

### Division & Sub-division Offices of UHBVN

Name of Circle	Total No. of Division	Total No. of Sub-Division
Sonipat	3	15
Panipat	3	10
Kurukshetra	3	12
Ambala	3	15
Karnal	4	18
Jhajjar	3	13
Kaithal	3	12
Yamunanagar	3	14
Rohtak	3	16
UHBVN	28	125

### Details of division and sub-division offices of DHBVNL

Name of Circle	Total No. of Division	Total No. of Sub-Division
Sirsa	3	13
Hisar	3	13
Bhiwani	3	17
Rewari	3	9
Gurugram-1	2	8
Gurugram-2	2	7
Palwal	3	13
Faridabad	4	18
Jind	3	12
Fatehabad	2	11
Narnaul	2	8
DHBVNL	30	129

The following table presents the trend in total sales from FY 2012-13 to FY 2018-19 as per actual audited accounts: -

### Category wise Sales of UHBVN (In MU)

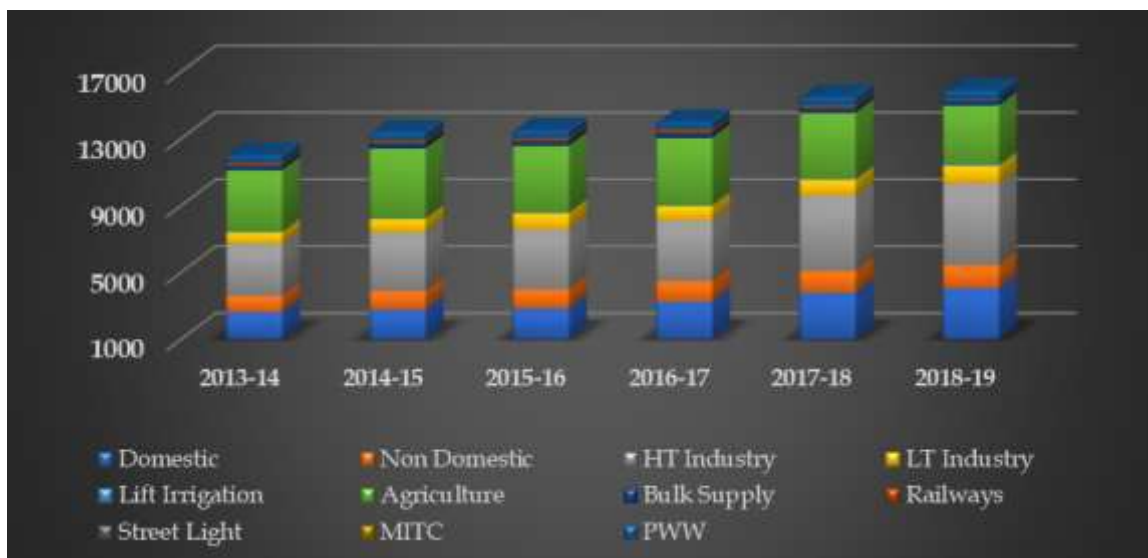
Category	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
Domestic	2,607	2,757	2,835	3,229	3,756	4,032
Non-Domestic	975	1,110	1,140	1,242	1,311	1,383
HT Industry	3,104	3,517	3,589	3,620	4,516	4,887
Lift Irrigation	686	787	952	857	944	1,056
LT Industry	50	55	53	46	71	64
Agriculture	3,664	4,166	3,980	4,027	3,922	3,546
Bulk Supply	289	323	301	302	300	315
Railway Traction	147	154	152	181	105	10
Street Lighting	43	43	43	52	85	75
MITC	3	1	1	12	2	3
PWW	413	429	413	394	433	470
Total	11,979	13,341	13,460	13,960	15,444	15,842

### Category wise Sales of DHBVNL (MUs) for last six year

Category	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
Domestic	3,671.97	3,899.42	4,152.52	4,589.16	4,976.56	5,597.95
Non-Domestic	1,864.03	2,161.04	2,402.07	2,548.65	2,913.86	3,126.65
HT Industry	4,563.45	5,053.43	4,723.18	4,521.60	5,983.04	7,011.74
Lift Irrigation	156.06	152.15	157.55	148.29	199.79	195.69
LT Industry	780.46	819.72	878.56	898.95	975.28	1,035.89

Agriculture	4,398.93	5,072.62	5,196.80	5,614.52	6,119.66	6,148.62
Bulk Supply	773.64	670.18	555.53	676.6	780.31	863.84
Railway Traction/Metro	157.38	160.23	169.88	197.45	144.64	92.47
Street Lighting	57.48	56.01	63.45	91.79	88.47	94.20
PWW	414.93	451.25	477.68	524.91	609.97	667.27
Total	16,838.32	18,496.05	18,777.21	19,811.92	22,791.58	24,834.31

### Category-Wise Sales Mix – Year-Wise of UHBVNL



As evident from above chart, share of HT Industry and Agriculture sales vary over the year but contributes a major share in overall sales of UHBVNL. During the FY 2018-19, share of HT Industry remained 38% of the total consumption, followed by Domestic category having 25% share in total consumptions.

### Category-Wise Sales Mix – Year-Wise of DHBVNL

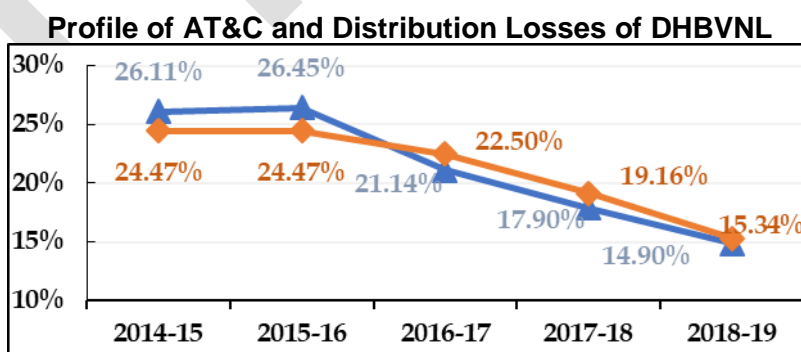


That it is evident from the above figures, Domestic category and Agricultural consumption although varying but remains the highest (47.30% in FY2018-19) consuming category followed by HT Industrial at 28.23% for DHBVNL. The HT Industrial and LT Industrial categories contribute for more than 32.41% of the total consumption.

That the Distribution losses depend upon various factors such as size of the network, energy demand, connected Load etc. UHBVN has reduced distribution losses on a sustained basis over a period of last three years. UHBVN has achieved distribution loss level of 22.04% and AT&C loss level of 21.88% in FY 2018-19.



That in FY 2018-19, UHBVN has provided electricity to 30,58,011 consumers out of which 23,51,324 are domestic consumers. As evident from the table given below, release of new connections has increased significantly over the last few years. UHBVN has released 1.24 Lakhs and 1.22 Lakhs connections in FY 2018-19 and FY 2017-18 respectively. Increase in release of connections in the last few years is due to implementation of online citizen services, feeder sanitisation scheme in rural and urban areas and aggressive vigilance drive. In FY 2017-18, Haryana Discoms have registered 96,440 vigilance cases, which is 1 in every 6 case of electricity theft booked the country.



That in FY 2018-19, DHBVN served electricity to 35,19,047 consumers out of which 27,98,770 are domestic consumers. Given below is a table showing the number of consumers of different categories from FY 2013-14 to FY 2018-19 which signifies that over the last few years new connections were released at a faster pace compared to the trend of

the past years. DHBVN endeavours to comply with the citizen charter over the past few years, which resulted in increase of number of consumers over the last few years.

### Consumer Mix of UHBVNL for Last Six Years

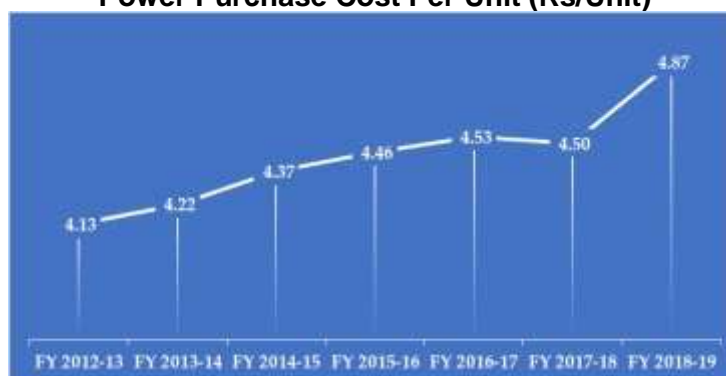
Category	Mar-14	Mar-15	Mar-16	Mar-17	Mar-18	Mar-19
Domestic	19,38,582	20,00,980	20,74,979	21,42,964	22,46,782	23,51,324
Non-Domestic	2,65,494	2,78,654	2,91,194	3,01,619	3,13,844	3,26,069
LT Industrial	35,720	36,626	37,585	38,467	39,467	41,124
HT Industrial	4,769	5,134	5,499	6,010	6,650	7,395
Agriculture Metered	1,47,047	1,57,728	1,64,053	1,69,932	1,74,134	1,80,547
Agriculture Unmetered	1,47,180	1,47,047	1,44,170	1,43,074	1,42,868	1,40,353
MITC / Societies	37	37	44	44	44	44
Lift Irrigation	103	119	80	97	134	188
Public Water Works	7,722	7,935	8,044	8,167	8,427	8,684
Bulk Supply	305	319	321	322	327	340
Railways	77	78	80	82	82	82
Street Light	961	1,068	1,200	1,508	1,674	1,861
Total	25,47,997	26,35,725	27,27,249	28,12,286	29,34,433	30,58,011

### Consumer Mix of DHBVNL for Last Six Years

Category	Mar-14	Mar-15	Mar-16	Mar-17	Mar-18	Mar-19
Domestic	22,22,212	22,90,331	23,69,349	24,52,966	25,94,361	27,98,770
Non-Domestic	2,56,616	2,68,741	2,82,654	2,95,444	3,09,611	3,27,287
LT Industrial	47,010	48,403	49,073	49,619	50,400	52,228
HT Industrial	6,340	6,494	6,804	7,052	7,653	8,287
Agriculture Metered	1,94,999	2,06,679	2,11,062	2,16,106	2,21,924	2,27,071
Agriculture Un-metered	93,379	92,343	92,138	91,990	91,561	90,220
Lift Irrigation	226	230	234	240	246	238
Public Water Works	10,855	11,434	11,821	12,132	12,368	12,689
Bulk Supply	575	627	647	619	654	701
Railways /Metro	3	4	5	6	7	8
Street Light	917	1,004	1,127	1,206	1,319	1,506
TOTAL	28,33,132	29,26,290	30,24,914	31,27,380	32,90,104	35,19,047

That the DISCOMS are purchasing power primarily from Central Generating Stations (CGS), earnest efforts are being made to tie up renewable energy sources under long term tie up to meet RPO compliance. The purchase cost over the past year is depicted in chart given below:

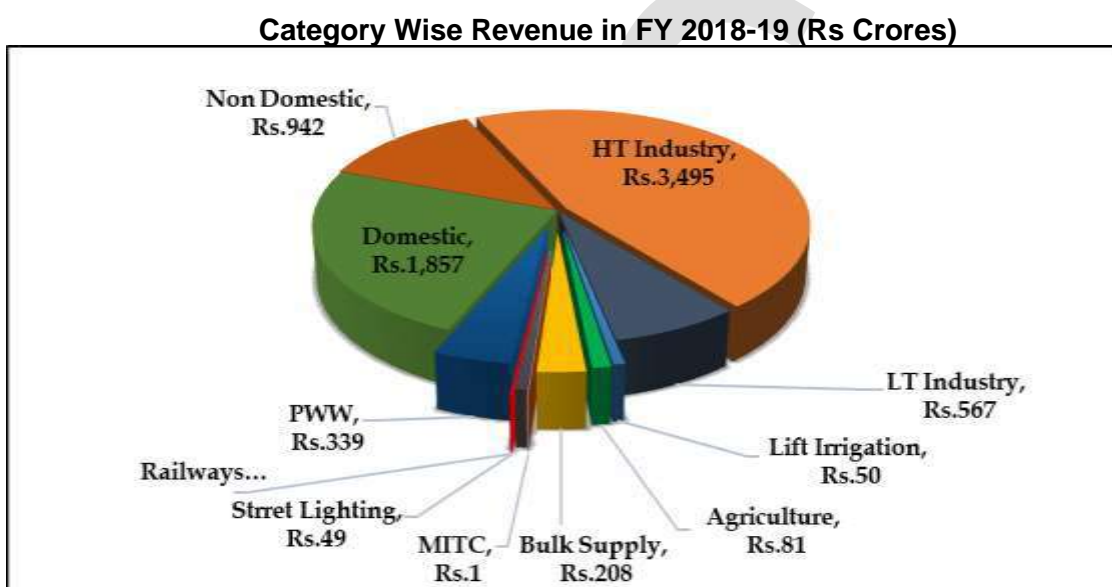
**Power Purchase Cost Per Unit (Rs/Unit)**



That increase in power purchase cost is primarily due to increase in fuel cost of power generating stations. In the FY 2018-19, power purchase cost has increased primarily due to prior period expenses.

