

# **COMMISSION'S ORDER IN**

Case No. HERC/PRO - 59 of 2019 & HERC/PRO - 60 of 2019

ON

TRUE- UP FOR THE FY 2018-19, ANNUAL (MID-YEAR) PERFORMANCE REVIEW FOR THE FY 2019-20, AGGREGATE REVENUE REQUIREMENT OF UHBVNL AND DHBVNL FOR THE MYT CONTROL PERIOD 2020-21 TO FY 2024-2025 AND DISTRIBUTION & RETAIL SUPPLY TARIFF FOR THE FY 2020-21

1<sup>st</sup> June, 2020

HARYANA ELECTRICITY REGULATORY COMMISSION BAYS 33-36, SECTOR-4, PANCHKULA-134112, HARYANA

https://herc.gov.in

#### IN THE MATTER OF

Petition for True-up of the ARR for the FY 2018-19, Annual (Mid-Year) Performance Review for the FY 2019-20, determination of ARR for the MYT period from the FY 2020-21 to FY 2024-25 and Distribution and Retail supply tariff for the FY 2020-21 for Uttar Haryana Bijli Vitaran Nigam Limited (UHBVNL) and Dakshin Haryana Bijli Vitaran Nigam Limited (DHBVNL), as per the provisions of the Haryana Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2019 and Section 45, 46, 47, 61, 62, 64 & 86 of the Electricity Act, 2003.

#### QUORUM

Shri D.S. Dhesi Chairman
Shri Pravindra Singh Chauhan Member
Shri Naresh Sardana Member

#### ORDER

The Haryana Electricity Regulatory Commission (hereinafter referred to as 'the Commission' or HERC), in exercise of the powers vested in it under section 62 of the Electricity Act, 2003 read with section 11 of the Haryana Electricity Reforms Act, 1997 and all other enabling provisions in this behalf, passes this Order determining the True-up of the ARR for the FY 2018-19, Annual (mid-year) Performance Review for the FY 2019-20, determination of ARR for the MYT period from the FY 2020-21 to FY 2024-25 and Distribution and Retail supply tariff for the FY 2020-21 for Uttar Haryana Bijli Vitaran Nigam Limited (UHBVNL) and Dakshin Haryana Bijli Vitaran Nigam Limited (DHBVNL) in accordance with the provisions of Haryana Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Generation Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2019 (hereinafter referred to as MYT Regulations, 2019).

The Commission, while passing Order in the present case(s), has considered the Petition(s) filed by UHBVNL and DHBVNL along with subsequent filings including supplementary filing dated 5.05.2020 (Memo No. Ch-36/RA/F-25/Vol-76 after taking into consideration the impact of lockdown due to COVID – 19 pandemic/additional data provided by them including filings made by the two distribution licensees in response to the various queries of the Commission, objections received from various organisations and individuals and the reply / comments furnished by UHBVNL/DHBVNL thereto to as well as the suggestions of the SAC

Members in the meeting held on 24.02.2020. All other relevant facts, data and information available in the Commission as well as in the public domain have been considered while taking a reasoned view germane to the present petitions.



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# **Chapter 1**

#### INTRODUCTION

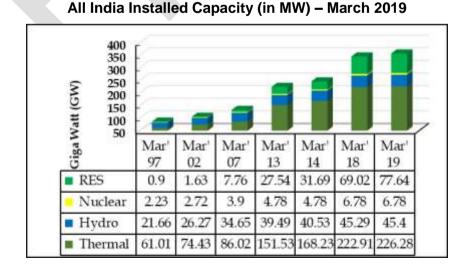
### 1.1 Petition filed by UHBVNL and DHBVNL

The two distribution licensees (Discoms) in Haryana i.e. Uttar Haryana Bijli Vitran Nigam (UHBVNL) and Dakshin Haryana Bijli Vitran Nigam (DHBVNL) have filed their respective petition(s) under the provisions of the Electricity Act, 2003 and the MYT Regulations, 2012 (for the true-up of FY 2018-19) and the MYT Regulations, 2019 for determination of ARR for the Control Period FY 2020-21 to FY 2024-25 & determination of distribution and retail supply tariff for the FY 2020-21. The petition(s) filed by the Discoms is briefly set out below.

