

**GOVERNMENT OF INDIA
MINISTRY OF POWER**

**LOK SABHA
UNSTARRED QUESTION NO.2761
TO BE ANSWERED ON 05.08.2021**

CONVENTIONAL METERS

2761. SHRI SHYAM SINGH YADAV:

**Will the Minister of POWER
be pleased to state:**

- (a) whether the Government maintain any data of number of conventional meters installed in the State of Uttar Pradesh;**
- (b) if so, the details thereof, district-wise;**
- (c) the present the status of installation of prepaid smart meters across the country;**
- (d) the number of smart meters installed in the State of Uttar Pradesh, district-wise;**
- (e) whether the Government proposes to replace all the conventional meters with smart meters in the State of the State of Uttar Pradesh especially in Jaunpur district; and**
- (f) if so, the details of all the agencies involved in this project including private contractors?**

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

- (a) & (b) : A total of 2,62,94,894 conventional meters are installed in Uttar Pradesh. The district-wise details are furnished at Annexure-I.**
- (c) : As per the data collated from various agencies/schemes, about 2.49 lakh smart prepaid meters have been deployed across the country as on 30th July 2021.**
- (d) : A total of 11,47,910 smart meters are installed in the State of Uttar Pradesh. The district-wise details are furnished at Annexure-II.**
- (e) : Ministry of Power vide letter dated 26.02.2021 (copy enclosed as Annexure III) has requested all the States including Uttar Pradesh to prepare a road map for shifting over to smart pre-payment meters/ pre-payment meters. New Distribution Reforms Scheme approved by Central Government has provision for giving financial assistance to States for installing smart prepaid meters.**
- (f) : State of Uttar Pradesh has reported that M/s Energy Efficiency Services Limited (EESL) is the implementing agency for the present project related to installation of smart meters in the State. EESL is a company promoted by Central Public Sector Enterprises of Ministry of Power.**

ANNEXURE-I

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 2761 TO BE ANSWERED IN THE LOK SABHA ON 05.08.2021

#NAME	DISTRICT	TOTAL	
		Billable	Conventional Meters
DVVNL	AGRA	411564	381221
DVVNL	ALIGARH	629904	546132
DVVNL	AURAIYA	195842	190146
DVVNL	BANDA	276835	265634
DVVNL	CHITRAKOOT	156559	147889
DVVNL	ETAH	222129	207788
DVVNL	ETAWAH	222508	214571
DVVNL	FARRUKHABAD	262550	249090
DVVNL	FIROZABAD	378573	336427
DVVNL	HAMIRPUR	186380	173743
DVVNL	HATHRAS	249328	230937
DVVNL	JALAUN	248240	238480
DVVNL	JHANSI	300472	298793
DVVNL	KANNAUJ	216273	203691
DVVNL	KANPUR DEHAT	251400	242653
DVVNL	KANPUR NAGAR	222817	206123
DVVNL	KANSHIRAM NAGAR	191070	185429
DVVNL	LALITPUR	148705	143269
DVVNL	MAHOBA	137816	135794
DVVNL	MAINPURI	253670	240305
DVVNL	MATHURA	464200	367069
MVVNL	AMBEDKARNAGAR	337623	321346
MVVNL	AMETHI	260567	252961
MVVNL	AYODHYA	405587	384917
MVVNL	BADAUN	357858	312872
MVVNL	BAHRAICH	399424	394318
MVVNL	BALRAMPUR	241246	223879
MVVNL	BARABANKI	396001	368423
MVVNL	BAREILLY	610335	542621
MVVNL	GONDA	389728	378543
MVVNL	HARDOI	476159	470306
MVVNL	LAKHIMPUR	530272	500968
MVVNL	LUCKNOW	1168158	852649
MVVNL	PILIBHIT	281634	274215
MVVNL	RAIBAREILI	501085	477906
MVVNL	SHAHJAHANPUR	357465	335053
MVVNL	SHRAWASTI	125492	125288
MVVNL	SITAPUR	494296	479268
MVVNL	SULTANPUR	363288	347350
MVVNL	UNNAO	475979	466041
PUVNL	AZAMGARH	593090	523502
PUVNL	BALLIA	311014	300820
PUVNL	BASTI	390146	349668
PUVNL	CHANDAULI	246407	228393
PUVNL	DEORIA	422654	353541
PUVNL	FATEHPUR	349196	309451
PUVNL	GHAZIPUR	413722	331045

