
FY-2024-25	242554	7793	206	0
FY-2025-26 as on 05 Feb 2026	1196852	40329	3505	83
FY-2026- 27(Estm.)	4393058	249168	9796	13898
<b>Total</b>	<b>5832464</b>	<b>297290</b>	<b>13507</b>	<b>13981</b>

**Response 2.2:** It is submitted that the rate (Rs./meter/month, inclusive of taxes) of M/s Intellismart Infrastructure Pvt. Limited is mentioned below. A copy of the Letter of Award (LoA) issued to M/s Intellismart Infrastructure Pvt. Ltd. vide letter no. 512/PVVNL/MT/MM/AMISP/LOA/51/23-24 dated 19.04.2023 is enclosed as **Annexure-C** and letter no. 3978/PVVNL/MT/MM/AMISP/LOA/51/25-26 dated 11.09.2025 is enclosed as **Annexure-D**.

**Rate(Rs./meter/month inclusive of Tax)**

<b>Package AMISP</b>	<b>M/s. Intellismart Infrastructure Pvt. Ltd.</b>
Single Phase	80.81
Three Phase	118.25
LT-CT(Consumer Meter)	273.55
LT-CT(DT Meter)	291.97
HT-CT/PT(Feeder Meter)	343.81
HT-CT/PT(Consumer Meter)	317.64
<b>Total</b>	<b>1426.03</b>

**Response 2.3:** It is submitted that in PVVNL, only M/s Intellismart Infrastructure Pvt. Limited has been awarded as the AMISP in all 14 districts, the total cost (Actual Billed Cost inclusive of Tax) are provided as under.

**Total Cost (Actual Billed Cost inclusive of Tax)**

<b>AMISP</b>	<b>M/s. Intellismart Infrastructure Pvt. Ltd.</b>	
	<b>PMPM (Monthly service charge)</b>	<b>LUMPSUM (Rs. 900/meter part)</b>
Single Phase	16,35,71,627.94	58,58,21,167.99
Three Phase	10,06,407.03	30,36,592.58
LT-CT(Consumer)	6,14,935.00	6,40,798.43
LT-CT	5,45,66,663.29	13,77,79,255.91
HT-CT/PT	2,11,80,782.31	5,71,03,167.37
<b>Total</b>	<b>24,09,40,415.57</b>	<b>78,43,80,982.28</b>
<b>**SAT Completed (SAT-1 to SAT-7)</b>		
<b>** The table above shows billed amount for FY 2025-26 upto Dec-25.</b>		

3. The petitioners are to submit a certificate from the statutory auditor for the year-wise payment made to AMISP, showing the accounting head (A&G/ R&M/ Employee cost) under which these expenses have been booked.

**Response 3:** It is submitted that no expense was booked in FY 2024–25 in respect of AMISP. The expenses booked under AMISP up to 21.01.2026 are provided below. Accordingly, the certificate from the Statutory Auditor regarding year-wise payments made to AMISP shall be submitted after the closure of FY 2025–26. Details of Payment made to AMISP is enclosed as **Annexure E**.

Sr. No.	Year	Description	Amount	Remark
1	2024-25	—	0	No expenses
2	2025-26 (till 21.01.2026)	PMPM (Monthly Service Charge)	20,70,43,318	These expenses has been booked in 74.53110 in P&L related to AMISP PMPM and one time grant and PMA related to AMISP.
		Lumpsum payment for metering	49,22,10,815	
3		PMA	87,51,416	
Total			70.80.05.549	

4. The petitioners are to explain the accounting treatment of Rs. 900/meter for which a Grant has been received from the Government. Petitioners to also show the treatment of Rs 900/meter paid to AMISP. The Petitioners are to demonstrate that RoE has not been claimed on this amount.