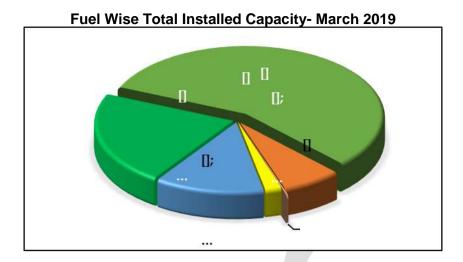
### 1.2 Background - Indian Power Sector

That the Indian power sector has changed significantly after the enactment of Electricity Act, 2003. Various reforms have been introduced to promote competition in power sector, efficiency in service dispatch, strengthening of regulatory framework, private participation, integration of regional grids, protection of consumer interest, renewable generation, legal framework for curbing commercial losses etc. to ensure transparency in the power sector.

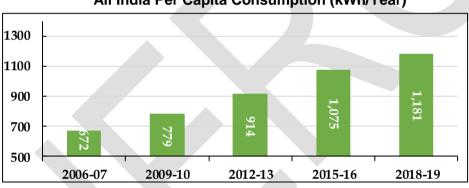
That electricity plays a vital role in social and economic development. Agriculture, industrial and service sector, along with day to day living of the mankind is 'directly' dependent on the quality of power supply. Therefore, electricity has become an essential input across all the sectors. Over the last 10 years, the installed capacity of the country has grown at a compounded annual growth rate of 10.14%, resulting total installed capacity of 3,56,100 MW by the end March 2019 as under: -



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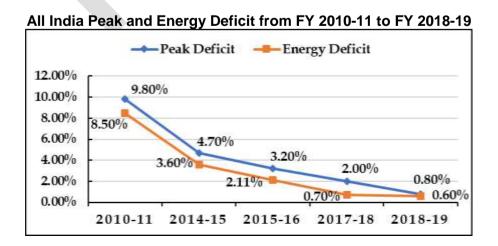


That all villages of India as per the Census - 2011 (i.e. 5,97,464) have been electrified as on 28.04.2018. Also, the per capita consumption of electricity in the country increased from 15 kWh in 1950 to about 1,181 kWh in the year 2018-19.



All India Per Capita Consumption (kWh/Year)

That regional grids are integrated into a single national grid with effect from 31.12.2012, allowing evacuation of power from one corner of the country to another through strong inter regional AC and HVDC links. Steep decline has been registered in Peak Demand (MW) and Energy (MU) in India. Currently, the shortage of Peak Demand and Energy in India is 0.80% and 0.6% respectively as may be seen from the graph presented below:



Chapter 1 Page 9 of 290 That with growing demand for electricity, per capita consumption of India has also grown, however the same is still lower than the average per capita consumption of the world. This implies that demand of electricity will increase substantially in coming years.

That integration of generation and transmission capacity is currently being made to meet the growing demand of country in most cost-effective manner. Under such scenario the role of Distribution and Retail Supply Business becomes critical in the value chain. Therefore, financial viability of the Discoms needs to be ensured for sustainable growth of the power sector.

#### 1.3 Profile of UHBVNL and DHBVNL

That the Companies are Distribution Licensees within the meaning of Section 2 (17) of Electricity Act 2003 and pursuant to the Section 14 of the Electricity Act. Further, Section 42 and 43 of the Electricity Act 2003 prescribes following duties of the Distribution Licensee:

- To develop and maintain an efficient, co-ordinated and economical distribution system;
- To supply electricity on an application of the consumer in accordance with the provisions specified in the Electricity Act 2003;
- To provide non-discriminatory open access to the consumers;
- To establish a forum for redressal of grievances of the consumers;

That since UHBVNL and DHBVNL have been vested with the function of distributing electricity by the State Government of Haryana, the Business Scope of the Company falls within the legal framework as specified in the Act and includes:

- To develop and maintain an efficient, co-ordinated and economical distribution system;
- To Operate the existing distribution infrastructure efficiently & effectively;
- Merchant Sale of Power in the event of availability of surplus power after meeting the requirement of own consumers with whom the capacity is contracted presently;
- Other associated businesses like providing Training, Research and Development activities, Technical consultancy services and O&M related services;
- Contracts for outsourcing of distribution related activities, joint venture participation;

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#### **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
DHBVN	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 wise sales of or by it (iii wo)									
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

		J - ,		· /		
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

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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.