PUVNL	GORAKHPUR	753650	657861
PUVNL	JAUNPUR	594731	467622
PUVNL	KAUSHAMBI	200872	173370
PUVNL	KUSHINAGAR	432300	392370
PUVNL	MAHRAJGANJ	392276	354133
PUVNL	MAU	328833	257382
PUVNL	MIRZAPUR	298425	267669
PUVNL	PRATAPGARH	456815	403861
PUVNL	PRAYAGRAJ	831437	709422
PUVNL	SANT KABIR NAGAR	246762	230284
PUVNL	SANT RAVIDAS NAGAR	182139	161641
PUVNL	SIDDHARTHA NAGAR	335827	307890
PUVNL	SONBHADRA	262240	250165
PUVNL	VARANASI	692860	481714
PVVNL	AMROHA (J.P. NAGAR)	320877	275927
PVVNL	BAGHPAT	254820	226061
PVVNL	BIJNOR	644248	595431
PVVNL	BULANDSHAHR	584892	526715
PVVNL	GAUTAM BUDDHA NAGAR	341235	329529
PVVNL	GHAZIABAD	957408	946371
PVVNL	HAPUR (PANCHSHEEL NAGAR)	276101	251914
PVVNL	MEERUT	763437	570472
PVVNL	MORADABAD	546951	527447
PVVNL	MUZAFFARNAGAR	521380	474215
PVVNL	RAMPUR	356462	345203
PVVNL	SAHARANPUR	624298	520797
PVVNL	SAMBHAL	289181	262559
PVVNL	SHAMLI	249488	216341
UPPCL		29265206	26294894

ANNEXURE-II**ANNEXURE REFERRED TO IN REPLY TO PART (d) OF UNSTARRED QUESTION
NO. 2761 TO BE ANSWERED IN THE LOK SABHA ON 05.08.2021**

District	No. of Smart meters installed in U.P.
Varanasi	180717
Prayagraj	82686
Gorakhpur	56543
Meerut	148599
Saharanpur	49823
Lucknow	297283
Barabanki	22518
Bareilly	56048
Mathura	83894
Firozabad	20837
Aligarh	42729
Kanpur	106233
Total	1147910

ANNEXURE REFERRED TO IN REPLY TO PART (e) OF UNSTARRED QUESTION NO. 2761 TO BE ANSWERED IN THE LOK SABHA ON 05.08.2021

Annexure - II

No. 23/05/2020-Part (1)
Government of India
Ministry of Power
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Shram Shakti Bhawan, Rafi Marg,
New Delhi, 26th February, 2021

To,

1. Additional Chief Secretaries/Principal Secretaries/Secretaries, Energy/
Power Dept., All State Government/UTs
2. CMDs/MDs, All Discoms

Sub: Implementation of smart pre-payment meter/pre-payment meters.

Sir/Madam,

I am directed to refer to Ministry of Power's letters dated 16.08.2018, 02.08.2019 & 07.08.2020 (copies enclosed) and to say that all the States must have taken steps and prepared a road map for shifting over to smart pre-payment meters/pre-payment meters. Some of the States have already started implementation of pre-payment meters at the consumer levels. Based on the feedback from the States who have implemented the prepayment meters, the following benefits are envisaged:-

- i. The working capital requirement will reduce;
- ii. DISCOMs will be able to purchase comparatively cheaper electricity from power exchange which due to financial constraint they are not able to purchase;
- iii. The burden of late payment surcharge which is as high as 18% at present will also become zero. The late payment surcharge is quite substantial in some of the states;
- iv. DISCOMs will be able to improve the infrastructure and provide 24x7 reliable power to all its consumers;
- v. DISCOMs will be able to pay in advance to GENCOS, Transmission companies, trading companies thereby taking a rebate of around 1.5% to 2% on the power purchase cost;
- vi. Once generating companies and transmission companies get payment in time or in advance, their working capital requirement will also reduce and to this extent, the tariff will also come down.
- vii. Cost saving as there would not be any requirement of serving a physical bill: - This will do away with irregular billing, particularly, in the rural area where the meters are not read periodically and bills are served either quarterly or half-yearly or even sometimes annually. This has led to cumulative dues which the rural consumers find it difficult to timely pay to the DISCOMs and the amount is compounded with late payment surcharge. With pre-payment meters, consumers can pay as per the convenience and in smaller denominations as per his payment capacity.

