

भारत सरकार Government of India विद्युत मंत्रालय Ministry of Power केन्द्रीय विद्युत प्राधिकरण Central Electricity Authority विद्युत शक्ति सर्वेक्षण और भार पूर्वानुमान प्रभाग Power Survey & Load Forecasting Division

No. CEA/PLG/EPS/NCR/2/2019/213

Date: 06.05.2019

To,

Managing Director	Managing Director
Uttar Haryana Bijli Vitran Nigam	Dakshin Haryana Bijli Vitran
Ltd. (UHBVNL), Shakti Bhawan,	Nigam Ltd (DHBVNL), Vidyut
Sector-VI	Nagar, Shakti Sadan, Hissar
Panchkula Haryana-134109	Haryana-125005
Managing Director	Managing Director
Paschimanchal Vidhyut	Jaipur Vidyut Vitran Nigam
Vitran Nigam Ltd. (PVVNL)	Ltd(JVVNL), Vidyut Bhawan,
Urja Bhawan Hydel Colony,	Janpath, Jyoti Nagar
Victoria Park, Meerut, UP-250001	Jaipur,Rajasthan- 302005

Subject: Minutes of the meeting held on 30.04.2019 to finalize Electricity Demand Projection for National Capital Region-reg.

Sir,

A meeting was held in CEA on 30.04.2019 to finalize Electricity Demand Projection for National Capital Region. The minutes of the meeting is attached for information and necessary action.

> Sd/-Naresh Kumar Deputy Director (PS&LF) Ph. no. 26732253 e-mail: pslfcea@yahoo.com

MINUTES OF THE MEETING HELD ON 30.04.2019 AT CEA, SEWA BHAWAN REGARDING VOLUME – II OF 19TH ELECTRIC POWER SURVEY- DELHI (NCR)

1. A meeting was held under the chairmanship of Chief Engineer (Power Survey & Load Forecasting Division) on 30.04.2019 in the Conference room, 2nd Floor, CEA, Sewa Bhawan, R K Puram at 15:00 Hrs for finalizing Volume-II of the 19th Electric Power Survey for National Capital Region. The list of participants is enclosed as Annexure-I.

2. At the outset, Chief Engineer (PS&LF) welcomed all the participants in the meeting and emphasized the importance of Electric Power Survey as the whole planning depends on the accurate forecasting that in turn depends on reliable past data/information & future plans.

3. Director (PSLF) briefed about the background of this exercise of demand projection. He expressed concern over the delay in the submission of the data and non-submission of the data by the Discoms. Setting up the agenda, he further added that there are four mains issues for discussion. Those were non-submission of data by Discoms of Uttar Pradesh, inconsistencies in the data submitted, partial data submitted for some of the districts and non-matching of input data for 18th EPS vis-à-vis 19th EPS for the same period. He further added that that CEA has framed some guidelines that may be kept in mind while furnishing the data. He added that those are just border guidelines and if the data submitted by the power utilities are not in accordance with the guidelines, it will still be acceptable though the deviation may be explained by the power utility. The guidelines are placed as Annexure-II.

4. Chief Engineer(PS&LF) requested that prior to taking of the agenda items, Discoms might explain the methodology to collect the data for both electrical energy consumption as well as peak electrical demand of the district.

5. Chief engineer (DHBVN) informed that in their Discom data for electrical energy consumption collected for a sub-division as a unit. In addition, the feeders for different categories of the consumers are mostly segregated. The consumption for each category of the consumer for the district is arrived at by adding the data for all the sub-division in a district. The Representatives of the

other Discoms informed that they are collecting the consumption data in a similar pattern.

6. For peak data of electricity demand for the district unit, Chief Engineer(DHBVN) explained the methodology by giving the example of Gurugram district. He stated that there are 26 sub-stations feeding the Gurugram district load and demand data for each sub-station is collated on a 15-minute basis. Based on this data a graph giving the 15-minute electricity demand of all sub-station is plotted. The plot is extended for a year and the highest demand is taken as the peak demand of the district. This data is also transferred to SLDC through General Packet Radio Service(GPRS) system of communication. This peak demand for each district is available in SLDC also and DHBVNL is using this data for all-purpose including the power procurement. He further added that same pattern of data collection is followed by both the Discoms of Haryana.