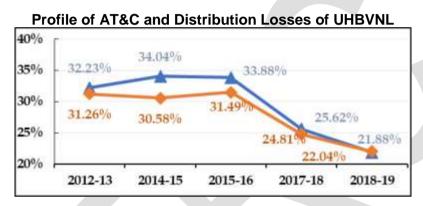
Category-Wise Sales Mix – Year-Wise of DHBVNL



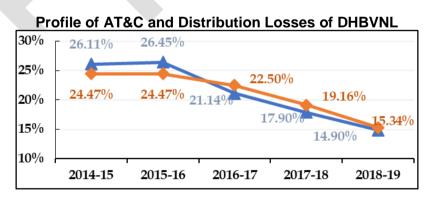
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That it is evident from the above figures, Domestic category and Agricultural consumption although varying but remains the highest (47.30% in FY2018-19) consuming category followed by HT Industrial at 28.23% for DHBVNL. The HT Industrial and LT Industrial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

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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**

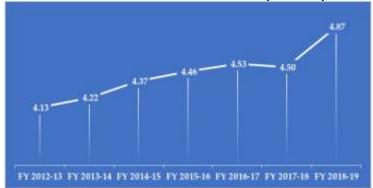
Category	Mar-14	Mar-15	Mar-16	Mar-17	Mar-18	Mar-19
Domestic	19,38,582	20,00,980	20,74,979	21,42,964	22,46,782	23,51,324
Non-Domestic	2,65,494	2,78,654	2,91,194	3,01,619	3,13,844	3,26,069
LT Industrial	35,720	36,626	37,585	38,467	39,467	41,124
HT Industrial	4,769	5,134	5,499	6,010	6,650	7,395
Agriculture 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:



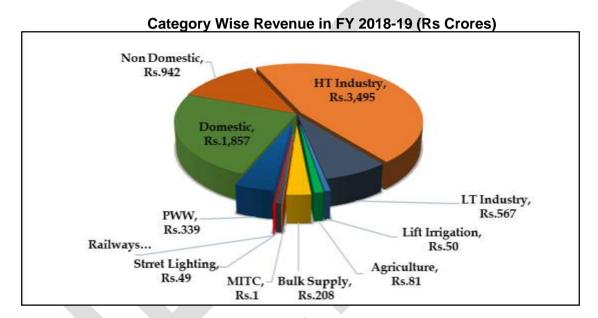


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That increase in power purchase cost is primarily due to increase in fuel cost of power generating stations. In the FY 2018-19, power purchase cost has increased primarily due to prior period expenses.

#### 1.4 Revenue

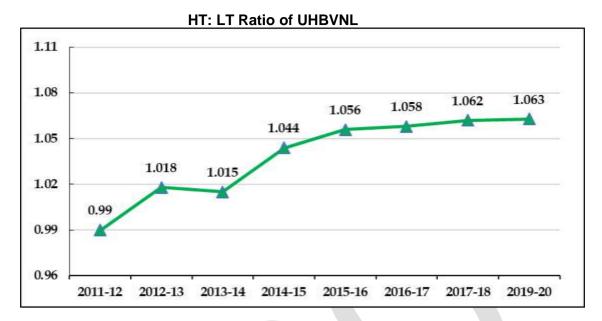
That the revenue generated from the consumption of electricity to various categories is shown in the chart below. HT consumers contribute a portion almost 48% in overall revenue, whereas Domestic category contributes 22% in total revenue.

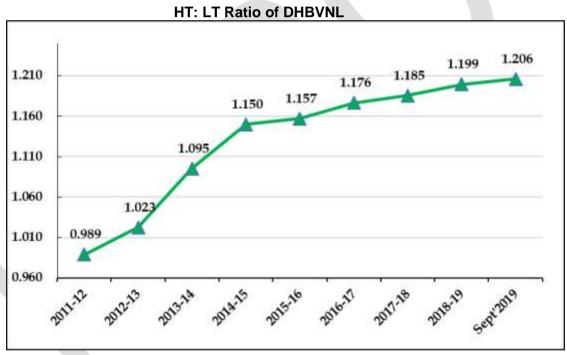


## 1.5 HT-LT Ratio

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:

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#### 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

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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 filling 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;

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- 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;

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- 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

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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 wavier 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. In 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

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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 24.81% achieved in FY 2017-18. Distribution 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.