2. In the Union Budget, 2021-22, Hon'ble Finance Minister has announced the reforms-based-result-linked power distribution sector scheme with an outlay of Rs.3,05,984/- crore over 5 years. The scheme will provide assistance to DISCOMs for infrastructure creation including prepayment smart metering, feeder separation, upgradation of systems etc. tied to financial improvements. Approximately Rs.1,50,000/- crore is being earmarked for prepayment meters.

3. The relevant provisions regarding metering under section 55(1) and 47(5) of the Electricity Act, 2003 and Central Electricity Authority (Installation and operation of meters) Amendment Regulation, 2019 are enclosed at Annexure.

4. The Electricity (Rights of Consumers) Rules, 2020 has been notified on 31.12.2020 and as per this Rule, no connection shall be given without a meter and such meter shall be the Smart pre-payment meter or pre-payment meter. The relevant provision in the above mentioned Rule is re-produced below:-

"No connection shall be given without a meter and such meter shall be the smart pre-payment meter or pre-payment meter. Any exception to the smart meter or pre-payment meter shall have to be duly approved by the Commission. The Commission, while doing so, shall record proper justification for allowing the deviation from installation of the smart pre-payment meter or pre-payment meter."

Accordingly, the Discoms are required to implement the above provision. No specific approval is required from State Commission in this regard.

5. In view of the above, the States are once again requested to timely prepare the scheme of switching over to smart pre-payment meters/pre-payment meters in a time bound manner to avail funds from the Government of India under the above Scheme. **States are requested to submit their plans to this Ministry within 2 months from the date of issue of this letter.**

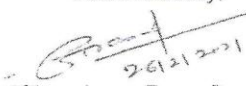
6. Further, the following stipulations may be indicated in the scheme to be proposed by the States:--

- I. No connection shall be given without a meter and such meter shall be the smart prepayment meter or prepayment meter;
- II. Any faulty meter shall be replaced only by smart prepayment meter or prepayment meter.
- III. The existing post-paid meters should be replaced within 3 years.

7. This issues with the approval of Hon'ble MoS (IC) for Power and NRE.

Yours faithfully,

Encl: As Above


(Ghanshyam Prasad)
Joint Secretary to the Govt. of India
Ph: 011 2371 0389

Copy for information to: PS to MOSP (IC), Sr. PPS to Secretary (Power), Sr. PPS to JS (R&R), PS to DS (R&R), Ministry of Power

Relevant provisions of the Electricity Act, 2003 regarding metering of electricity

Section 55(1) is reproduced below:-

*“(1) No licensee shall supply electricity, after the expiry of two years from the appointed date, except through installation of a correct meter in accordance with the **regulations to be made** in this behalf by the **Authority**:*

*Provided that the licensee may require the **consumer to give him security** for the price of a meter and enter into an agreement for the hire thereof, unless the consumer elects to purchase a meter:*

Provided further that the State Commission may, by notification, extend the said period of two years for a class or classes of persons or for such area as may be specified in that notification.

(2) For proper account and audit in the generation, transmission and distribution or trading of electricity, the Authority may direct the installation of meters by a generating company or licensee at such stages of generation, transmission or distribution or trading of electricity and at such locations of generation, transmission or distribution or trading, as it may deem necessary.”

Sub-Section 5 of Section 47 is re-produced below:

*“A distribution licensee shall **not be entitled to require security** in pursuance of clause (a) of Sub-Section (1) if the person requiring the supply is **prepared to take the supply through a pre-payment meter.**”*

The reference of pre-payment meter has been made only in this paragraph in the entire Electricity Act, 2003 wherein the person is not required to pay security in case he opts for pre-payment meter.

Central Electricity Authority (Installation and operation of meters) Amendment Regulation, 2019

CEA has amended its meter Regulation and as per clause 4(1)(b), all new consumer meters shall be **smart meters with pre-payment feature.**

“Provided that the existing meters, other than Smart Meters, shall be replaced with Smart Meters with pre-payment feature within a time frame as specified by the Central Government”

However, for the purpose of replacement of existing meters, the time frame has to be specified by the Central Government.