#### 1.4 Revenue

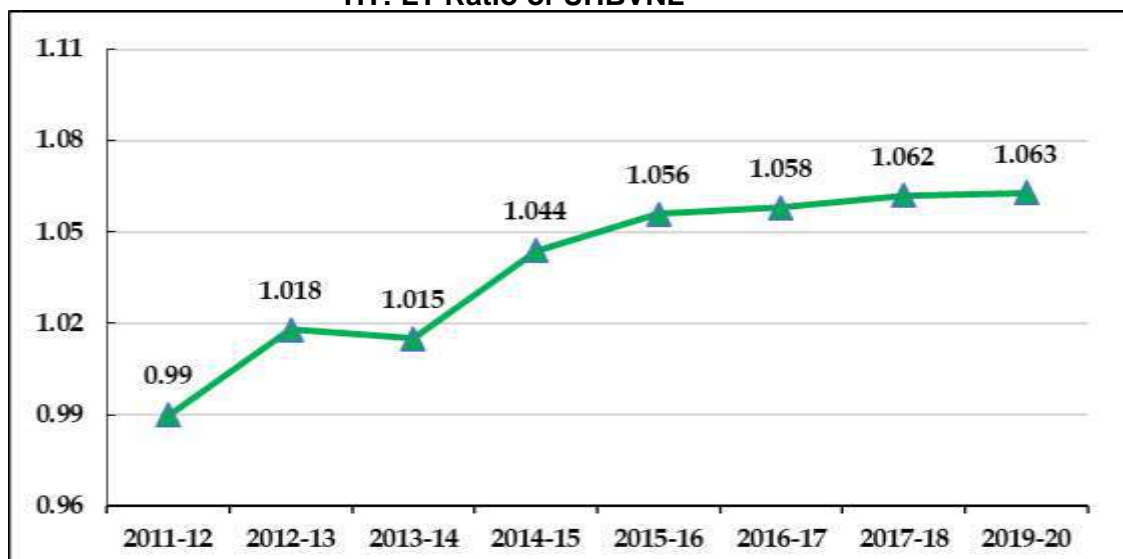
That the revenue generated from the consumption of electricity to various categories is shown in the chart below. HT consumers contribute a portion almost 48% in overall revenue, whereas Domestic category contributes 22% in total revenue.



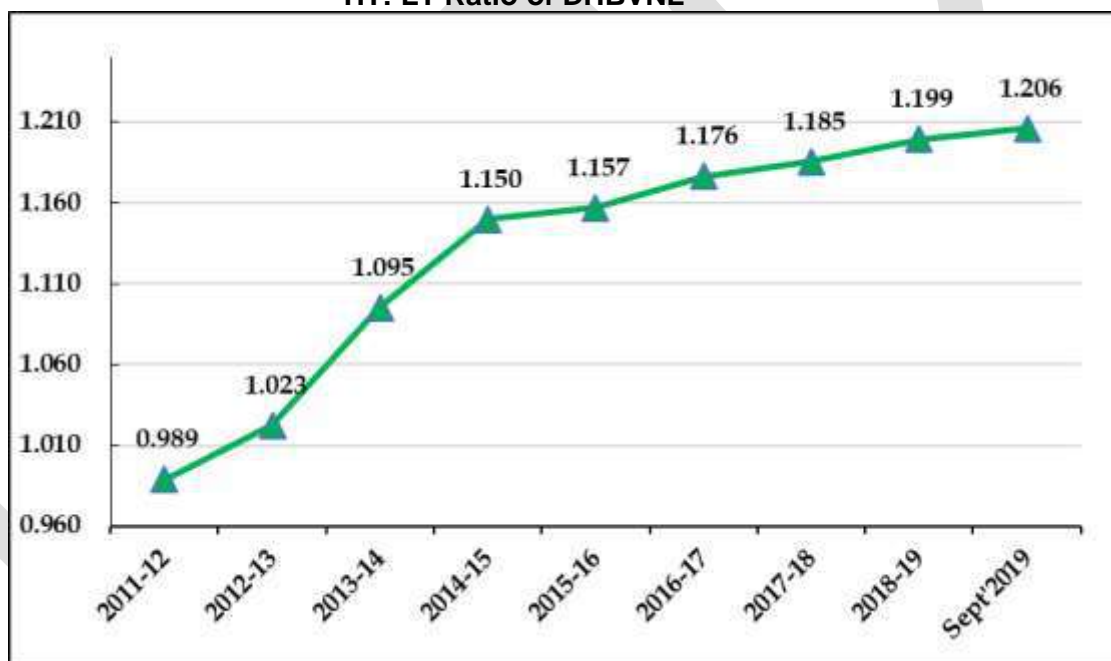
#### 1.5 HT-LT Ratio

That the ratio of length of Secondary line with respect to Primary distribution mains is one of the key parameters influencing the performance of distribution system. Over the years, large scale expansion of the urban system and rural electrification programme within the State of Haryana has resulted in considerable expansion of High Tension (HT) distribution network. Improvement in HT:LT over the years for UHBVN is depicted in chart below:

**HT: LT Ratio of UHBVNL**



**HT: LT Ratio of DHBVNL**



## 1.6 Regulatory Framework

That the Commission notified MYT Regulation for the First Control Period starting from FY 2014-15 to FY 2016-17 on 5<sup>th</sup> December 2012 as HERC (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2012 (hereafter MYT Regulation 2012), with subsequent amendments the span of first MYT Period were extended to FY 2019-20. On 31<sup>st</sup> October 2019, Commission notified MYT Regulation for the Second Control Period starting from FY 2020-21 to FY 2024-25 as HERC (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail

Supply under Multi Year Tariff Framework) Regulations, 2019 (hereafter MYT Regulation 2019).

That the current ARR Petition for MYT Control Period for FY 2020-21 to FY 2024-25, APR for FY 2019-20 and True-Up for FY 2018-19 is made in accordance with regulatory provisions of MYT Regulations, 2019. The relevant provisions for filing ARR Petition as per MYT Regulations 2019 is reproduced as under:

*“... 71 Tariff Filings*

*71.2 Tariff filing for the control period under MYT framework*

*71.2.2.1 The generating company and the licensees shall file an application for approval of ARR for their respective businesses for each year of the control period and tariff for the first year of the control period consistent with the business plan and the capital investment plan approved by the Commission. The ARR and tariff filing shall be filed by 30th November of the year preceding the 1st year of the control period along with requisite fee in accordance with the provisions of Haryana Electricity Regulatory Commission (Fee) Regulations amended from time to time. The application shall contain all the components of the ARR and tariff as provided in these Regulations;*

*The MYT filing shall also contain an application for mid-year performance review of and true – up petition.*

*The generation company and the licensees shall provide in the application forecast for each year of the control period of the various financial and operational parameters of ARR & various other components of the ARR and tariff relating to their respective businesses as mentioned in these Regulations. The application, in case of a distribution licensee and a transmission licensee shall also include:*

*(i) For distribution licensee*

- Sales / demand forecast for each consumer category and sub-categories for each year of the control period and the methodology and rationale used;*
- Power procurement plan based on the sales forecast and distribution loss trajectory for each year of the control period. The power procurement plan should also keep in view energy efficiency and demand side management measures;*
- A set of targets proposed for other controllable items such as collection efficiency, recovery of bad debts, working capital, quality of supply targets etc. The targets shall be consistent with the capital investment plan and business plan approved by the Commission;*

- *Expected revenue from the licensed business, non-tariff income and income from other business for the base year and first year of the control period and other matters considered appropriate by the distribution licensee(s);*
- *Number of consumers in each category, connected load in kW / kVA. Voltage wise estimates losses and cost of supply for various consumer categories per kW and per kWh /kVAh.*
- *The ARR for different years of the control period, the revenue gap and tariff proposal for meeting the revenue gap for first year of the control period. The tariff proposal should be based on the cost of supply for various consumer categories and the cross-subsidy reduction road map.*
- *Proposal for meeting the projected cumulative revenue gap for first year of the control period which shall include mechanism for meeting the proposed revenue gap, tariff revision for various consumer categories etc. In the absence of tariff proposal, the application/petition shall be considered as incomplete and shall be liable for rejection.*
- *A statement of the effect of the proposed tariff changes on a typical small, average and large consumer in each tariff class. For this purpose, a typical small consumer is defined such that within the tariff class, 90% of the consumers supplied under that tariff within a 12 months period would have greater total expenditure on tariff charges than the small consumer. Similarly, a typical large consumer is defined such that 90% of the consumers supplied under the tariff would have lesser expenditure over a 12 months period than the typical large consumer. The average consumer shall be defined as a consumer having expenditure on tariff charges equal to the average expenditure in that tariff class.*

That in accordance to the directions specified above, sincere efforts are being made to incorporate the requisite information in the ARR Petition of the MYT Control Period for FY 2020-21 to FY 2024-15.

### **1.7 Present Petition**

Petition of Annual Revenue Requirement for MYT Control Period for FY 2020-21 to FY 2024-25, Annual Performance Review (APR) for FY 2019-20 and True-up of FY 2018-19, is submitted by UHBVNL and DHBVNL for approval of expenses for each year of MYT Period.

- The current petition is prepared in accordance with the provisions of the following Acts/Policies/Regulations:
- Electricity Act 2003;
- National Electricity Policy;



- National Tariff Policy;
- HERC (Terms and Conditions for Determination of Tariff for Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2019 and current amendments;
- HERC (Terms and conditions for grant of connectivity and open access for intra-State transmission and distribution system) Regulations, 2012 and amendments thereof;

The Discoms have submitted that they have made their best efforts in compiling the information for determination of Aggregate Revenue Requirement (ARR) of True Up for FY 2018-19, APR for FY 2019-20 and MYT Control Period for FY 2020-21 to 2024-25. The information submitted for ARR calculation of relevant years is free from any material errors and consistent with MYT Regulations, 2019. However, in case any deficiency arises in the collation of information, UHBVNL and DHBVNL prays that the Commission may kindly accept the current MYT Petition. The Discoms will take appropriate measures to rectify such deficiencies to provide the requisite information as may be desired by the Commission.

### **1.8 Principles of True Up for FY 2018-19**

The petitioners have submitted that as per Regulation 11.6 of the MYT Regulations 2019, review/true-up the Aggregate Revenue Requirement for FY 2018-19 shall be carried on the same principles on the original application submitted for determination of ARR for FY 2018-19. As specified in the Regulation 11.6 of MYT Regulation 2019, Aggregate Revenue Requirement for FY 2018-19 is trued up on the basis of expenses approved in Tariff Order dated 15th November 2018 against the actual expenses of UHBVNL and DHBVNL for the FY 2018-19.

- Actual expenses filed for UHBVNL and DHBVNL are based on the Audited Annual Accounts for the FY 2018-19.
- The Annual Accounts of UHBVNL and DHBVNL for FY 2018-19 are enclosed along with Petition as Annexure A (Audited Annual Accounts for FY 2018-19).

The approved and actual expenditures, corresponding revenue and resultant revenue gap for FY 2018-19 as submitted by the petitioners are detailed in subsequent sections.

### **1.9 Distribution Loss**

That it is evident from past year's performance of UHBVN that earnest efforts are being made towards reduction of AT&C losses to plug in the revenue loss. UHBVN has achieved

AT&C losses level of 21.88% in FY 2018-19 from 33.88% in FY 2015-16, which is a 12% loss reduction over a period of 3 years.

That DHBVN has achieved AT&C loss level of 14.90% in FY 2018-19. The AT&C losses were at 26.45% in FY 2015-16 thus reduction of 12% over the period of 3 years. The Utility has been able to reduce the AT&C losses at an average rate of 4% per year. DHBVN has also achieved financial turnaround three years prior to the target given under UDAY MoU.