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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)

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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)

ORBVILL True Op of Expenses for F1 2010-19 (NS. 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	Actual	Difference	
31.	Falticulars	(A)	(B)	(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)	

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Summ	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	ı	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		
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		
5	Revision in Subsidy due to actual AP Sales		
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)	

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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:

# 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

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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

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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:

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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;

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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)

	Aggregate Revenue Requirement for with Control Feriod OribVNL (NS 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

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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	1	-	-	ı	ı
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)

revenue (eappear place)							
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)	-	-	1	-		
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

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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)		689.09
Additional Surcharge to be applicable on OA Consumers in H1 of FY 2019-20	Rs /kWh	1.15

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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

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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

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

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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;

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- 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.

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#### 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:

Catego	orv wise	Revised	Fnera	, sales	for F	Y 2020-21	(MU)
Calego	JI y WISC	ILEVISEU I	Litery	Jaics	101 1	1 2020-21	(1810)

Sr.	Category	Ul	HBVN	DHBVN		
No.		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:

:

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# 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	U L	IHBVN	DHB	VN
		MYT Projection	Revised Projection	MYT	Revised
				Projection	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)	MÜ	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

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**Summary of Power Purchase (Rs Crore)** 

Darticulars		U	HBVN	DHBVN		
Particulars	Particulars		Revised Projection	MYT Projection	Revised Projection	
Power Purchase cost		10,605.27	9,981.04	14,896.95	13,969.40	
Interstate	transmission	830.40	947.17	1,216.80	1,387.90	
Charges		650.40	947.17	1,210.80	1,367.90	
Intrastate	transmission	648.00	645.11	758.71	755.33	
Charges		048.00	045.11	736.71	755.55	
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

Distribution and ATGO 2000 for TT 2020 21								
Particulars	UHBVN		DHE	BVN	HARYANA			
	MYT	Revised	MYT	Revised	MYT	Revised		
	Projection	Projection	Projection	Projection	Projection	Projection		
Distribution	18.50%	21.50%	14.60%	16.75%	16.22%	18.73%		
Losses								
Collection	99.50%	99.00%	99.50%	99.00%	99.50%	99.00%		
Efficiency								
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: -

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

	Capital Expenditure of UHBVN for F		1 -
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	15000 1105.	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	Strengthing 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
	Total A		498.50
16	Smart City Karnal (HT < Lines, DTs, U/G Cables, RMU and FRTUs etc)		0.00
17	Smart City Panchkula (HT < Lines, DTs, U/G Cables, RMU and FRTUs etc)		22.00
18	Smart City Panipat (HT < Lines, DTs, U/G Cables, RMU and FRTUs etc)		22.00
19	SCADA ImplementationIndustrial 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. Establishment of IT infra in SDO & Other offices and its connectivity with Data Center.		1.80
	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
	Total B		279.38
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	Power Transformer (12.5	5.35
	such as 33 kV CTs - 30 Nos.	MVA) = 10 Nos. 33 kV CTs= 30 Nos.	
	Total C		239.85
	Gross proposed Capex (A+B+C)		1,017.73

Capital Expenditure of DHBVN for FY 2020-21

	Oapital Expellatture of Diribate in	11 1 2020 21		
S.	Category	Quantity (In Nos.)	Unit Rate	Revised
No.			(In Rs.)	CAPEX
1	Plan for maintaining AT&C loss below 15%			
а	Procurement of single-phase meters for replacement of defective meters &	300000	684	32.00
	release of new connections and procurement of Smart Meters.			
В	Procurement of three phase meters for replacement of defective meters &	50000	1688	10.00
	release of new connections and procurement of Smart Meters.			
С	Power Factor Improvement (Providing automatic power factor correctors)			10.00
D	Providing of LT Capacitors on 400 KVA and above Distribution			4.00
	Transformers			