File No.26/9/2015-IPDS(Vol-II)(Pt)

F. No. 26/9/2015-IPDS
Government of India
Ministry of Power

New Delhi, the 16th August, 2018

To

Pr. Secretary/Secretary (Energy) of all States/MDs of all DISCOMs

Subject – Road map for shifting over to smart/prepaid meters within the next three years-reg.

Sir,


Kindly refer to DO letter dated 28.05.2018 from Hon'ble Minister of State (IC) for Power and New and Renewable Energy requesting drawing up a road map for shifting over to smart/prepaid meters within the next three years. The National Tariff policy, 2016 already mandates installation of Smart meters for consumers drawing upto 200 units per month by December, 2019. It also indicates that progressively all the meters for all consumers should be converted to Smart meters progressively.

2. Based on the requirements projected by the States, the Government of India has sanctioned funds to the tune of Rs. 830 Crores for Smart metering under IPDS. Funding has also been done for Smart meters under the National smart Grid mission under Smart grid projects. Besides this, it is understood that several States have also started projects of Smart metering under business models with EESL as well as under multilateral funding.

3. Smart meters have an added benefit of possibility of operation in prepaid mode. Smart meter in the prepaid mode or simple prepaid meters will do away with the problems of meter reading and billing. Smart meters in prepaid mode will detect thefts as such meters would enable real time energy audit, thereby being a major enabler for reduction of AT&C losses. Prepaid mode also empowers the consumers, including those in rural areas, to use electricity as per need, and would enable energy conservation measures by making the cost of electricity salient to them in real time.

4. It is therefore advised with the approval of Hon'ble Minister of State (I/C) for Power that States may consider switching over to Smart meters in prepaid mode/simple prepaid meters over a period of next three years, say by March, 2021. A roadmap for the same may please be sent to this Ministry at the earliest.

Yours faithfully,


16/8/18

(G. Swan Za Lian)
Under Secretary to the Govt. of India
Tel: 23708051

F. No. 26/9/2015-IPDS(Vol-II)
Government of India
Ministry of Power
Shram Shakti Bhawan, Rafi Marg, New Delhi - 110001

Dated: 2nd August, 2019

To

Pr. Secretary/Secretary (Energy) of all States/MDs of all DISCOMs

Subject– Road map for shifting over to smart/prepaid meters within the next three years-reg.

Sir,

Kindly refer to DO letter dated 28.05.2018 from Hon'ble Minister of State (IC) for Power and New and Renewable Energy (Copy enclosed) and letter dated 16.08.2018 (copy enclosed) requesting drawing up a road map for shifting over to smart prepaid meters within the next three years.

2. Benefits of smart metering in the prepaid mode are well known. Smart Meters in the prepaid mode do away with the problem of billing and collection, reduce the cost of collection, do away with the problems associated with the disconnection in case of non-payment, reduce carrying costs, enable accurate demand forecasting, and energy conservation. It increases the consumers' engagement as well as enhances the revenue and reduces transaction costs.

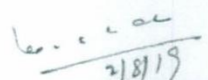
3. Progress would have been made by the States/DISCOMs in the interim on the roadmap, as well as installation of Smart meters in prepaid mode. The Ministry of Power has also sanctioned funds to the tune of Rs. 830 Crores for almost 41 lakh Smart meters under IPDS to the States that had requested assistance. Funding has also been done for Smart meters under the National smart Grid mission under Smart grid projects. All the smart meters procured under these schemes must be configured in the prepaid mode.

4. It is therefore requested that the States should submit their roadmaps for smart prepaid metering of all consumers as well as on the progress of Smart metering projects already undertaken/in process at the earliest.

5. It is further reiterated that States/Discoms must switchover to **smart meters in the prepaid mode** and implementation may be completed within three years.