That the Discoms have implemented Mhara Gaon JagMag Gaon (MGJG) and Feeder Sanitisation Schemes in rural and urban areas to curb the power theft and to improve the quality of service to the consumers. Line losses of Rural Domestic Feeders (RDS) contribute a significant portion to the overall distribution losses, therefore, to minimise the losses on these feeders. MGJG scheme has been implemented on the RDS feeders to encourage the participation of consumers, surcharge waiver and 15 hours power supply was offered to the villages in initial phase. On achievement of substantial reduction in line losses and increase in collection efficiency, power supply for 24 hours is provided in the villages. Currently, UHBVN is supplying 24x7 power to 2,501 villages out of 3,445 villages and DHBVN is supplying 24x7 power to 1,753 villages out of 3,600 villages covered under MGJG scheme as on 15th November 2019. Works included in MGJG scheme is under progress in remaining villages and the impact of the same will reflect on overall loss level of UHBVNL and DHBVNL in ensuing years.

That the Discoms are further working extensively on strengthening of sub transmission and distribution network under Deendayal Upadhyaya Gram Joti Yojna (DDUGJY), Integrated Power Development Scheme (IPDS). Under these Schemes, the overloaded feeders are bifurcated and trifurcated along with creation of new 33 KV Substations. Works under these schemes are on their closure and the impact of these works will reflect in the performance of UHBVN in the ensuing years.

That UHBVN is also installing 5 lakhs Smart Meters in Panipat and Karnal under BOOT Mode through Energy Efficiency Services Limited (EESL) which is promoted by Ministry of Power, Govt. of India. DHBVN has also planned to install 5 lakhs smart meters in Gurugram and Faridabad under BOOT Mode through Energy Efficiency Services Limited (EESL) which is promoted by Ministry of Power, Govt. of India. The Discoms have successfully installed back-end system integration software which is a crucial module for establishing two-way communication with Smart Meters. It was observed, from the experience of Discoms in neighbouring state that backend system integration turns out as a major challenge for successful implementation of smart metering project, therefore to avoid such hurdle the

Discoms first ensured the successful installation of backend system integration software. UHBVN has so far installed 37,000 Smart Meters in Panipat & Karnal. DHBVN has so far installed more than 28,000 Smart Meters in Gurugram and the Discoms also planned to procure additional 10 Lakhs Smart Meters with a view to increase efficiency in meter reading and billing, resulting in reduction of technical and commercial losses of Nigam.

That Discoms are also working on Demand Side Management. Various measures like distribution LED Lights, energy efficient fans and agriculture pump-set have been undertaken. These measures will reduce the energy requirement at LT network and eventually reduces the loss level of Discoms.

That in FY 2018-19, UHBVN has achieved distribution loss level of 22.04% against the losses level of 24.81% achieved in FY 2017-18. Distribution loss in FY 2018-19 has reduced by 2.77% from the loss level achieved by UHBVN in FY 2017-18. However, the UHBVN has marginally missed the distribution loss target of 20% given by the Commission in HERC Tariff Order dated 15th November 2018. It may be noted that UHBVN has added 1.22 Lakhs consumer in FY 2017-18 and 1.24 Lakhs consumers in FY 2018-19, which is higher than the average rate of consumer addition (i.e. 0.83 Lakhs) during the period FY 2013-14 to FY 2016-17. In spite of increase in number of consumers at LT network, UHBVN has been able to consistently reduce the AT&C losses over the past three years, besides achieving financial turnaround in FY 2017-18.

That in FY 2018-19, DHBVN has achieved distribution loss level of 15.34%. The reduction is 3.82% over previous year from 19.16%. DHBVN has marginally missed the distribution loss target of 14.14% given by the Hon'ble Commission in HERC Tariff Order dated 15th November 2018. It may be noted that DHBVN has added 1.62 Lakhs consumers in FY 2017-18 and 2.29 Lakhs consumers in FY 2018-19, which is higher than the average rate of consumer addition of 0.95 Lakhs during the period FY 2014-15 to FY 2016-17. In spite of increase in number of consumers at LT network, DHBVN has been able to consistently reduce the AT&C losses over the past three years, besides achieving financial turnaround in FY 2016-17.

That the Discoms have endeavoured to achieve the loss targets fixed by the Commission and working aggressively towards it. Initiatives undertaken are of long term in nature and impact will be visible after completion of the works which are under progress. It is submitted that reduction of distribution losses over the last year is a significant achievement and may be appreciated.

It has been further submitted that in accordance to P. Abraham Committee Report and R-APDRP Guidelines issued by Ministry of Power, Distribution Licensee having AT&C losses level ranging between 20% - 30% may be given loss reduction target of 2% per year, whereas for AT&C losses level less than 20% loss reduction target shall be fixed at 1% per year. The relevant extract of the Report is reproduced as under: -

*“...AT&C Loss Reduction Targets*

*The Task Force examined the targets set for AT & C losses reduction and after taking into consideration experience of the Utilities felt that the targets should be recast in a manner that they are realistic and achievable based on the present level of AT&C losses in each State. Accordingly, the Task Force recommends the following targets depending on their present level of AT&C losses:*

*Utilities having AT&C losses above 40%: Reduction by 4% per year*

*Utilities having AT&C losses between 30 & 40%: Reduction by 3% per year*

*Utilities having AT&C losses between 20 & 30%: Reduction by 2% per year*

*Utilities having AT&C losses below 20%: Reduction by 1% per year...”*

In view of the above it is submitted that Commission may kindly consider the actual distribution loss level of UHBVNL and DHBVNL for carrying out the true up for FY 2018-19.

**1.10 True up of RE subsidy**

The petitioners have further submitted that the Commission approved Rs. 7,139.72 Crore towards Agriculture Subsidy for FY 2018-19. The actual agriculture sales as per HERC methodology works out to 8,721.25 MU for FY 2018-19 (UHBVN-3,572.20 MU and DHBVN 5,149.05 MU). On the basis of per unit agriculture subsidy, calculated as above, Agriculture Subsidy gets revised to Rs. 6,503.11 Crores for Haryana Discoms during FY 2018-19. Detail calculations of Agriculture Subsidy for the FY 2018-19 is as under:

**Proposed True up of RE subsidy for FY 2018-19**

Particulars	2018-19
Total RE subsidy allowed by HERC in Tariff order for 2018-19 (Rs Crs)	7,139.72
Total Agricultural sales approved by HERC in T.O (Mus)	9,575.00
Approved Per unit Subsidy (Rs. /unit)	7.46
Agriculture Sales based on Feeder data minus 16% losses (Mus) UHBVN	3,572.20
Agriculture Sales based on Feeder data minus 16% losses (Mus) DHBVN	5,149.05
Agriculture Sales based on Feeder data minus 16% losses (Mus)-HR	8,721.25
Eligibility of subsidy based on actual sales of 2018-19 (Rs. Crs)	6,503.11
Subsidy Outstanding/(Surplus) (Rs. Crs)	(636.61)

That the Commission has allowed Rs. 606.28 Crore of additional agriculture subsidy on account of revision in AP Sales and LT Cost of Supply for FY 2016-17. It is submitted that the same may be adjusted from the surplus amount of agriculture subsidy received by the Discoms in FY 2018-19.

### 1.11 Summary of True up of FY 2018-19

Summary of expenses approved by the Commission vis-à-vis the actual expenses of UHBVN for FY 2018-19 is tabulated below:

#### UHBVNL True Up of Expenses for FY 2018-19 (Rs. Crore)

Sr. No	Particulars	Approved	Actual	Diff.
1	Power Purchase Cost	10,214.91	11,314.36	(1,099.45)
1.1	Power Purchase Expense	8,747.21	9,737.83	
1.2	Interstate transmission charges	641.80	753.20	
1.3	Intrastate transmission & SLDC charges	825.90	823.33	
2	Operations and Maintenance Expenses	1,334.49	1,092.36	242.13
2.1	Employee Expense	803.02	615.19	
2.2	Administration & General Expense	99.91	106.21	
2.3	Repair & Maintenance Expense	131.56	66.97	
2.4	Terminal Liability	300.00	303.99	
3	Depreciation	305.29	285.96	19.33
4	Total Interest & Finance Charges	312.46	885.85	(573.39)
5	Return on Equity Capital	196.61	258.39	(61.78)
6	Other Expenses	-	678.59	(678.59)
7	Total Expenditure	12,363.76	14,515.51	(2,151.75)
8	Less: Non-Tariff Income	197.25	221.56	(24.31)
9	Net Aggregate Revenue Requirement	12,166.51	14,293.95	(2,127.44)
10	Total Revenue		9,667.98	
10.1	Revenue from Interstate sales	1,047.84	867.26	
10.2	Revenue from Intrastate sales / Sale of Power		8,306.35	
10.3	Revenue from FSA		494.37	
11	Net Gap		(4,625.97)	
12	Subsidy from State Government			
12.1	AP-Subsidy	4,283.83	4,283.83	
12.2	Domestic Subsidy		89.48	
13	GAP After Subsidy		(252.66)	

#### DHBVNL True Up of Expenses for FY 2018-19(Rs. Crore)

Summary of Actual ARR of DHBVN for FY 2018-19				
Sr.	Particulars	Approved (A)	Actual (B)	Difference (A-B)
1	Total Power purchase cost	13,720.50	16,029.65	(2,309.15)
1.1	Power Purchase Expenses incl Inter State Transmission	12,751.35	15,065.65	(2,314.30)
1.2	Intrastate transmission charges and SLDC charges	969.15	964.00	5.15
2	Operations and Maintenance Expenses	1,397.45	1,409.51	(12.06)
2.1	Employee Expense	820.03	831.26	(11.23)
2.2	Administration & General Expense	85.18	111.37	(26.19)
2.3	Repair & Maintenance Expense	148.99	106.88	42.11
2.4	Terminal Liability	343.25	360.00	(16.75)
3	Depreciation	288.09	241.14	46.95
4	Total Interest & Finance Charges	437.39	541.74	(104.35)

Summary of Actual ARR of DHBVN for FY 2018-19				
Sr.	Particulars	Approved (A)	Actual (B)	Difference (A-B)
5	Return on Equity Capital	198.23	209.19	(10.96)
6	Other Expenses	-	21.18	(21.18)
7	Total Expenditure	16,041.67	18,452.41	(2,410.74)
8	Less: Non-Tariff Income	247.47	307.66	(60.19)
9	Net Aggregate Revenue Requirement	15,794.20	18,144.75	(2,350.55)
10	Total Revenue		14,241.58	
10.1	Revenue from Interstate sales		1,308.99	
10.2	Revenue from Intrastate sales / Sale of Power		12,932.59	
11	Revenue Surplus/(Gap)		(3,903.17)	
	Less: Subsidy from Govt. of Haryana & NEF		2,978.41	
	Less: FSA Recovered as per Audited Accounts FY 2018-19		703.80	
13	GAP After AP Subsidy		(220.97)	

That the Commission, in previous years Tariff Orders, has acknowledged the interest cost on UDAY Bonds, but the same was not allowed in the ARR of respective years. The Commission has directed that such expenses are to be met from OFR funding provided by the State Government. However, as per the procedure of debt taken over by the State Govt., interest cost on UDAY Bonds is to be borne by the Discoms. Since the interest on UDAY bonds is an actual payout for the Discoms, it is requested that the Commission may kindly allow this interest cost on UDAY Bonds in the ARR of FY 2018-19. The summary of the admissible interest cost on UDAY Bonds is tabulated as under:

**Summary of Interest cost on UDAY Bonds (Rs Crores)**

Financial Year	UHBVN	DHBVN	Haryana
FY 2015-16	1.67	-	1.67
FY 2016-17	630.99	461.21	1,092.20
FY 2017-18	564.00	480.33	1,044.33
Total Interest Cost on UDAY bonds	1,196.66	941.54	2,138.20

That the net revenue gap for FY 2018-19, after considering the interest cost on UDAY bonds and revised AP Subsidy along with the holding cost of one and half years at the rate of 9.50% works Rs 3711.33 Crores. The details of the same is tabulated as under:

**Revenue Gap of True up for FY 2018-19 (Rs Crores)**

Sr. no	Particulars	Amount
1	Revenue gap of UHBVN after Subsidy	(252.66)
2	Revenue gap of DHBVN after Subsidy	(220.96)
3	Total Revenue gap	(473.63)
4	Interest Cost on UDAY bonds in previous years	2,138.20
5	Revision in Subsidy due to actual AP Sales	(636.60)
6	Revenue Gap for FY 2018-19	(3,248.43)
7	Carrying Cost for 1.5 years @ 9.50%	(462.90)
8	Revenue Gap for FY 2018-19 including holding cost	(3,711.33)

Therefore, in view of the above, the petitioner has requested that the Commission may kindly allow net revenue gap as submitted in table above for FY 2018-19. It has been further requested that the same may be allowed to be carried forward in the ARR for FY 2020-21.