7. The Representative of JVVNL and PVVNL intimated that they are maintaining the manual record for the peak electricity demand for a sub-station and from this data peak demand of the district is calculated.

8. Thereafter, a detailed discussion was held with respect to electricity data/ information of each district of NCR as circulated along with the agenda. The issues and clarifications given were as follows:

8.1 Paschimanchal Vidhyut Vitran Nigam Ltd. (PVVNL):

<u>A. Ghaziabad</u>

Sl. No.	Issues	Clarifications given
i	Data of Public Water Works is not	The issues would be
	included in the Summary Sheet.	looked into.
ii	The summary sheet is incomplete. Data	The issues would be
	of Energy Requirement, T&D Losses,	looked into.
	Peak Load, and Annual Load Factor	
	needs to be provided.	

iii.	Inclusion in the "others" category needs	It includes temporary
	to be specified.	connections, departmental
		connections etc.
iv	PWW (>1 MW) and Lift Irrigation:	No such connection is
	Format is blank.	given.

The representative assured to submit the corrected data/clarification by 10^{th} May 2019.

<u>B. Gautam Budh Nagar</u>

The data submitted for Gautam Budh Nagar was found to be consistent.

It was noticed that representative of only Ghaziabad and Gautam Budh Nagar district were present in the meeting and other six districts of PVVNL coming under NCR viz. <u>Hapur, Bulandshar, Muzzafarnagar, Bagpat, Meerut, and Shamli</u> remained unrepresented. In view of this, it was decided to convene another meeting on 09.05.2019 for addressing issues related to districts coming under PVVNL only.

8.2 Jaipur Vidyut Vitran Nigam Limited:

<u>A. Alwar</u>

Sl. No.	Issues	Clarifications given
i	T& D losses of Alwar has increased	It would be examined.
	drastically in 2013-14 and are hovering	
	at about 28 % for 03 consecutive years	
	from 2013-14 to 2015-16.	
ii.	Too much increase in Domestic	Around 1 Lacs
	Category	connections were given
		during the said period.

The representative of Alwar stated that the data would be revisited and corrected data/clarification would be submitted within a week.

<u>B. Bharatpur</u>

Sl. No.	Issues	Clarifications given
i.	Railway traction: Consumption	Since January 2017, traction
	from 2017-18 is reducing to zero.	has been shifted to open
		access.
ii	Data of Public Water Works (LT) is	The issue would be looked
	not added in the Summary Sheet.	into.
iii	T&D Losses does not show a	The issue would be looked
	decreasing trend.	into.

The representative of Bharatpur stated that the data would be revisited and corrected data/clarification would be submitted within a week.

8.3 Dakshin Haryana Bijli Vitran Nigam:

<u>A. Bhiwani</u>

S1.	Issues	Clarifications given
No.		
i.	Industries LT: Consumption has	The discrepancy has been
	increased at a very high rate (66%) from	noted and the corrected
	2010-11 to 2011-12 whereas it has	data would be submitted
	decreased at a higher rate (-35%) from	shortly.
	2011-12 to 2012-13.	
ii.	Industries HT (<1 MW): Consumption	The data would be re-
	has increased at a very high rate (34%)	checked.
	from 2012-13 to 2013-14.	

<u>B. Faridabad:</u>

S1.	Issues	Clarifications given
No.		
i.	Consumption in PWW and	Due to the separation of Palwal from
	Irrigation is decreasing	Faridabad in 2013-14, the majority of
		the portion of PWW and Irrigation is
		now under the jurisdiction of Palwal.

ii.	T&D losses does not show a	It would be examined.
	trend.	
iii.	Inclusion in the "Others"	The Government departments, Civil
	category needs to be specified.	establishment, etc are included in the
		"Others" category.