**Response 4:** It is submitted that the accounting treatment of Rs. 900 per meter for which a grant has been received from the Government, and the treatment of Rs. 900 per meter paid to AMISP, is provided below. *Further, UPPCL, vide Letter No. I/38866/2026/PCL/CA/N312 dated 24.01.2026, has issued “Accounting in respect of Payment to AMISP and Government Budgetary Support for Implementation of the Advanced Metering Infrastructure (AMI) Project under the RDSS Scheme,” The same is attached as **Annexure-F**.*

Sr. No.	Accounting Entry	Transaction reference
1	Dr. 74.53110 (Metering Equipment -AMISP)	Payments made to AMISP against Grant of Rs. 900/meter are booked as expenses in the Profit & Loss account and settled through bank payments.
	Cr. 24.0000	
2	Dr. 24.000	Funds received from the Government and corresponding equity capital is allotted to UPPCL.
	Cr. 52.60100 (SHARE CAPITAL & EQUITIES)	

5. Petitioners to explain the nature of expenses booked under the head of ‘Online/ Spot Billing’ in the A&G Expenses.

**Response 5:** - It is submitted that Online Spot Billing & Camp charges include expenses related to revenue such as Camp & Spot Billing, Online Billing, Handheld Billing, etc. A copy of LoA is enclosed as **Annexure H**.

6. Petitioners are to submit meter-type (1-phase, 3-phase, LT and HT CT-PT Operated) & overall Cost- Benefit Analysis for the installation of each type of smart meters as mentioned above & also on holistic level amongst consumers where replacement of existing meters has been done with smart meters. Consumer base can be selected based on consumers, whose at least 3 billing cycles have been completed post installation of smart meters in their premises. The analysis can be done for different periods of installation, e.g. 3m, 6m, 1yr and should include:

- a) Savings achieved in meter reading, billing, and collection cost (year-wise for current FY and past two FYs).
- b) Savings achieved in any other cost (year-wise for current FY and past two FYs).
- c) Increase in Average Billed Units per Consumer over previous consumption in the same period.
- d) Increase in total Billed Units per month over previous consumption in the same period.
- e) Increase in Average Collection Efficiency in the same period.
- f) Increase in Average Collection per month per consumer over a defined period.
- g) Increase in Total collection over a defined period.
- h) What kind of Data Analytics is being done using smart meter data? How many cases of Theft, Tampering, and abnormal consumption patterns were detected and action taken?

**Response a:** It is submitted that the quantum of smart meters installed so far is not sufficient, and the data available is limited, to conduct a comprehensive year-wise analysis of savings achieved in meter reading, billing, collection cost for the current and past two financial years. Such analysis would become feasible and provide meaningful results only when the smart meter installation reaches certain saturation level. Once the installation is substantially complete and coverage is adequate, a comprehensive assessment of cost savings can be undertaken, and the results will be more conclusive.

**Response b:** It is submitted that upon achievement of saturation levels in smart meter installation, a year-wise analysis for the past financial years shall be undertaken to assess cost savings and other related aspects.

**Response c:** It is submitted that, as on 27.01.2026, 11,91,440 smart meters are installed out of which 9,56,744 smart meters are working with prepaid functionality. Currently, disconnection for consumers having smart meters with pre-paid functionality is not being carried out to minimize the consumer resistance, for building consumer trust in smart metering, etc., which is resulting in lower revenue realization. Further analysis has been done and found that average consumption per consumer has been increased to 84.24% as mentioned below: -

Description	July-December 2024 (Avg./Consumer/Month) (Non-Smart Meter)	July-December2025 (Avg./Consumer/Mont h) (Smart Meter)	Increase in Billed Units per month	Increase (%)
Consumption Pattern (Units)	118.94	219.15	100.21	84.24%

**Response d:** It is submitted that, as on 27.01.2026, 11,91,440 smart meters are installed out of which 9,56,744 smart meters are working with prepaid functionality. Currently, disconnection for consumers having smart meters with pre-paid functionality is not being carried out to minimize the consumer resistance, for building consumer trust in smart metering, etc., which is resulting in lower revenue realization. Further, an analysis has been carried out in respect to billed Units per month over previous consumption in the same period as mentioned below:

Description	July-December 2024 (Non-Smart Meter)	July-December2025 (Smart Meter)	Increase in Units sales	Increase (%)
Consumption Pattern (In MUs)	116.22	214.11	97.90	84.24%

**Response e:** It is submitted that the analysis pertaining to average collection efficiency shall be undertaken upon achievement of saturation levels in smart meter installation and activation of



prepaid functionality. Only thereafter shall actual and reliable figures be available for conducting such analysis.