## **1.12 Annual Performance Review for FY 2019-20**

### **Background**

The Commission has issued the HERC (Terms and conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff framework) Regulations, 2012 on 5th December 2012 (hereinafter referred as “MYT Regulation 2012”) for Control Period of FY 2014-15 to FY 2016-17. Further, the Hon’ble Commission with subsequent amendments has extended the Control Period of MYT Regulation, 2012 till FY 2019-20.

The Commission on 31<sup>st</sup> October 2019 has notified HERC (Terms and conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2019 (hereinafter referred as “MYT Regulation 2019”) for Second Control Period from FY 2020-21 to FY 2024-25. As per Regulation 11.6 “Mid- Year Performance Review and Tariff Setting” of MYT Regulation 2019, Annual Performance Review (APR) of FY 2019-20 is to be done in accordance with Tariff Order of the relevant year. The relevant extract of the Regulation is provided as under:

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### **11. Mid -Year Performance Review and Tariff Setting**

*11.6 “The Commission shall review/consider, during the control period, the application made under this Regulation as also the application for truing up of the ARR of the previous year, as per provision of the Regulation 13, on the same principles as approved in the MYT order on the original application for determination of ARR and tariff. The review / true-up for FY 2018-19 and FY 2019-20 shall, however, be done on the same principles as approved in the tariff order for FY 2018-19 and for FY 2019-20...”*

Tariff Order on ARR and Retail Supply & Distribution Tariff for FY 2019-20 was issued by the Hon’ble Commission on 7<sup>th</sup> March 2019.

In line with the above, the Petitioner hereby submits Annual Performance Review of ARR for FY 2019-20. Petitioner has considered actual available data for the first half of current financial year, pro-rata projections and escalations as per principles defined in the MYT

Regulations, 2012 to project the ARR for FY 2019-20. Projected ARR for APR Year vis-a-vis approved expenses is submitted for the approval of Hon'ble Commission.

### 1.13 Distribution Losses during the FY 2019-20

The petitioners have informed that since implementation of UDAY, UHBVN has reduced 12% AT&C losses over a span of three years. UHBVN has implemented various system strengthening schemes and feeder sanitisation scheme for reduction of line losses. Works under these schemes are at completion phase and impact of the same will be observed in ensuing years. As already submitted, the maximum target for reduction of AT&C losses as suggested by P. Abraham Committee and RAPDRP Guidelines is 1.5 % per year for Discoms having AT&C Loss upto 30%. However, the same shall be 1% per year for Discoms having 20% of AT&C loss level.

That the Distribution losses of UHBVN are expected to reduce further by 2.54%, during the current financial year, therefore distribution loss level of 19.50% is considered for FY 2019-20. The Commission has approved distribution loss target of UHBVN at 14.14% for FY 2019-20. It is submitted that reduction of distribution losses by approximately 8% in one year doesn't seem realistic and hence it is requested that the Commission may kindly allow the distribution losses of UHBVN at 19.50% for FY 2019-20.

DHBVN has informed that it has added 1.62 Lakhs consumer in FY 2017-18 and 2.29 Lakhs consumers in FY 2018-19, which is higher than the average rate of consumer addition of 0.95 lakh during the period from FY 2014-15 to FY 2016-17. The addition of bulk of new consumers is on LT network and the resultant increase in sales on LT network will be a challenging task to maintain the existing loss level. In view of the above, it is requested that the Commission may kindly allow distribution losses of DHBVN at 15.00% for FY 2019-20.

### 1.14 Aggregate Revenue Requirement:

That the revised estimate of Aggregate Revenue Requirement of UHBVN for FY 2019-20 is tabulated as under:

#### Aggregate Revenue Requirement for FY 2019-20 UHBVNL (Rs. Crores.)

Sr. No	Particulars	Approved	Projected
1	Total Power Purchase Expense	9,989.26	11,502.80
1.1	Power Purchase Expense	8,471.51	10,103.45
1.2	Interstate transmission Charge	909.25	790.86
1.3	Intrastate transmission charges and SLDC charges	608.50	608.50
2	Operations and Maintenance Expenses	1,367.90	1,195.57
2.1	Employee Expense	639.87	643.99
2.2	Administration & General Expense	85.21	111.15
2.3	Repair & Maintenance Expense	142.82	136.44



Sr. No	Particulars	Approved	Projected
2.4	Terminal Liability	500.00	303.99
3	Depreciation	332.72	350.26
4	Total Interest & Finance Charges	342.80	611.08
4.1	Interest on UDAY bonds payable to the State Government		124.89
4.2	Interest on WC loans including CC/OD limits	91.82	272.33
4.3	Interest on CAPEX loans	164.39	109.00
4.4	Interest Cost on Consumer Security Deposit	84.58	86.32
4.5	Guarantee Fees	26.00	18.54
4.6	Less: Interest cost on Jind Loans	-23.99	
5	Return on Equity Capital	215.13	272.88
6	Other Expenses		43.92
7	Total Expenditure	12,221.81	13,976.51
8	Less: Non-Tariff Income	197.25	221.56
9	Net Aggregate Revenue Requirement	12,024.56	13,754.96

That the revised estimate of Aggregate Revenue Requirement of DHBVN for FY 2019-20 is tabulated as under:

#### Aggregate Revenue Requirement for FY 2019-20 DHBVNL (Rs Crores)

S. No.	Particulars	FY 2019-20 (Approved)	FY 2019-20 (Projected)
1.00	Power Purchase Cost	16,250.45	15,844.66
1.10	Power Purchase Cost	14,239.06	13,954.58
1.20	Transmission Charges (PGCIL)	1,280.17	1,158.86
1.30	Transmission Charges (HVPN + SLDC)	731.22	731.22
2.00	Operation & Maintenance Expenses	1,643.44	1,500.12
2.10	Employee Expenses (net)	969.66	869.99
2.20	Administration & General Expenses (net)	81.69	116.56
2.30	Repair & Maintenance Expenses	165.34	153.57
2.40	Terminal Benefits	426.75	360.00
3.00	Depreciation	307.01	312.36
4.00	Interest & Finance Charges	359.59	518.54
4.10	Interest on Long Term Loan	140.77	112.77
4.20	Interest on Working Capital	126.70	173.06
4.30	Interest on UDAY Bonds	-	95.45
4.40	Interest on Consumer Security Deposit	87.12	88.25
4.50	Other Interest & Finance Charges including MDR/digital payment transaction charges	5.00	29.01
4.60	Guarantee Fee	-	20.00
6.00	Return on Equity Capital	193.15	227.51
7.00	Prior period expenses & other expenses	-	-
8.00	Other Debts, (including wealth tax)	-	-
9.00	Provisions for bad and doubtful debt	-	67.14
10.00	Aggregate Revenue Requirement	18,753.64	18,470.33
11.00	Less: Non-Tariff Income	469.51	307.66
12.00	Aggregate Revenue Requirement from Retail Tariff	18,284.13	18,162.67

That on the basis of the proposed revised estimates of Aggregate Revenue Requirement of Haryana Discoms and proposed income for FY 2019-20, revenue gap works out to Rs 1,365.80 Crores for FY 2019-20. The details of the same are tabulated below:

### Revenue Gap for FY 2019-20 (Rs Crores)

Particulars	Approved	Projected
Total Aggregate Revenue Requirement	28,805.08	31,917.63
UHBVNL	12,024.56	13,754.96
DHBVNL	16,780.53	18,162.67
Total Revenue	22,596.84	24,688.73
Revenue from Interstate sales		2,477.40
Revenue from Intrastate sales / Sale of Power	22,596.84	22,211.32
Revenue Gap	(6,208.24)	(7,2328.90)
Less: AP-Subsidy	6,854.21	6,856.04
GAP After AP Subsidy	645.97	(372.86)
Revenue Gap for FY 2017-18	(865.12)	(865.12)
Holding Cost for 1.5 years @ 9.5%	(127.82)	(127.82)
Net Revenue GAP	(346.98)	(1,365.80)

#### 1.15 ARR of MYT Control Period for FY 2020-21 to FY 2024-25

The Discoms have submitted that the petition for Aggregate Revenue Requirement of Second Control Period has been filed as per Regulation 4 & 71 of MYT Regulations, 2019. Aggregate Revenue Requirement for MYT Period is need to be submitted for approval of the Commission by 30<sup>th</sup> November of year preceding to the first year of the MYT Control Period. Capital Investment Plan for first year of Control Period is also to be submitted along with MYT Petition. Business Plan for MYT Period is to be submitted by end of January 2020. Relevant portion of Regulations is provided as under:

*“4.3 Basis of implementation of Multi Year Tariff framework: -*

*The implementation of MYT framework shall be based on the following: -*

*(a)The capital investment plan and the business plan for a period not less than the control period to be submitted by the utilities for their respective businesses along with the MYT Petition;*

*Provided that to begin with, the generating companies and the licensees may file their business plan by the end of January 2020 and the first-year investment plan with the respective MYT Petition for the second control period under these Regulations.”*

*71.2.21 Tariff filing for the control period under MYT framework*

*71.2.1 The generating company and the licensees shall file an application for approval of ARR for their respective businesses for each year of the control period and tariff for the first year of the control period consistent with the business plan and the capital investment plan approved by the Commission. The ARR and tariff filing shall be filed by 30th November of the year preceding the 1st year of the control period along with requisite fee in accordance with the provisions of Haryana Electricity Regulatory Commission (Fee) Regulations amended from time to time. The application shall contain all the components of the ARR and tariff as provided in these Regulations;*

The MYT filing shall also contain an application for mid-year performance review of and true – up petition.

### 1.16 Aggregate Revenue Requirement for MYT Control Period:

That the Aggregate Revenue Requirement of UHBVN for each year of MYT Control Period for FY 2020-21 to FY 2024-25 is tabulated as under:

#### Aggregate Revenue Requirement for MYT Control Period UHBVNL (Rs Crores)

Sr. No	Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
1	Total Power Purchase Expense	12,083.67	12,716.79	13,401.28	14,139.96	14,963.17
1.1	Power Purchase Expense	10,605.27	11,164.47	11,771.35	12,428.53	13,166.17
1.2	Interstate transmission Charge	830.40	871.92	915.51	961.29	1,009.36
1.3	Intrastate transmission & SLDC	648.00	680.40	714.42	750.14	787.65
2	Operations and Maintenance Expense	1,308.81	1,363.07	1,418.34	1,473.64	1,529.63
2.1	Employee Expense	740.76	775.42	811.68	849.64	889.36
2.2	Administration & General Exp.	115.60	120.98	126.62	132.52	138.69
2.3	Repair & Maintenance Expense	148.45	162.68	176.05	187.49	197.58
2.4	Terminal Liability	303.99	303.99	303.99	303.99	303.99
3	Depreciation	366.46	407.04	449.31	485.16	515.66
4	Total Interest & Finance Charges	503.39	513.45	541.66	573.60	617.97
4.1	Interest on Working Capital	262.14	245.08	228.74	226.28	249.96
4.2	Interest on CAPEX loans	136.71	165.26	197.35	219.25	232.35
4.3	Interest on Consumer Security Deposit	94.54	103.11	112.04	121.35	131.07
4.4	Guarantee Fees	10.00	-	3.53	6.71	4.60
5	Return on Equity Capital	286.28	311.71	342.41	374.04	401.64
6	Other Expenses	47.30	50.69	54.33	58.27	62.51
7	Total Expenditure	14,595.91	15,362.76	16,207.33	17,104.67	18,090.58
8	Less: Non-Tariff Income	221.56	221.56	221.56	221.56	221.56
9	Net Aggregate Revenue Requirement	14,374.35	15,141.20	15,985.78	16,883.12	17,869.02

That the Aggregate Revenue Requirement of DHBVN for each year of MYT Control Period for FY 2020-21 to FY 2024-25 is tabulated as under:

#### Aggregate Revenue Requirement for FY 2020-21 to FY 2024-25 DHBVNL (in Crores)

Sr. No.	Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
1	Total Power Purchase Expense	16,872.46	18,030.96	19,284.25	20,638.51	22,048.51
1.1	Power Purchase Expense	14,896.95	15,956.68	17,106.25	18,351.61	19,647.27
1.2	Interstate transmission Charge	1,216.80	1,277.64	1,341.52	1,408.60	1,479.03
1.3	Intrastate transmission & SLDC charges	758.71	796.64	836.48	878.30	922.21
2	Operations & Maintenance Expenses	1,597.59	1,669.93	1,744.11	1,818.72	1,892.83
2.1	Employee Expense	938.93	982.67	1,028.45	1,076.37	1,126.51
2.2	Administration & General Expense	121.22	126.87	132.78	138.97	145.44
2.3	Repair & Maintenance Expense	177.43	200.38	222.87	243.39	260.88
2.4	Terminal Liability	360.00	360.00	360.00	360.00	360.00
3	Depreciation	384.74	451.81	518.83	583.58	639.94

Sr. No.	Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
4	Interest and Finance Charges	477.44	559.47	638.55	718.91	793.29
4.1	Interest on CAPEX Loans	186.03	250.83	311.49	372.13	426.75
4.2	Interest on WC loans (Normative)	163.32	165.05	167.17	169.75	171.49
4.3	Interest on Consumer Security Deposit	102.01	116.42	131.51	147.31	163.86
4.4	Other Interest Cost	16.08	17.18	18.39	19.72	21.19
4.5	Guarantee Fee	10.00	10.00	10.00	10.00	10.00
5	Return on Equity Capital	272.32	312.60	350.00	387.46	424.09
6	Prior Period & Other Expenses	-	-	-	-	-
7	Provision for Bad & Doubtful Debts	73.57	79.24	84.87	90.92	97.43
8	Total Expenditure	19,678.12	21,104.01	22,620.60	24,238.10	25,893.10
9	Less: Non-Tariff Income	307.66	307.66	307.66	307.66	307.66
10	Net Aggregate Revenue Requirement	19,370.46	20,796.34	22,312.93	23,930.43	25,585.43

### 1.17 Revenue Gap for MYT Control Period

That on the basis of proposed Aggregate Revenue Requirement and Revenue from sale of Power and AP Subsidy, revenue (gap)/surplus for MYT Control Period for Haryana Discoms for FY 2020-21 to FY 2024-25 is detailed as under:

#### Revenue (Gap)/Surplus for MYT Control Period (Rs Crores)

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Aggregate Revenue Requirement	33,744.81	35,937.54	38,298.71	40,813.55	43,454.45
-UHBVN	14,374.35	15,141.20	15,985.78	16,883.12	17,869.02
-DHBVN	19,370.46	20,796.34	22,312.93	23,930.43	25,585.43
Total Revenue	26,569.71	28,382.49	29,873.39	31,770.84	33,298.37
-Revenue from Interstate sale	2,396.07	2,396.10	2,032.98	1,934.04	1,311.25
-Revenue from Intrastate sale	24,173.64	25,986.39	27,840.41	29,836.80	31,987.12
Revenue Gap	7,175.10	7,555.05	8,425.32	9,042.71	10,156.08
AP Subsidy	6,856.04	6,856.04	6,856.04	6,856.04	6,856.04
Revenue gap of FY 2018-19 carried forward -true up	(3,711.33)	-	-	-	-
Revenue Gap after AP Subsidy	(4,030.39)	(699.01)	(1,569.28)	(2,186.67)	(3,300.04)

### 1.18 Recovery of Outstanding Revenue Gap

That the Aggregate Revenue Requirement for MYT Control Period is projected on the basis of audited accounts. Accordingly, as per projected sales and existing retail supply tariff, revenue from sales of power is estimated for each year of MYT Control period. In consideration of the revenue gap of Haryana Discoms, it is requested that the Commission may kindly continue the current level of energy charges for ensuing years of MYT Control Period for FY 2020-21 to FY 2024-25. The cumulative revenue gap during the first year of MYT Control Period comes out to Rs.4,030.39 Crores for Haryana Discoms. Therefore, in view of the same the continuation of current level of tariff shall be required for ensuring

sustainable financial position of Haryana Discoms in ensuing years. It is further submitted that the gap will be funded through operating fund requirements (OFR).

### 1.19 Additional Surcharge

That in accordance with the Haryana Electricity Regulatory Commission (Terms and Conditions for grant of connectivity and open access for intra-State transmission and distribution system) Regulations, 2012, Nigam hereby submits the calculation of additional surcharge based on 100% data of all days in first half of FY 2019-20 i.e. April-19 to September-19. The methodology for computation of Additional Surcharge is explained in subsequent paragraphs.

That in order to ensure that only such power surrendered is taken for calculating additional surcharge, which corresponds to power stranded because of open access consumers, the lower quantum of open access power per slot and surrendered power for corresponding slot is taken as quantum of the stranded power for slot due to open access.

That the Discoms have calculated slot wise stranded power due to open access and also the total open access power availed in that particular time slot. Further, based on slot-wise quantum eligible for calculation of Additional Surcharge and slot wise total open access power availed, the corresponding slot wise units have been calculated for all the days in first half of FY 2019-20 and thereafter the petitioner has calculated total units in MU, which corresponds to the stranded power due to Open Access and total Open Access units availed for the first half of FY 2019-20.

That the total Additional Surcharge for first half of FY 2019-20 (in Rs. Crores) is consequently, calculated by multiplying the Units of Power (in MUs) evaluated above and the per unit effective fixed charge. Finally, the Per Unit Additional Surcharge is determined by dividing the total additional surcharge with the estimated Open Access Units for First half of FY 2019-20 in MU.

#### Calculation of Additional Surcharge for First half of FY 2019-20.

Particulars	Units	Amount
Total Eligible Quantum (Min of backing down and OA) to be considered for Additional Surcharge	MU	658.97
Average Fixed Cost approved for FY 2019-20	Rs/kWh	1.21
Total Additional Surcharge for H1 of FY 2019-20	Rs. Cr.	79.58
Estimated Open Access Units for H1 of FY 2019-20 (considering same as in H2 of FY 2018-19)	MU	689.09
Additional Surcharge to be applicable on OA Consumers in H1 of FY 2019-20	Rs /kWh	1.15

That the Commission is requested to allow an additional surcharge of Rs 1.15 per unit to be levied on open access consumers which has been calculated based on details of slot wise surrendered power and slot wise open access power considering data of all days.

### **1.20 Time of Day/Time of Use (ToU) Tariff**

That the Commission vide its Order dated 7<sup>th</sup> March, 2019 for True-up of the ARR for the FY 2017-18, Annual (Mid-Year) Performance Review for the FY 2018-19 and determination of ARR and Distribution and Retail supply tariff for the FY 2019-20 had directed the Discoms to submit a comprehensive proposal for Time of Day (ToD) tariff including night time concessional tariff in order to utilise the surplus power available to them so as to reign in the trading losses in disposing of the surplus power during off – peak hours / seasons. The proposal as desired is discussed/presented in the following paragraphs.

#### **Proposal for Time of Day Tariff**

That the ToD tariff was introduced for the first time by the Commission vide its ARR/Tariff Order for Discoms dated 11.07.2017 on optional basis. This option was available to the H.T Industry including Furnace, L.T. Industry, H.T. Non-Domestic, Bulk Supply consumers (Excluding Bulk DS), Public Water Works and Lift Irrigation during October to March, the low demand winter period of the year.

That the ToU tariff as approved by the Commission covers only two time segments i.e. off peak hours (22:00 to 05:30 hrs) and Peak hours (18:30 to 22:00 hrs). There is a rebate of 10% (earlier it was 15%) on the energy charges as approved for energy drawl during off Peak hours and there is a premium of 19% over the normal energy charges for energy drawl during Peak Hours. The third ToD segment i.e. Normal demand hours (05:30 to 22:00 hrs) is not covered in ToU Tariff. Now consider the HT Industrial consumers having continuous process industries or seasonal industries who operate in Oct to March. These industries normally run during night hours also and being continuous process/seasonal, also run in the peak hours. They already pay PLEC @Rs 1.00/kVAh for demand upto 50% of Contract Demand and Rs 1.50 /kVAh for drawl above 50% of the CD i.e. they are already paying PLEC almost at the same rate as it works out with 19% premium. So, such consumers opt for ToU Tariff without a second thought and get the benefit of rebate without shifting any load from Peak/Normal Demand hours to off Peak hours.

That it is, therefore, felt that unless third ToD segment i.e. normal demand hours (05:30 to 18:30 hrs) is also covered in the ToU tariff and an appropriate premium is charged for the energy drawl during normal demand hours and in addition premium for energy drawl during

peak hours is further enhanced so as to make it a bit higher than PLEC, it would not prompt/incentivize the consumers to shift their load from Peak / Normal demand hours to Off Peak hours.

That in case ToU covering all these ToD segments on above lines is introduced it will definitely help in shifting of load from normal/peak demand hours to off peak hours and thus result in flattening of the load curve. The consumers having continuous process/seasonal industries who do not shift their load from normal/peak demand hours to off-peak hours would not stand to gain by opting ToU tariff as they have been doing with the existing ToU tariff.

In view of above, the petitioners have felt that the ToU Tariff need to be redesigned/modified as under: -

The rebate during off Peak hours should be increased to 15% as it was allowed earlier in the ToU tariff approved in FY 2017-18. This is required to incentivize the consumers to opt for ToU Tariff.

The premium to be charged during peak load hours should also be increased. In West Bengal the tariff during off peak hours is around Rs 9.50/kWh as against tariff of about Rs 6.50 /kWh during the normal demand hours. Similarly, in Punjab the normal tariff plus Rs 2/kAVh is charged for consumption during peak hours.

That in view of above, it is suggested that if load/demand during peak load hours is sought to be shaved off i.e. suppressed to minimize investments on additional infrastructure/tie up of additional power, the premium during peak hours should be increased at least to 22% or Rs 1.50 per kVAh.

That as suggested earlier, to make the ToU Tariff effective, premium should also be charged for energy drawl during normal demand hours. Besides prompting the consumers, who opt ToU tariff, to shift load from normal demand hours to off peak hours, it will also make the ToU tariff revenue neutral for the Discoms to some extent. From the daily load curves of the Discoms for winter months, it is observed that consumption during normal demand hours (05:30 to 18:00 hrs) varies from 1.8 to 2.2 times the total consumption during the off-peak hours.

In view of above, petitioners have suggested that if a rebate of 15% is given during off peak hours, a premium of 5 to 6% on the normal energy charges should be charged for energy drawl during normal demand hours also. This is extremely essential to prompt the

consumers opting for ToU tariff to shift load from normal demand hours to off peak hours and to prevent the consumers, having continuous process/seasonal industries, to opt ToU tariff to get the benefit of rebate during off peak hours without shifting any load/operations from peak/normal hours to off peak hours.

In the winter months of October to March, the peak load hours are from 17.30 hrs to 2100 hrs. Accordingly ToD segments for ToU tariff should be as under: -

Normal demand hours : 05.30 to 17.30 hrs.  
 Peak demand hours : 17.30 to 21.00 hrs.  
 Off Peak demand hours : 21.00 to 05.30 hrs

ToU Tariff, therefore, needs to be modified as above.

The proposal for Time of Day (ToD) or Time of Use (ToU) tariff for HT Industrial Consumers for power drawn by them during off peak hours i.e. 21.00 to 05.30 hours in excess of their normal consumption during the corresponding month in the preceding year is submitted for kind consideration and approval of the Commission as under: -

#### Time of Day (ToD) Tariff

That the Time of Day (ToD) or Time of Use (ToU) tariff shall be optional and shall be applicable during the period from **November to March**. This option shall be available to the **H.T Industrial consumers including Furnaces, L.T. Industry, H.T. Non-Domestic and Bulk Supply consumers (Excluding Bulk DS)**. The Peak hours, Off Peak Hours and Normal Demand Hours shall be as under: -

Peak demand hours : 17.30 to 21.00 hrs.  
 Off Peak demand hours : 21.00 to 05.30 hrs  
 Normal demand hours : 05.30 to 17.30 hrs.

**A modified Time of Day (ToD) or Time of Use (ToU) tariff is proposed as under: -**

Period	Charge	Time
Off-Peak Demand (November to March)	15 % rebate on the normal energy charges as approved by the Commission.	From 9:00 P.M to 05.30 A.M
Peak Demand (November to March)	22% premium over the energy charges determined by the Commission	From 5.30 P.M to 9.00 P.M
Normal Demand (November to March)	5% premium over the energy charges determined by the Commission	From 05.30 A.M to 5.30 P.M
Demand Charges	As determined by the Commission - shall be the same for all categories of consumers including ToU. PLEC shall continue to be applicable for Open Access Power.	