<u>C. Gurgaon:</u>

S1.	Issues	Clarifications given
No.		
i	High consumption in Domestic	The data submitted is correct.
	and Commercial Category	Due to developmental activities,
	(Number of units per day coming	especially because of too many
	out to be too high).	malls coming up, consumption is
		high.
ii	No relation between Electricity	The matter would be looked into.
	Consumption, T&D losses and	
	Requirement.	
iii	Consumption in traction is	It is due to the expansion of Metro
	increasing at high growth rate.	and Rapid Metro.
iv	Irrigation: Electricity	One of the possible explanation
	consumption is increasing	may be that the capacity of the
	progressively, though at a slow	motors is increasing. However,
	pace.	the issues would be looked into
		further.
v	Load Factor is low	It would be examined.
vi	Industries (HT < 1 MW):	The data would be re-checked.
	Connected load is increasing but	
	electricity consumption is	
	decreasing.	

<u>D. Jind</u>

Sl. No.	Issues	Clarifications given
i.	Data is provided from 2013-	The district was separated from
	14	UHBVN in the year 2013-14.
		Therefore, the data is not available
		with DHBVN. However, the same
		would be arranged.
ii.	HT Industries: Values of	Data has been corrected and Discom
	electricity consumption as	would submit the data.
	shown in the summary sheet	
	does not match with the	
	value of electricity	
	consumption shown in the	
	relevant sheet.	
iii.	The growth rate of electrical	It appears that due to shifting of the
	energy requirement for the	district from UHBVN to DHBVNL the
	forecast period works out to	data available with DHBVNL for the
	about 20 % per annum,	year 2013-24 is for half the year.
	which is much higher than	Thereafter during the next years, the
	the national average of about	rate of growth of consumption is
	6%.	normal. It would be examined.
iv.	No relation between T&D	T&D losses in percentage figure are
	Losses and Load Factor.	correct. The load factor is although
	Load factor provided is very	low in the district, the same would be
	low, around 17%.	rechecked and confirmed thereafter.

<u>E. Palwal</u>

Sl. No.	Issues	Clarifications given
i.	There is no relation between T&D	It would be examined.
	losses and Energy Requirement.	
ii	Load Factor provided is greater than 100%.	It would be examined.

ſ	iii	Data prior to 2013-14 has not	Palwal district has been carved
		been submitted	out of Faridabad in 2013

<u>E. Rewari</u>

Sl. No.	Issues	Clarifications given	
i.	Actual data has not been provided	Data is available only from	
	up to 2011-12.	2011-12.	
ii	Public Lighting: Data for	Due to some court case during	
	consumption for 2013-14 and	that particular period,	
	2014-15 is very much on lower	consumption has not been	
	side vis-à-vis prior and succeeding	billed and data could not be	
	year.	provided for this period.	
iii	Industries LT: Data for	It would be examined.	
	consumption for 2013-14 is on		
	very higher side vis-à-vis prior and		
	succeeding year.		
iv	Industries(HT<1 MW) and	No connection in this category	
	Traction: Format is blank.	has been given.	

F. Mahendragarh

Sl. No.	Issues	Clarifications given	
i.	Issue pertaining to Commercial	It would be examined.	
	category, PWW, Industries (LT)		
ii	Irrigation: Format is blank.	It would be examined.	
iii	Issues pertaining to Traction, bulk	No connection in this category	
	supply and Industries(HT)	has been given.	

iv	Peak Load and Load Factor data not provided from 2006-07 to 2013-14.	It would be examined.
v	Energy Requirement figures are the same as Electricity Consumption. T&D losses (%) figures not provided from 2006-07 to 2013-14.	It would be examined.

G. Mewat

Sl. No.	Issues	Clarifications given		
i.	Only 3 years' data are	Earlier it was a part of Gurgaon, then		
	present. (2014-15 to 2016-	became a part of Palwal, then		
	17)	separated as Mewat(NUH), therefore		
		segregated data is not available.		
ii	Irrigation: Format is blank	It would be examined.		
iii	Issue pertaining to PWW,	No connection has been given in this		
	Lift Irrigation	category.		
iv	All the other issues	It would be examined.		