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S. No.	Category	Quantity (In Nos.)	Unit Rate (In Rs.)	Revised CAPEX
	Total			56.00
2	Load Growth schemes			
а	Creation of new 33 kV sub-stations alongwith associated 33 kV & 11 kV lines	35	55000000	100.00
В	Augmentation of existing 33 kV sub-stations	30	6000000	18.00
С	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
Е	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
Н	11 KV Lines			138.18
1	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			
111	Total			608.18
2	Other works			000.10
3				0.00
а	Maintenance free earthling using 'Ground Enhancing Material/ Conventional earthling for Distribution Transformers, Meter Pillar Boxes and H-pole etc.			0.00
В	Civil Works			14.85
С	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
Н	Shifting of 11 lines passing over residential areas under DHBVN.			15.79
	Double Source of 33 KV Supply	50 KM	4000000	20.00
J	Muffing of existing poles of 11 KV Lines			5.71
	Total			489.35
4	R-APDRP Part-A (IT) Project			24.97
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
			1	40.00
6	Implementation of ERP application			16.88

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

# **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)

Net interest a finance onarges for it is 2020 Et (NS. Ofores)							
Particulars	UHBVN		DHBVN				
	MYT Projection	Revised	MYT Projection	Revised			
		Projection		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.	Particulars	UHE	BVN	•	DHBVN
No		MYT Projection	Revised	MYT Projection	Revised
			Projection	-	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	648.00	645.11	758.71	755.33
	charges				
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

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Sr.	Particulars	UHBVN			DHBVN
No		MYT Projection	Revised	MYT Projection	Revised
			Projection		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.

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- 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	ar 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

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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 additional 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.	Name of the firm	Contracted	Date of Signing of	Scheduled
No.		Capacity	PPA	Commissioning of
		(MW)		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

	HOH OULAN				
Sr.	Name of the firm and/or	Contracted	Date of Signing of	Scheduled Commissioning of	
No.	Scheme	Capacity (MW)	PPA	Project	
Wind P	ower Projects				
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	
Waste	Waste to energy Projects				
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	
Biomas	Biomass Based Projects				
7.	Small Biomass projects (10 Nos)	66.2	2018 & 2019	2020-21& 2021-22	

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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.

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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 ofcorona 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.

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#### 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

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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 constraint is defined by Collins Dictionary term (Source: https://www.collinsdictionary.com/dictionary/english/constraint) 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.

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- 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.



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# Chapter 2

# PROCEDURAL ASPECTS OF THE ARR PETITION (S)

## 2.1 ARR Petitions filed by UHBVNL & DHBVNL

The Petition(s) filed by UHBVNL and DHBVNL as reproduced in the preceding chapter were examined at length. The Commission, vide memo no. 4632-33/HERC/Tariff dated 9.01.2019 sought a few clarification / additional information from the petitioners.

# 2.2 Objections filed by the Interveners

The Discom (UHBVN & DHBVN), as required, issued a Public Notice in two Newspaper i.e. The Tribune (English) and Dainik Bhaskar (Hindi) dated 03.12.2019 informing the stakeholders / General Public regarding their petition / availability of documents and inviting objections on the same. Additionally, the Commission also issued public notice dated 10.01.2020 in Dainik Bhaskar (Hindi) and Tribune (English) inviting objections / suggestions / comments from the stakeholders / general public.

# 2.3 Objections & Discoms reply thereto

In response to the public notice issued by the Discoms and the Commission, the following objections were received in the Commission: -

# 2.3.1 Objection filed by Jindal Stainless, Hisar

#### I. TRUE-UP OF EXPENSES FOR FY 2018-19:

The intervener has submitted that DHBVN has filed its application for True-up of expenses for FY 2018-19. The application shows a large variation in some of the important performance parameters compared to the figures approved by the Commission. For ready reference some of the important parameters are given hereunder,

(All figures in Rs. Crore)

		,	
Parameter	HERC ARR order	Actual by DHBVN	Variation with revised
Cost of power purchase	13,420.50	*16,029.65	2,309.15
O&M Expenses	1397.45	*1,409.51	12.06
R & M Cost	148.99	106.88	(-) 42.11
Interest & Financing cost	437.39	*541.74	104.35
ROE	198.23	209.19	10.96
Net Annual Expenses	16,041.69	18,452.41	2,410.74
Revenue Gap/(Surplus)		220.97	
CAPEX	1170.00		

<sup>\*</sup>Parameters which are controllable as per MYT Regulations.