That since the ToU tariff shall be optional, once electing to be charged at the Time of Use Tariff, the consumer / applicant opting for the same shall continue to be charged from the date the Discoms, on an application submitted by a consumer allows the same, upto 31st March.

That all other charges except PLEC on power purchased from the Discoms during the ToU period shall be applicable for the electricity consumers opting for ToU Tariff. But during the non ToU period (April to October) PLEC shall continue to be levied. Also, PLEC shall continue to be levied for Open Access Power during ToU period (November to March) as well as non-ToU period.

That in case a consumer opting for ToU tariff does not have ToU compatible meter installed, the ToU compatible meter, as per specifications of the Discoms/CEA shall be procured by the Consumer opting for ToU Tariff. The Discoms shall test, seal and install the same within ten days counted from the day a consumer hands over the meter to the Discoms. Other terms and conditions can be as may be prescribed by the Commission.

The petitioners have requested that the Commission may kindly consider and approve the proposal for Time of Day (ToD) or Time of Use (ToU) tariff subject to various provisions, terms and conditions as per proposal given above and pass suitable orders on the Petition.

#### **1.21 Prayer**

In view of the above submissions UHBVNL and DHBVNL have prayed that the Commission may:

- Take the accompanying filing on record and accept the Aggregate Revenue Requirement of True up for FY 2018-19, Annual Performance Year for FY 2019-20 and MYT Control Period for FY 2020-21 to FY 2024-25.
- Allow revision of the current petition, filing of any additional /supplementary submissions during the course of these proceedings;
- Allow return on equity as proposed;
- Allow the entire fixed charges of power purchase as the power is procured from the sources whose PPAs have been duly approved by the Hon'ble Commission and also the energy charges of power procurement from these sources as proposed in the filing;

- Allow the Annual Revenue Requirement for first year of MYT Control Period for FY 2020-21 to FY 2024-25 along with actual interest cost on entire loan which is borne by the utility;
- Allow True-Up of FY 2018-19 along with the holding cost, revised estimate of expenses projected for FY 2019-20 and Annual Revenue Requirement of first years of MYT Control Period FY 2020-21 to FY 2024-25.;
- Allow to continue the current levels of charges to meet the expenses and the gap being funded through operational financing as proposed under UDAY scheme;
- Allow Additional Surcharge of Rs 1.15 per unit to be recovered from Open Access Consumers
- Condone any inadvertent omissions/errors/shortcomings and permit the Discoms to add/change/modify/alter this filing and make further submissions as may be required during the course of these proceedings;
- Pass such Order, as the Commission may deem fit and appropriate keeping in view the facts and circumstances of the case submitted by the Petitioners.

**Before the Commission could consider the aforesaid prayers and pass appropriate Order, the outbreak of COVID - 19 happened and lockdown was enforced to contain the Pandemic. Keeping in view the lockdown caused by the outbreak of the COVID-19, the Commission, vide letter Memo. No. Spl-2/HERC/Tariff/SV dated 20.04.2020 directed the Haryana Discoms to file Supplementary ARR Petition in view of the fact that the revenue projections for the FY 2020-21 were likely to be severely affected.**

**Thus, keeping in view the relaxation scheduled in the lockdown and the lockdown exit measures, Haryana Discoms have proposed a revision in the ARR of FY 2020-21.**

It has been submitted that COVID-19 Pandemic has had massive impact on load growth, revenue realisation and other performance parameters of the Haryana Discoms. Under such an unprecedented crisis, relief in the electricity bills were also extended to the various consumer categories, which further impacted the financial position the Discoms.

Pursuant to the aforementioned references, the Haryana Discoms have filed following supplementary submissions in respect of the ARR projections for the FY 2020-21 vide memo no. Ch-36/RA/F-25/Vol-76 dated 05.05.2020.

## 1.22 Details of Supplementary ARR Petition Filed BY The Discoms

### Sales Projections for FY 2020-21

The energy sales to the various consumer categories has been projected on the basis of the actual energy sales of the FY 2019-20.

In the present submission, Energy sales of HT industry, LT industry, Railway and Non-domestic categories have been reduced due to the continuing lockdown affecting these categories. The energy sales of these categories have been reduced for FY 2020-21 assuming that during the first quarter, the sale would be 40% of actual energy sale in first quarter of FY 2019-20, 60% during 2nd quarter, 80% during 3rd quarter and 100% during the 4th quarter.

Energy sales of the categories other than HT industry, LT industry, Railway and Non-domestic have been projected by applying CAGR on actual sales of FY 2019-20.

In view of above, the revised projections of category wise energy sales of Discoms for the FY 2020-21 is as under:

#### Category wise Revised Energy sales for FY 2020-21 (MU)

Sr. No.	Category	UHBVN		DHBVN	
		MYT Projection	Revised Projection	MYT Projection	Revised Projection
1	Domestic	4,672.80	4,812.56	6,513.42	7,090.41
2	Non-Domestic	1,561.70	1,016.73	3,562.33	2,293.55
3	HT Industry	5,904.47	3,813.54	7,324.48	4,343.06
4	LT- Industry	1,071.73	689.15	1,102.09	694.66
5	Lift Irrigation	67.70	63.66	229.51	215.00
6	AP Sales	3,718.29	3,718.29	5,676.85	5,676.85
7	Bulk Supply	329.11	335.07	971.86	1,135.72
8	Railways	9.45	6.42	117.45	60.21
9	Street Light	91.03	89.96	112.43	92.31
10	MITC	3.41	4.91	-	-
11	PWW	502.61	506.73	784.00	747.09
	Total Sales	17,932.30	15,057.02	26,394.41	22,348.86

### 1.23 Revised Revenue Estimations for FY 2020-21

Revenue from sale of power is projected for FY 2020-21 on the basis of projected sales and current level of retail supply tariff. Category wise revenue from sale of power of Haryana Discoms for FY 2020-21 is tabulated below:

:

### Revised Revenue Estimations for FY2020-21 (Rs. Crores)

Sr. No.	Category	UHBVN		DHBVN	
		MYT Projection	Revised Projection	MYT Projection	Revised Projection
1	Domestic	2,214.36	2,280.59	3,436.69	3,844.12
2	Non-Domestic	1,050.22	683.73	2,475.71	1,593.14
3	HT Industry	3,923.71	2,534.22	5,133.64	3,044.00
4	LT- Industry	702.07	451.45	790.30	474.00
5	Lift Irrigation	49.76	46.79	168.69	158.02
6	AP Sales	18.43	18.43	35.91	35.91
7	Bulk Supply	206.86	210.61	598.69	699.63
8	Railways	6.14	4.17	77.27	39.61
9	Street Light	66.91	66.12	82.64	67.85
10	MITC	2.50	3.61	-	-
11	PWW	369.42	372.45	576.24	549.11
12	Total Energy Charges	8,610.38	6,672.16	13,375.78	10,505.39
13	Fixed Charges	896.91	881.89	1,412.05	1,379.76
14	Revenue Billed	9,507.29	7,554.05	14,787.83	11,885.15
15	Collection Efficiency	99.50%	99.00%	99.50%	99.00%
16	Revenue Realised	9,459.75	7,478.51	14,713.89	11,766.30

### Energy Availability and Power Purchase cost

In the revised submission, the power purchase cost has been projected by the Discoms on the basis of revised sale projections for FY 2020-21 and the expected delay in power availability from new generating plants by three months over the initial projections. The revised energy balance and Power Purchase cost is as under:

### Revised Energy Balance for FY 2020-21

Particulars	Unit	UHBVN		DHBVN	
		MYT Projection	Revised Projection	MYT Projection	Revised Projection
Energy Sales	MU	17,932.30	15,057.02	26,394.41	22,348.86
Distribution losses	%	18.50%	21.50%	14.60%	16.75%
Energy Requirement at Discom Periphery	MU	22,002.82	19,180.92	30,906.80	26,845.47
Intra- State Transmission Loss	%	2.15%	2.15%	2.15%	2.15%
Energy Requirement at State Periphery (A)	MU	22,486.28	19,602.37	31,585.90	27,435.33
Energy Available (Ex Bus)	MU	26,327.81	25,473.40	36,982.00	35,652.40
Interstate Power Purchase	MU	11,381.67	10,862.68	15,987.54	15,203.33
Inter State transmission losses	%	3.82%	3.82%	3.82%	3.82%
Interstate Power at State Periphery	MU	10,946.89	10,447.73	15,376.82	14,622.57
Intra state Power at State Periphery	MU	14,946.14	14,610.72	20,994.46	20,449.06
Power Purchase at State Periphery (B)	MU	25,893.03	25,058.45	36,371.28	35,071.63
Surplus (B-A)	MU	3,406.75	5,456.08	4,785.38	7,636.29

### Summary of Power Purchase (Rs Crore)

Particulars	UHBVN		DHBVN	
	MYT Projection	Revised Projection	MYT Projection	Revised Projection
Power Purchase cost	10,605.27	9,981.04	14,896.95	13,969.40
Interstate transmission Charges	830.40	947.17	1,216.80	1,387.90
Intrastate transmission Charges	648.00	645.11	758.71	755.33
Total Power Purchase Cost	12,083.67	11,573.32	16,872.46	16,112.62

#### 1.24 Distribution Loss for 2020-21

The Discoms have submitted that the power sales to Industrial and Commercial consumers is likely to be affected severely due to the lock down and possible delay in the resumption of full-scale economic activity. These categories have a lower distribution loss as compared to the other categories. As a result of the alteration in the consumption mix, the Discoms are expected to incur a higher level of distribution loss as compared to the actual of the previous year instead of the loss reduction as proposed in the original filing. Further, due to COVID-19 lockdown, the vigilance activities and loss reduction activities like MGJG, LRP will also be affected.

The revised losses have been projected on the basis of estimated consumption of various major consumer categories.

#### Distribution and AT&C Loss for FY 2020-21

Particulars	UHBVN		DHBVN		HARYANA	
	MYT Projection	Revised Projection	MYT Projection	Revised Projection	MYT Projection	Revised Projection
Distribution Losses	18.50%	21.50%	14.60%	16.75%	16.22%	18.73%
Collection Efficiency	99.50%	99.00%	99.50%	99.00%	99.50%	99.00%
AT&C Losses	18.91%	22.29%	15.03%	17.58%	16.64%	19.54%

It has been submitted that the revision of distribution losses for the FY 2020-21 would also impact the loss trajectory during the entire control period for which the submissions will be made in the annual revenue requirement of the year concerned.