For Charkhi Dadri, it was informed that prior to 2016 it was a part of Bhiwani district and in all probability; Bhiwani data includes the data for Charkhi Dadri. However, Discom would check the same and revert.

The DHBVN representative assured to submit the corrected data or/and the clarification, as the case may be, by 07^{th} May 2019.

8.4 Uttar Haryana Bijli Vitran Nigam:

<u>A. Rohtak</u>

Sl. No.	Issues	Clarifications given	
i.	In the Public Lighting category,	Data has been corrected and it	
	electricity consumption increases	would be submitted.	

	from 29 LU in 2015-16 to 100 LU		
	in 2016-17.		
ii	Inclusion in the "Others" category	Civil establishment,	
	needs to be specified.	Panchayats, Govt. schools are	
		included in "Other" Category.	
iii	In the PWW category, electricity	Data has been corrected and it	
	consumption decreases from	would be submitted.	
	321.88 LU in 2014-15 to 289.72		
	LU in 2015-16.		
iv	Traction: Format is blank	No connection has been given	
		in this category.	

<u>В.</u>	Sonepat

Sl. No.	Issues	Clarifications given	
i.	Issue of Industries (LT &	It would be examined.	
	HT<1MW)		
ii	In some categories, consumption is provided in LU's and in some MU's	Data has been corrected has already been furnished through e-mail.	
iii	Irrigation: Figures in summary sheet does not match	Data has been corrected has already been furnished through e-mail.	
iv	Issues pertaining to Bulk supply	It would be examined.	
v	HT Industries (> 1 MW): Electricity consumption figures are not filled in.	Discom would submit the segregated data for industries.	
vi	In Public Lighting Category, there is a decrease in connected load in 2015-16 but the connected load increases by 34 % in 2016-17. The connected load increases from 1288 kW in 2015-16 to 1955 kW in 2016-17.	Earlier some of the rural areas were not included in the category. Now their load has also been added. Also, due to LED the connected load has decreased.	
vii	In PWW category electricity consumption is decreasing from 2012-13 to 2015-16, though the	As per Discom the data provided is correct. One of the reason for PWW may be that	

connected load is increasing in the same period.	of hours of supply the consumption is decreasing in spite of increase in connected
	load.

<u>C. Jhajjar</u>

Sl. No.	Issues	Clarifications given	
i.	Provisional data provided for	Actual data will be sent as	
	2015-16 and 2016-17	soon as possible	
ii	There is no relation between T&D	T&D losses in percentage	
	Losses and Electrical Energy	figure is correct.	
	Requirement.		
iii	Issue pertaining to HT/LT	It would be examined.	
	Industries		
iv	Electricity consumption in	The data submitted is correct.	
	Domestic, Commercial, Public		
	Lighting, and PWW is decreasing.		
v	Issues pertaining to Lift Irrigation and LT Industries	Discom would check and would revert on the issue. Nonetheless, the availability of more canal water to the district may be a plausible explanation for this drastic increase in the consumption in spite of constant load	
vi	LT Industries: Decrease in	The data submitted is correct.	
	connected load and electricity		

consumption	from	2013-14	to
2014-15.			

<u>D. Karnal</u>

The representative of Karnal assured to submit the corrected data or/and the clarification, as the case may be, by 07th May 2019.

<u>E. Panipat</u>

The representative of Panipat assured to submit the corrected data or/and the clarification, as the case may be, by 07th May 2019.

9. The Chief Engineer, DHBVN pointed out the issue of non-inclusion of open access consumers (including Railway) in the information submitted by the DISCOMs. On that, Director(PSLF) requested all to include open access consumers also in the information furnished by them by adding a field to this effect separately in the summary sheet. As the Railway is the biggest electricity consumer served through open access, it was decided to write to them also separately to provide information related to them.