**Response f:** It is submitted that an analysis has been carried out on a sample size of 1,62,837 smart meters for the period July 2025 to December 2025, and the same has been compared with non-smart meters for the period July 2024 to December 2024, and found that average revenue collection per month per consumer of the same period has been increased to 50.70 %, as mentioned below: -

Description	July-December 2024 Avg./Consumer/Month) (Non-Smart Meter)	July-December2025 (Avg./Consumer/Month) (Smart Meter))	Increase in Revenue per Month	Increase (%)
Revenue Collected (In Rs.)	918.70	1384.53	465.83	50.70%

**Response g:** It is submitted that due to the limited availability of smart meter data at the present stage, a comprehensive year-wise analysis of total collection for a defined period cannot be carried out. Such analysis will be feasible only after smart meter installation reaches an adequate saturation level, ensuring sufficient data for detailed evaluation.

**Response h:** Data analysis is being conducted using smart meter data for the following “Use Cases” on regular basis by the DISCOM:

- Zero Consumption (0) Analysis.
- Meter Events Analysis
- Identified smart meters where current is available but voltage is recorded as zero in the load survey.
- Identified consumers whose maximum demand exceeded the contracted load for three consecutive months.
- Identified post-paid consumers disconnected for more than seven days for whom payment has not been received.
- Identified LMV-1 category consumers showing consumption during daytime hours (08:00 AM to 10:00 PM) and zero consumption during night hours (10:00 PM to 08:00 AM).
- Identified consumers tagged under rural supply whose average power availability exceeds the scheduled hours or who are mapped to non-agriculture / rural feeders

The identified cases are under detailed verification. Based on the verification results, appropriate and necessary corrective actions are being taken to address the discrepancies.

7. How is the data received from smart meters installed on feeders/DTs being used for outage management, improving SAIDI & SAIFI, detecting high loss areas, grid intelligence, demand forecasting, energy accounting, etc. Give details.

**Response 7:** It is submitted that the data received from smart meters installed on feeders/DTs are utilized for the following system optimization measures.

#### 1. Improvement in Outage Management

Smart meters provide real-time information about the status of electricity supply. In case of any interruption at the feeder, transformer, or consumer level, immediate information is received. This helps in quick identification of faults and taking prompt corrective action. As a result, the duration of outages is reduced, leading to improved consumer satisfaction.

## 2. Improvement in SAIFI and SAIDI

Based on accurate and real-time data received from smart meters, frequent faults and long-duration outages can be easily identified. As a result:

- **SAIFI (System Average Interruption Frequency Index)** reduces because unnecessary and repeated interruptions can be controlled.
- **SAIDI (System Average Interruption Duration Index)** improves because faster fault location leads to quicker fault rectification and reduced outage duration.

## 3. Development of Grid Intelligence

Smart meters make the power grid more intelligent. Based on the data received from smart meters, load profile, voltage profile, power quality, and performance at feeder and distribution transformer (DT) levels can be analysed. This helps in making grid operations safer, more stable, and more efficient.

## 4. Support in Demand Forecasting

Smart meters provide detailed consumer-wise and time-wise (hourly, daily, and monthly) consumption data. By analysing this data, accurate forecasting of future electricity demand is possible, which helps in better planning of power generation and power procurement.

## 5. Improvement in Energy Accounting

Since accurate measurement of energy flow is possible at the feeder, transformer, and consumer levels, a clear input-output energy accounting can be prepared. Proper assessment of technical and commercial losses becomes possible, which helps in revenue protection.

## 6. Identification of High-Loss Areas

Using smart meter data, feeders, distribution transformers (DTs), or geographical areas with high technical or commercial losses can be identified. Based on this analysis, targeted corrective actions, such as network strengthening, theft control, and improvement in metering—can be taken.

**Sanjay Jain**  
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by Sanjay Jain  
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