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#### Commission's View:

The Commission's has noted the aberrations pointed out by the Intervener and observes that true-up is carried out as per the provisions of the MYT Regulations, 2012 under which the Order for the FY 2018-19 was passed.

It has been submitted by the Intervener that while reviewing the CAPEX Plan for the year 2018-19, the Commission had observed as under:

Further, in case of DHBVNL the actual capital expenditure for FY 2016-17 and FY 2017-18 has been Rs. 640.93 Cr. and Rs. 808.63 Cr. respectively. For the FY 2019-20, DHBVNL had proposed a capital expenditure of Rs. 1355.89 Cr. which included Rs. 300 Cr. towards the Smart Grid project of Gurgaon and Rs. 50 Cr. towards smart city project of Faridabad, Bhadurgarh, Hisar and Rewari. The expenditure of Rs. 125 Cr. for MGJG scheme and sanitization of urban feeders.

The Commission approved the overall capital expenditure plan for Rs. 1170 Cr. only for FY 2018-19. However as per the ARR Petition for true up of FY 2017-18, annual performance review for FY 2018-19 and ARR for FY 2019-20 filed by the petitioner the licensee has submitted the actual Capital Expenditure for 2017-18 to be Rs. 808.36 Cr.

In view of the licensee past performance on Capital expenditure, Commission approves the Capital expenditure of Rs. 1220 Cr. for FY 2019-20 for DHBVNL and further direct the licensee to revise their capital expenditure plan accordingly and submit the scheme wise details of proposed expenditure to the Commission within one month from the data of issue of this Order.

The Commission directs the DISCOMs to utilise the CAPEX approved for Smart Grid HERC Order on Application for True Up for the FY 2017-18, APR for the FY 2018-19 and ARR and Tariff Determination for the FY 2019-20 & Smart meters in these projects itself and not to divert the funds in other schemes. Further, the Commission decides that DISCOMs should encourage GHS, HT/LT Industrial, B&R, Tourism, Roadways to install their own Smart Meters.

Both the licensees are further directed that they shall regulate their capital expenditure plans for FY 2019-20 as per Regulations 9.7 to 9.12 of the Haryana Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2012.

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Another important observation made by the Commission was on the submission of Cost of Service by the Licensee, which was under examination by the Commission.

Our main observations on this part of the True-up Application of the licensee are as under,

- a) There are large variations even on the controllable parameters i.e. Cost of Power Purchase and Interest & Financing Cost, which need to be disallowed. Reg. 13.2 of MYT Regulations, 2012 reads as under,
  - 13.2 Truing-up of uncontrollable items shall be carried out at the end of each year of the control period through tariff resetting for the ensuing year and for controllable items shall be done only on account of force majeure conditions and variations attributable to uncontrollable factors.
- b) It would kindly be appreciated that every year such non-compliance of performance targets fixed by the Hon'ble Commission result in accumulation of losses of the Utilities which ultimately are carried over to the next ARR and are to be made good from the corresponding tariff increase and ultimate financial burden to the electricity consumers.
- c) Reduced expenditure on Repair & Maintenance should be taken seriously as this reflects directly on the lack of proper maintenance of the distribution system which ultimately impacts the quality of power supply to the consumers;
- d) The capital expenditure allowed to the Licensee should be linked with corresponding increase in revenue and quality of power supply otherwise it is an avoidable burden on the consumers. The Licensee need to implement the Smart Grid system in the State as the grant of concession in ToD is subject to this facility.
- e) Due to non-furnishing of voltage-wise cost of service the Commission had to adopt the average CoS for major two categories i.e. LT & HT. It results in distortion of COS to various consumers falling in HT categories (including 11 kV, 33 kV, 66 kV, 132 kV, 220 kV and 400 kV) which affects the determination of Cross Subsidy Surcharge for the Industrial consumers using open access facility. While in many of the progressive States the Cross-Subsidy Surcharge is determined for each voltage category of consumers.
- f) It is disheartening that every year the Licensees report huge revenue deficit which is carried forward and attracts the resultant carrying cost as well. DHBVN alone has reported a net revenue gap of Rs. 706.53 Crore for FY 2017-18 which after taking

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into account the carried forward revenue gap of Rs.743.47 Crore for FY 2015-16 and the carrying cost comes to a huge gap of Rs.1651.04 Crore. Due to the inefficient working of the Discoms the consumers are unnecessarily burdened by way of huge revenue deficits and ultimate impact the consumer tariffs.