6. This issues with the approval of MoSP(IC).

Yours faithfully,


(G. Swan Za Lian)

Under Secretary to the Govt. of India
Tele: 23708051

Copy to:
PS to Hon'ble MOSP(I/C)/Sr. PPS to S(P)/ PPS to SS(SNS)
PPS to JS(D)/PS to Dir(D)
CMD,PFC
Director,NSGM/NPMU

आर. के. सिंह
R. K. SINGH



विद्युत एवं नवीन और नवीकरणीय ऊर्जा
राज्य मंत्री (स्वतंत्र प्रभार)
भारत सरकार
Minister of State (Independent Charge)
for Power and New & Renewable Energy
Government of India

D.O. No. 239628/MOS(IC)/Power/2018

28.05.2018

Dear Biplab Jee,

As the number of consumers have increased so have the difficulties in meter reading, service of bills and disconnection in case of non-payment of bills. The difficulties are especially acute in rural areas where the meter reading happens infrequently and the bills reach the consumers in two to three months and disconnections in case of non-payment are becoming more and more difficult. Under SAUBHAGYA, we are going to add an additional 3.70 Crores consumers. This will further increase the difficulties in meter reading, billing, collection and disconnection. We, therefore, need to take the assistance of technology. Accordingly, we propose to shift electricity supply from post-paid mode to the pre-paid mode. This will do away with the necessity for meter reading, service of bills or manual disconnection in case of non-payment. We propose to make the shift in a time frame of three years; beginning at once.

2 The prepaid mode is advantageous for poor people in that they can re-charge any number of times in a month and the re-charge can be even for Rs.50 or Rs.100/- at a time. This will enable the poor people to stay connected. They will find it easy to pay for five to six days at a time rather than 30 days at a time which is the requirement in post-paid. It will be advantageous to the Distribution Companies because, they will be freed of the requirement of meter reading / service of bills / collection and disconnection. We would prefer smart meters programmed in the prepaid mode. These may be installed in all urban areas. In rural areas, simple pre-paid meters will also suffice.

3 I shall be grateful, if you could direct the Energy Department and the Discoms of your State to draw up a road map for shifting over to smart / prepaid meters within the next three years and share it with us.

With regards,

Yours sincerely,

(R. K. Singh)

Shri Biplab Kumar Deb
Hon'ble Chief Minister of Tripura
Government of Tripura
Secretariat
AGARTALA : 799 001



F. No. 26/9/2015-IPDS(Vol.II)(Pt.)(238595)
Government of India
Ministry of Power

New Delhi, Dated: 07th August, 2020

To

Pr. Secretary/Secretary (Energy) of all States/MDs of all DISCOMs

Subject– Road map for shifting over to smart/prepaid meters within the next 3 years.

Sir/Madam,

Kindly refer to this Ministry's letter of even number dated 02.08.2019 and letter dated 16.08.2018 (copies enclosed) requesting for drawing up a road map for shifting over to smart prepaid meters or prepaid meters within the next 3 years. The replies including the road map is still awaited.

2. The major reasons for high AT&C losses include non-billing, wrong billing, thefts, non-collection of the billed energy etc. All these reasons have an underlying factor, i.e a human interface. Prepaid metering will allow Utilities to address these issues by replacing human interface by technology. It will also enable consumers to use electricity as per their own requirements and budgets. In areas where prepaid metering has been introduced the AT&C losses have gone down sharply. In Manipur, the losses have come down from 47 percent to 15 percent.

3. It is therefore in the interest of Utilities to shift to prepaid mode- whether prepaid smart metering or simple prepaid metering – at the earliest. Prepaid smart metering would have some added advantages such as remote tariff updates; real time energy audits and TOD tariff- but the choice of whether to go in for prepaid smart metering or simple prepaid metering vests with the States. The essential requirement is to shift to prepaid to do away with manual interface and reduce transaction costs. It is requested that the shift to the prepaid system may be taken up and progressed phase wise. It is requested that this Ministry may be kept apprised of the action taken.

4. This issues with the approval of Hon'ble Minister of State (I/c) for Power, & NRE and MoS for Skill Development & Entrepreneurship.

Yours faithfully,


 (Mritunjay Kumar Narayan)
 Joint Secretary (Distribution)

Copy to:

1. PS to Hon'ble MoSP(I/C)
2. Sr. PPS to Secretary(Power), Ministry of Power
3. Sr. PPS to AS(D), Ministry of Power
4. PPS to JS(Distribution, Ministry of Power)
5. PS to Dir(D)
6. CMD,PFC
7. Director, NSGM/NPMU