10. Chief Engineer (PS&LF) also requested all the participants to submit a small write up covering brief of the city, climate and rainfall in the city, policy Initiatives of Government affecting electricity demand economy, industrial or infrastructure development in the city, etc. for including the same in the final report. All participants ensured to submit it by a week or two. As the data furnished by Discoms for 18th EPS is not matching with that of data for 19th EPS, Discoms are requested to check the same and reconcile the data as far as possible. If there is a gross difference, then Discom would provide the reasons for the same.

11. As all the participants ensured to submit the requisite information latest by 10th May 2019 and thereafter keeping some time gap for examining the submitted data/information and preparing comments thereon, it was decided that next meeting for resolving all the issues and taking up the matter further would be convened on 21st May 2019. The meeting ended with vote of thanks to the Chair.

Annexure-I

S.No	Name	Name Designation/ Organisation		Email ID	
1.	Sh. B.K Arya	Chief Engineer (PS&LF)	011-26732767	b.karya1664@gov.in	
2.	Sh. Deepak Kumar	Director (PS&LF)	011-26732252	deepak.cea@gmail.com	
3.	Sh. Naresh Kumar	Deputy Director (PS&LF)	011-26732253	naresh.kumar38@nic.in	
4.	Sh. Sanjeev Kumar Chopra	Chief Engineer (DHBVN) Operation	9643303410	cedelhi@gmail.com	
5.	Sh. Akash Gupta	Consultant (DHBVN)	9871446944	akash.gupta@feedbackinfra.com	
6.	Sh. Suresh Hooda	SDO Bhalout(Rohtak)	9354726566	sdoopuhbvnbhalout123@gmail.com	
7.	Sh. Yadavendra Singh	Executive Engineer (Ghaziabad)	9193320005	czegzb@gmail.com	
8.	Sh. Hardidutt	SE- System Operation (DHBVN)	8221001209	sesodhbvn@gmail.com	
9.	Sh. Ashok Kumar	SDO- Operation (UHBVN- Panipat)	9354919032	seopuhbvnpanipat@gmail.com	
10.	Sh. Pardeep Kumar	SDO (UHBVN- Murthal-Sonepat)	9315609736	sdoopuhbvnsonepat@gmail.com/ sdoopuhbvnmurthal@gmail.com	
11.	Sh. Sandeep Sikri	SDO- Karnal	9354761641	sdoopuhbvncitykarnal@gmail.com	
12.	Sh. Ajay Singroha	SDO- City-1 Bahadurgarh	9354726614	sdoopuhbvncity- 1bahadurgarh@gmail.com	
13.	Sh. A.K. Singh	SE- Noida Zone (PVVNL-UP)	8576975555	cenoidapvvnl@gmail.com	
14.	Sh. R.K Sharma	SE-Commercial (JVVNL)	9413390178	secomml@jvvnl.org	

15.	Sh. Ishan Khan	Executive Engineer (Bhiwani)	9413390514	<u>xenbhiwadi@jvvnl.org</u>
16.	Sh. Ram Pal	Executive Engineer (Jhajjar)	9354726618	
17.	Ms. Komal Dupare	Assistant Director (PS&LF)	011-26732236	komal.dupare@gov.in

<u>Guidelines</u>

- > Details of Area/districts covered under DISCOM needs to be provided.
- A year-wise increase of > 10% in any category should be provided with a specific reason.
- There should be increasing consumption trends in all categories except for Irrigation & Industrial.
- > There should be decreasing trends in T&D losses.
- > Category- wise consumption limits:

Category	Category Field	
Domestic	Specific Electrical Energy Consumption	8-10 units per day
Commercial	Specific Electrical Energy Consumption	18-20 units per day
Public Lighting	Hours of operation	10-11 hours per day
Public Water Works	Hours of operation	9-10 hours per day
Industries	Hours of operation	Should be less than 24
		hours

- Summary sheet to be completely filled with details of Energy Consumption, Energy Requirement, T&D losses, Peak Load and Annual Load Factor.
- Declaration of any special zones (SEZ etc., housing schemes) or Inclusion of Metro Expansion Plan to be provided.
- A brief write up about the city/district covering the climate, economy, industrial and infrastructural developments needs to be provided.