#### 1.25 Capital Expenditure

That as a consequence of the COVID-19 pandemic, the estimation of the CAPEX of Discoms has also undergone revision as per the details tabulated below: -

### Capital Expenditure of UHBVN for FY 2020-21

Sr. No.	Name of the Scheme	Qty.	Cost
1	Creation of new 33 kV sub-stations alongwith Spill Over and associated 33 kV & 11 kV lines including civil works / Normal development (33 kV & 11 kV)	40 Nos.	95.00
2	Augmentation of existing 33 kV sub-stations including civil works	44 Nos.	36.00
3	Augmentation of existing 33 kV lines	56 km	4.00
4	Bifurcation/Trifurcation of overloaded 11 kV feeders	150	25.00
5	Release of tube well connections on Turn Key Basis	15000 Nos.	187.50
6	Construction of UHBVN Head office Buildings		17.00
7	Civil Works other than substation buildings		3.00
8	Works to be carried out under IPDS scheme for system strengthening including 2 Nos. GIS substations	2 Nos.	20.00
9	LRP works (Urban sanitization) and works to be carried out under MGJG scheme		30.00
10	Shifting of 11 kV lines passing over residential areas under UHBVN	595.58 km	10.00
11	Shifting of HT line (33 kV), passing over authorized/un-authorized colonies under jurisdiction of UHBVN	84.38 km	10.00
12	AMC for 33 kV substations		1.00
13	Capacitor Bank		30.00
14	Strengthening of 11 kV lines, 11 kV Ringmain System, New DTs & normal development		20.00
15	Creation of double supply source for 33 kV substations, 33 kV Ringmain / Scada	50 km	10.00
	<b>Total A</b>		<b>498.50</b>
16	Smart City Karnal (HT & LT Lines, DTs, U/G Cables, RMU and FRTUs etc)		0.00
17	Smart City Panchkula (HT & LT Lines, DTs, U/G Cables, RMU and FRTUs etc)		22.00
18	Smart City Panipat (HT & LT Lines, DTs, U/G Cables, RMU and FRTUs etc)		22.00
19	SCADA Implementation Industrial Area Kundli (HT & LT lines, DTs, U/G Cables, RMUs and FRTUs etc.)		7.40
20	Scaling of IT project to Non-R-APDRP areas covering the following: -		1.80
	1. Establishment of IT infra in SDO & Other offices and its connectivity with Data Center.		
	2. Commercial Data Migration (IPDS & Balance Areas)		0.36
	3. GIS Indexing (IPDS & Balance areas)		3.37
21	RT-DAS SAIFI/SAIDI Measurement System in Non- SCADA, R-APDRP, Non- RAPDRP and IPDS Towns of UHBVN		9.30
22	ERP Implementation		20.00
23	Smart Metering		192.00
24	AMR of HT Industrial consumers		1.15
	<b>Total B</b>		<b>279.38</b>
25	Procurement of single-phase meters for replacement of defective meters & release of new connections.	60,000	4.50
26	Material required for release of Non-AP connections & replacement of old assets / system improvement & normal development		230.00
27	Procurement of Power Transformers -10 Nos. alongwith allied equipment such as 33 kV CTs - 30 Nos.	Power Transformer (12.5 MVA) = 10 Nos. 33 kV CTs= 30 Nos.	5.35
	<b>Total C</b>		<b>239.85</b>
	<b>Gross proposed Capex (A+B+C)</b>		<b>1,017.73</b>

### Capital Expenditure of DHBVN for FY 2020-21

S. No.	Category	Quantity (In Nos.)	Unit Rate (In Rs.)	Revised CAPEX
1	<b>Plan for maintaining AT&amp;C loss below 15%</b>			
a	Procurement of single-phase meters for replacement of defective meters & release of new connections and procurement of Smart Meters.	300000	684	32.00
B	Procurement of three phase meters for replacement of defective meters & release of new connections and procurement of Smart Meters.	50000	1688	10.00
C	Power Factor Improvement (Providing automatic power factor correctors)			10.00
D	Providing of LT Capacitors on 400 KVA and above Distribution Transformers			4.00

S. No.	Category	Quantity (In Nos.)	Unit Rate (In Rs.)	Revised CAPEX
	<b>Total</b>			<b>56.00</b>
<b>2</b>	<b>Load Growth schemes</b>			
a	Creation of new 33 kV sub-stations alongwith associated 33 kV & 11 kV lines	35	55000000	100.00
B	Augmentation of existing 33 kV sub-stations	30	6000000	18.00
C	Augmentation of existing 33 kV lines	50 KM	800000	4.00
D	Bifurcation of 11 kV feeders (Work of bifurcation of feeders, augmentation of ACSR).			40.00
E	Material required for release of Non-AP connections & replacement of old assets			180.00
F	Release of Tube well connection on turnkey basis and segregation of AP load from Rural Urban feeders.	10000	150000	100.00
G	Procurement of power transformers and allied equipment such as 33 kV CTs, 33 kV PTs, 33 kV and 11 kV VCBs, 33 kV Control and Relay Panels etc.	10 MVA-20 Nos 12.5 MVA- 8 Nos		28.00
H	11 KV Lines			138.18
I	Distribution Transformer (25, 63,100, 200 kVA)			
J	LT line with ABC/XLPE Armoured Cable			
K	Augmentation- DTR, Existing line on conductor to ABXLPE, Augmentation of 11kV lines			
L	Metering (3 phase) , Solar Energy Meter			
m	Solar Project			
	<b>Total</b>			<b>608.18</b>
<b>3</b>	<b>Other works</b>			
a	Maintenance free earthing using 'Ground Enhancing Material/ Conventional earthing for Distribution Transformers, Meter Pillar Boxes and H-pole etc.			0.00
B	Civil Works			14.85
C	Shifting of HT line (33 kv), passing over authorized/un-authorized colonies under jurisdiction of DHBVN. Note: -Hon'ble Chief Minister has made an announcement on the floor of Haryana Vidhan Sabha that all dangerous wires of 33 KV and above levels passing over the various colonies shall be removed. Accordingly, Worthy ACS/Power, Govt. of Haryana, Power Deptt. directed to prepare the detailed scheme in this regar. Also, Worthy ACS/Power, Govt. of Haryana, Power Deptt. has desired that it may be made part of the CAPEX Plan and approval of HERC be obtained.			10.00
D	Mahara Gaon Jagmag Gaon scheme for rural area and feeder sanitization for Urban area/LRP/Replacement of iron pole.			110.00
E	Other works for system improvement - Procurement of IT Equipment & Softwares			3.00
F	Smart City Gurgaon (HT & LT Lines, DTs, U/G Cables, RMUs and FRTUs Etc.) including SCADA Project, IMT, Manesar (Rs. 24 Crores)			310.00
G	Smart City (Hisar & Rewari (HT & LT Lines, DTs, U/G Cables, RMUs and FRTUs Etc.)			0.00
H	Shifting of 11 lines passing over residential areas under DHBVN.			15.79
I	Double Source of 33 KV Supply	50 KM	4000000	20.00
J	Muffing of existing poles of 11 KV Lines			5.71
	<b>Total</b>			<b>489.35</b>
<b>4</b>	<b>R-APDRP Part-A (IT) Project</b>			<b>24.97</b>
5	Scaling of IT project to Non R-APDRP areas covering the following: - 1. Establishment of IT infra in SDO & Other offices and its connectivity with Data Center. 2. AMR for HT consumer meters. 3. Engagement of an Agency for GPS based field survey activities & data digitization. 4. Engagement of SI for DM 5. Procurement of Computer Furniture (Computer chair & table) for office under IPDS town and in balance non-R-APDRP areas			19.53
6	Implementation of ERP application			16.88
7	RT-DAS (Real Time Data Acquisition System)			6.15

S. No.	Category	Quantity (In Nos.)	Unit Rate (In Rs.)	Revised CAPEX
8	Laying of Infrastructure in Gurgaon (Sector-58 to 115 and Faridabad (Sector-75 to 89))			25.00
9.a	SCADA for 33 KV Substations			3.00
9.b	SCADA for 11KV lines in Urban Areas comprising of 11 KV Urban, Urban Mix, Industrial Feeders, etc.			5.00
	<b>Total</b>			<b>100.53</b>
	<b>Grand Total</b>			<b>1254.06</b>

### Revised Interest and Finance Charges 2020-21

The interest and finance charges have been revised as a consequence of changes in the Capex and the Working Capital. The summary of interest and finance charges for FY 2020-21 is tabulated below: -

#### Net Interest & Finance Charges for FY 2020-21 (Rs. Crores)

Particulars	UHBVN		DHBVN	
	MYT Projection	Revised Projection	MYT Projection	Revised Projection
Gross Int. on Capex loans	244.91	240.61	305.89	297.34
Less: Interest Capitalized	108.20	103.97	119.86	117.47
Net Interest on Capex Loans	136.71	136.64	186.03	179.88
Interest on WC loans	262.14	297.76	163.32	254.01
Interest on Security Deposits	94.54	70.27	102.01	75.89
Guarantee Fees	10.00	24.74	26.08	40.08
Net Interest & finance charges	503.39	529.42	477.44	549.86

### 1.26 Revised Aggregate Revenue Requirement for FY 2020-21

The following table summarizes the estimated Aggregate Revenue Requirement (ARR) of UHBVN and DHBVN respectively for FY 2020-21.

#### ARR of UHBVN and DHBVN for FY 2020-21 (Rs. Crs)

Sr. No	Particulars	UHBVN		DHBVN	
		MYT Projection	Revised Projection	MYT Projection	Revised Projection
1	Power Purchase Expense	12,083.67	11,573.32	16,872.46	16,112.62
1.1	Power Purchase Expense	10,605.27	9,981.04	14,896.95	13,969.40
1.2	Interstate transmission Charge	830.40	947.17	1,216.80	1,387.90
1.3	Intrastate transmission charges and SLDC charges	648.00	645.11	758.71	755.33
2	Operations and Maintenance Expenses	1,308.81	1,308.35	1,597.59	1,597.06
2.1	Employee Expense	740.76	740.76	938.93	938.93
2.2	Administration & General Expense	115.60	115.60	121.22	121.22
2.3	Repair & Maintenance Expense	148.45	147.99	177.43	176.91
2.4	Terminal Liability	303.99	303.99	360.00	360.00
3	Depreciation	366.46	368.44	384.74	383.80
4	Interest & Finance Charges	503.39	529.42	477.44	549.86
4.1	Net Interest on Capex Loans	136.71	136.64	186.03	179.88
4.2	Interest on Working Capital	262.14	297.76	163.32	254.01
4.3	Interest on Consumer Security Deposits	94.54	70.27	102.01	75.89
4.4	Interest on UDAY bonds payable to the State Government	-	-	-	-
4.5	Other Interest and Finance charges	10.00	24.74	26.08	40.08



Sr. No	Particulars	UHBVN		DHBVN	
		MYT Projection	Revised Projection	MYT Projection	Revised Projection
5	Return on Equity Capital	286.28	285.52	272.32	272.35
6	Other Expenses	47.30	37.39	73.57	58.83
7	Total Expenditure	14,595.91	14,102.44	19,678.12	18,974.53
8	Less: Non-Tariff Income	221.56	221.56	307.66	307.66
9	Net Aggregate Revenue Requirement	14,374.35	13,880.89	19,370.46	18,666.86

### Revenue (Gap)/Surplus for FY 2020-21 (Rs Crores)

Sr. No.	Particulars	MYT Projections	Revised Projections
1	Aggregate Revenue Requirement	33,744.81	32,547.75
1.1	-UHBVN	14,374.35	13,880.89
1.2	-DHBVN	19,370.46	18,666.86
2	Total Revenue	26,569.71	22,968.08
2.1	-Revenue from Interstate sale	2,396.07	3,723.27
2.2	-Revenue from Intrastate sale	24,173.64	19,244.81
3	Revenue (Gap)/Surplus	(7,175.10)	(9,579.68)
4	AP Subsidy	6,856.04	6,856.00
5	Revenue Gap after AP Subsidy	(319.06)	(2,723.68)
6	Add: Revenue gap of FY 2018-19 carried forward -true up	(3,711.33)	(3,711.33)
7	Net Regulatory Revenue (Gap)/Surplus	(4,030.39)	(6435.01)

The Discoms have submitted that the above calculations of the ARR and the gap are provisional and likely to undergo change as the impact of COVID-19 is ongoing and cannot be assessed with accuracy. Further the RE subsidy has now been taken as per the original filing and the gap may change after determination of subsidy by the HERC. **The Discoms propose to continue with the present level of tariff.**

#### 1.27 Relief proposed to be granted to various consumer categories

The Discoms, in the revised ARR filing have informed the Commission that certain relaxations w.r.t fixed Charges, extension of bill payment dates etc., have been given to the consumers due to the lockdown and their tentative financial impact on Haryana DISCOMs is detailed as below: -

1. The consumers will be given an incentive of 2% of the bill paid subject to a maximum of Rs. 100/- if the payment is made through any of the online modes, namely, Net Banking, Debit Card, Credit Card, Paytm, Billdesk, BBPS, NEFT or RTGS. The incentive will be adjusted in the next bill. This offer will remain in force during the period of lockdown due to corona virus.
2. **Extension of bill payment dates:-**
  - a) Bill due dates for all category of consumers falling from 22.03.2020 to 14.04.2020 has been extended to 15.05.2020.

- b) The bills which were generated from 15.04.2020 to 03.05.2020 shall have bill payment date one month from the bill generation date.
- c) Monthly billed consumers for the month of May, 2020 shall be billed in such a way that their bill payment dates fall between 20.05.2020 to 28.05.2020.
3. HT & LT Non Domestic consumers and Industrial consumers (having load more than 20 KW), who fulfils the criteria that their consumption in the month of March and April is less than or equal to 50% of the average consumption of January and February, shall be eligible to avail the financial benefits as per the following criteria:-
- a) If the fixed charges are up to Rs. 40,000/- per month, the consumer shall be given benefit by waiving off his/her actual fixed charges or Rs. 10,000/- per month whichever is lower in the bills of March and April 2020.
- b) 25% of the fixed charges in the bills of March and April 2020 shall be waived off in case the monthly fixed charges are more than Rs. 40,000/-.
- c) In addition to Sr. No. (a) & (b) above, the remaining fixed charges for the consumers categories mentioned above will be recovered in six equal monthly interest free instalments in the billing from July 2020 to December 2020.

**Impact: The tentative financial implications on account of the above relaxations on Haryana Discoms will be around Rs. 110 Crore.**

### 1.28 Representation regarding RPO targets and waiver of RPO backlog

The Discoms have made the following submissions on RPO targets and waiver of RPO backlog:

That the Commission vide HERC RE Regulations, 2017 has notified revised RPO targets on 24.07.2018. As per the revised RPO trajectory, Discoms have to achieve 11% (3% non-solar and 8% solar) by FY 2021-22 against the pre-revised target of 5.5% as shown below: -

Year	RPO (%) as per RE Regulations, 2010		RPO (%) as per HERC Regulations, 2017	
	Non Solar	Solar	Non Solar	Solar
2016-17	2.75	1.00	2.75	1.00
2017-18	2.75	1.25	2.75	2.50
2018-19	3.00	1.50	3.00	4.00
2019-20	2.75	2.00	3.00	5.50
2020-21	2.50	2.50	3.00	7.00
2021-22	2.50	3.00	3.00	8.00

That the trajectory of solar RPO targets was increased very sharply to nearly three folds, even though there is stark mismatch between the demand curve of the state and the solar generation curve in as much as the peak demand in the state comes during morning and evening hours whereas the solar power generation peaks around noon. Because of the higher solar RPOs, Discoms are obligated to add more solar power against the very nature of its demand curve. As a result, in addition to the 125.8 MW and 230 MW of solar power capacity added from ground mounted and rooftop solar projects respectively, PSAs to the tune of 1080 MW solar power have already been executed with SECI, and proposals for another 460 MW are under consideration. Besides, solar projects of cumulative capacity of 25 MW under PM KUSUM scheme and 93 MW through HPGCL are also expected. In addition to the above, 100 to 150 MW are envisaged every year from rooftop solar. RPO compliance is also expected from the projects having cumulative capacity of 38.1 MW solar projects covered under waivers of wheeling and transmission charges.

That, considering the fact that the wind power suits the State demand curve better, the Discoms have executed PSAs of wind power to the tune of 1300 MW.

Details of upcoming solar and non-solar projects are as under:

#### **SOLAR**

Sr. No.	Name of the firm	Contracted Capacity (MW)	Date of Signing of PPA	Scheduled Commissioning of Project
1.	SECI	100	27.11.2018	Oct., 2020
2.	SECI	400	28.05.2019	Nov., 2020
3.	SECI (part of Hybrid power)	330	11.07.2019	Dec., 2020
4.	SECI	250	19.03.2020	April, 2021
5.	NIT-77 (300 MW on long term basis)	241	Under Process	2021-22
6.	HPGCL (Solar)	93	Under process	2021-22
7.	PM KUSUM	25	Under process	2021-22
8.	Rooftop	100-150	Expected increase	Every year

#### **NON – SOLAR**

Sr. No.	Name of the firm and/or Scheme	Contracted Capacity (MW)	Date of Signing of PPA	Scheduled Commissioning of Project
<b>Wind Power Projects</b>				
1.	SECI	150	13.12.2017	May, 2019
2.	SECI	350	17.05.2018	Dec., 2019
3.	SECI	590	21.01.2019	July, 2020
4.	SECI (part of Hybrid power)	110	11.07.2019	Dec., 2020
<b>Waste to energy Projects</b>				
5.	JBM Environment Management Pvt. Ltd	6.77	21.09.2018	20.09.2020
6.	Ecogreen Energy Gurgaon Faridabad Pvt. Ltd	25	Yet to be signed.	2021-22
<b>Biomass Based Projects</b>				
7.	Small Biomass projects (10 Nos)	66.2	2018 & 2019	2020-21 & 2021-22

It has been submitted that the Commission may kindly note that the RPO compliance by the Discoms has been impacted during FY 2019-20 and FY 2020-21 on account of unprecedented delays in Commissioning of Renewable Energy Projects attributed to force majeure issues or procedural delays. The long gestation period of Renewable Energy projects leads to accumulation of solar and non-solar RPO backlog. The solar and non-solar backlog of RPOs at the end of FY 2018-19 has been worked out as 910 MUs and 1850 MUs respectively. Discoms have continuously strived to meet the backlog with purchase for short term power, however, purchases could not mature due to high cost of power, non-availability, low participation in tenders and procedural delays.

That the Outbreak of corona pandemic has further added to the delays resulting in shortfall in the yearly RPOs of about 250 MUs and 1700 MUs of non-solar and solar power respectively during FY 2019-20. Accordingly, the non-solar and solar RPO backlog by the end of FY 2019-20 is expected to increase to 1160 MUs and 3550 MUs respectively (figures may change subject to reconciliation of data). Had the projects not got delayed, the non-solar yearly targets would have been met comfortably besides clearance of backlog. In this regard, the Commission may consider that:

That the Delay in Commissioning of projects under PSAs executed with SECI for supply of 150 MW, 350 MW and 590 MW wind power has led to shortfall of about 750 MUs during FY 2019-20. Similarly, shortfall of about 2500 MUs is expected during FY 2020-21 for delay in commissioning of projects.

That Delay in Commissioning of solar projects under PSAs, executed with SECI for supply of 100 MW, 400 MW and 330 MW solar power, is expected to result into a shortfall of about 525 MUs during FY 2020-21.

That the current situation will hamper the growth of Solar Rooftop in the state and anticipated capacity addition of 100 MW to 150 MW will suffer.

Delay in processing of power purchase cases/approvals of power purchase due to current situation arising on account of Pandemic Covid-19 may further lead to delay in Renewable Energy Projects for fulfilment of RPOs.

That the Solar project of 93 MW envisaged by HPGCL and 25 MW under PM KUSUM will also face delays due of current situation.

That the Solar Project of 240 MW (M/s Avaada shortlisted under NIT-77 finalized by HPPC) may also suffer delays due to current situation.

That it may be appreciated that prior to corona virus outbreak, SCPP in its 55th meeting held on 25.11.2019 & 13.02.2019 had approved purchase of solar power on short term power to the tune of 1320 MUs through PTC @ Rs. 5.10/- discovered the competitive bidding, floating of another tender for purchase of 400 MW solar power equivalent to the tune of 1800 MUs on short term basis along with purchase of REC equivalent to 100 MUs in order to meet the solar RPO backlog. These measures would have been sufficient to meet the backlog of solar RPOs considerably. However, in the present situation these purchases would impact the Discoms adversely.

The Discoms have submitted that the Commission may take notice that the outbreak of Corona Virus has resulted into unprecedented conditions across the world which inter alia have resulted in imposition of various restrictions across all sectors. The supplies from china have been disrupted besides local constraint affecting the commissioning of Renewable Power Projects adversely. Despite the fact that the Discoms have tied up for Renewable energy Power, the availability of RE power from various PPAs/PSAs signed by Discoms/HPPC and Solar Rooftop scheme has already been delayed and shall get further delayed due to COVID-19 pandemic effect. The outbreak of corona virus pandemic has put the Discoms as well as State into financial crises and purchase of RECs or costly short-term renewable power would not only deteriorate it further but also increase the revenue gap and hence tariff.

That the non-solar and solar RPO backlog by the end of FY 2019-20 is expected to increase to 1160 MUs and 3550 MUs respectively. Amount to the tune of Rs. 1100 Crores shall be required to meet the RPO backlog of solar and non-solar, by purchase of RECs. Further as per approved RPO targets for FY 2020-21, there shall be tentative shortfall of about 2400 MUs of solar power and an amount to the tune of Rs. 570 Crores shall be required for the purchase of RECs corresponding to this shortfall only.

That the current unprecedented situation warrants taking all possible measures required for financial viability of Discoms and insulating consumers of Haryana from tariff shock. In view of the situation explained above, the Commission is requested to consider waiving off solar and non-solar RPO backlog as on 31.03.2020 and also revise the RPO trajectory for 2020-21 and FY 2021-22. The RPO targets for FY 2020-21 and FY 2021-22 may please be revised to 3.0% for non-solar & 2.0% for solar power and 3.0% for non-solar & 3.0% for solar power respectively.

## 1.29 Restrictions/constraints on Open Access facility

The Discoms have submitted that the outbreak of Corona Virus has resulted into unprecedented conditions across the world which inter alia has resulted in imposition of various restrictions across all sectors. Industrial as well as commercial activities have suffered enormously. As a result, the Discoms have witnessed steep reduction in energy demand (specifically industrial and non-domestic sectors) since 22nd March, 2020. The current pandemic outbreak has severely affected the cash flow of Discoms besides operational challenges. The impact on demand is expected to continue till the pandemic lasts/controlled.

That the electricity demand during the day time is generally low even in the normal times. It may be noted that in normal operations industrial and commercial load contributes significantly to the electricity demand during the hours of the day. However, as a consequence of current pandemic, the industrial and commercial demand is expected to remain low during the currency of FY 2020-21. In the predicted low demand scenario during the off-peak hours, compounded with limited flexibility in operations of the existing thermal plants, it would be a challenging task to maintain grid stability without imposing power cuts during the peak hours besides under drawl during off-peak hours and DSM penalties.

That, from the electricity demand of Haryana as witnessed on 02.05.2020, the peak load and the off-peak load during the day is 6772 MW and 2924 MW respectively. The difference in peak and off-peak load is extremely high to the tune of 3848 MW whereas the capability of flexible operation of thermal generation scheduled on the day is limited to 2000 MW only. Even after optimization of all resources, surplus generation during the day time was as high as 2200 MW. The difference will grow further in case Open Access consumers migrate from Discoms during off-peak period owing to availability of cheap power in Power Exchanges.

That the price of power in the Power Exchanges is expected to remain low during the off-peak hours of FY 2020-21 which shall attract industrial consumers to secure power from Energy Exchanges under Open Access, especially during these off-peak hours. In this scenario it would be very difficult for the Discom to manage its demand-supply scenario and may result in heavy under drawl of power resulting in heavy DSM penalties owing to limited flexibility of thermal generation. **Grid stability requirements calls for restriction or even suspension of Open Access facility till the currency of this pandemic and restoration of normal course.**

That sub section 2 of section 42 of Electricity Act, 2003 ("EA") inter alia stipulates that Open Access is subject to operational constraints. The term operational constraints have not been

defined either in the Electricity Act, 2003 or HERC (Terms and conditions for grant of connectivity and open access for intra-State transmission and distribution system) Regulations, 2012 (“OA Regulations”). The term operational as defined in the Black’s Dictionary, Seventh Edition means ‘adj. 1. Engaged in the operation; able to function.’ The term constraint is defined by Collins Dictionary (Source: <https://www.collinsdictionary.com/dictionary/english/constraint>) to mean ‘something that limits or controls what you can do. Thus, etymologically operational constraints would include all technical as well as financial constraints which severely prejudice the operations of the Discoms. Thus, under the legal framework, restrictions can be imposed on Open Access considering the operational constraints as deemed appropriate.

**In view of above, the Discoms have requested to consider suspension of Open Access facility or put restrictions on Open Access during the off-peak hours of the day as notified by the Discoms considering the Demand scenario.**

### **1.30 Prayer as per Revised ARR Petition**

The Discoms have prayed as under:

- To accept the supplementary ARR filing of UHBVN& DHBVN including request for approve the current level of Tariff.
- To allow the Haryana Discoms to submit the trajectory of performance parameters for remaining years of MYT Control Period in the subsequent ARR filing.
- To approve prepaid-metering scheme already submitted vide Memo No. Spl-1/RA/F-25/Vol-76 Dated 24.03.2020 emailed to Secretary, HERC dated 26.03.2020 (copy enclosed).
- To approve Night time concessional tariff, as already requested, from November to March every year for next three years.
- To consider and approve the waiving off of solar and non-solar RPO backlog and to revise the RPO target for FY 2020-21 to 3.0% for non-solar & 2.0% for solar power and for FY 2021-22 to 3.0% for non-solar & 3.0% for solar power.
- To consider and approve suspension of Open Access facility or put restrictions on Open Access during the off-peak hours of the day.

- To condone any inadvertent omissions/errors/shortcomings and permit UHBVN to add/change/modify/alter this filing and make further submissions as may be required at a future date.
- To Pass such Order, as the Hon'ble Commission may deem fit and appropriate keeping in view the facts and circumstances of the case submitted by the Petitioner.

HERC