It has been submitted that the Utility has approached the Commission to allow a consolidated true up of Rs.18144.74 Crore for the FY 2018-19. Moreover, the Licensee has requested the Commission to allow carry forward a revenue gap of Rs.3711.33 Crore. Such a proposal is an attempt to camouflage the inefficiency by the Utility and seek relaxations over the figures approved by the Commission. It needs to be appreciated that if such relaxations are to be allowed, then the very purpose of the detailed exercise of approving ARR and other performance parameters becomes in-fructuous. Ultimately the consumers have to bear the difference by way of successive tariff increase. Moreover, these figures do indicate the lack of seriousness of the licensee to achieve the fixed parameters.

#### Commission's View:

The Commission has taken note of the detailed analysis and comments filed by the Intervener on the issue of Capex, Voltage Wise CoS, large variations in expenses visà-vis approved by HERC, non-meeting of performance targets, lower R&M expenses and large revenue deficit projected by the Discoms.

The Commission has taken note of point made by the Intervener herein and assures the Stakeholders that, while passing the present Order, the Commission will scrutinise all the details including the revenue deficit arising from non-achievement of performance targets. As far as Voltage wise CoS is concerned, the Discoms do provide the requisite data based on which CoS at two voltage levels i.e. HT and LT are computed by the Commission.

#### II. Annual Performance Review of 2019-20:

The intervener has submitted that DHBVN has filed its application for Annual Performance Review for FY 2019-20. The Utility has approached the Commission to allow a revised ARR of Rs.18,162.67 Crore against the earlier approved figure of Rs.16,780.53 Crore which is a considerable upward revision since the date of the HERC ARR order dated 07.03.2019.

The observations made on the True-up of ARR for FY 2018-19 also apply to the revised ARR for FY 2019-20, which may kindly be considered.

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Against the estimated gap of Rs.346.98 Crore for UHBVN & DHBVN combined for FY 2019-20, these Utilities have projected a total revenue gap of Rs.1365.80 Crore. The net result is that there is resultant drop in revenue of over Rs.1000 Crore for the two Licensees since the last ARR order. This is bound to result in increased financial burden to the consumers. This is inspite of the fact that Government of India had come up with UDAY Scheme under which large sums of accumulated losses of the Utilities were passed on to the State Government so that the financial health of the Distribution Utilities could be improved and the consumers are not unnecessarily burdened by way of increased tariffs. The continuation of such poor performance of the Utilities forfeits the very purpose of Government initiative.

The Commission may take necessary corrective measures so that the operational efficiency of the Licensees is improved and the expenses are curtailed and to save the consumers from ever increasing burden on their electricity bills.

#### Commission's View:

The Commission has taken note of the ibid observations as far as APR for the FY 2019-20 is concerned.

## III. Annual Revenue Requirement for FY 2020-21:

The Licensee has projected an Annual revenue Requirement of Rs.19,370.46 Crore for the year 2020-21. A net revenue gap of Rs. 4,030.39 Crore has been projected for both the Distribution Licensees (including gap of True up carried forward).

Some of the main observations on the ARR submissions for FY 2020-21 are as under;

- 1. Estimated sales to HT Industries and the energy booked to the Agriculture Consumers need to be examined carefully as these have considerable impact on the estimated revenue receipts and ultimate revenue gap. While the error in estimates of industrial consumers would result in actual revenue receipts of the Licensee, on the other hand the extra energy booked to the agriculture sector would largely impact the amount of RE Subsidy to be received from the State Govt.
- 2. The Commission had made following observations in the last ARR order for FY 2019-20,

"The Commission, in its Tariff Order dtd. 15/11/2018, had directed the Petitioners to engage a third party for authenticating the AP sales data for FY 2017-18 and supply hours vis-a-vis reasons of variance in supply hours and to submit analysis report at the time of next ARR filling. However, the said directive remained un-complied as the requisite report is still awaited. The Commission now directs the Petitioners to include

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the FY 2018-19 AP Sales data as part of the same scope of work and submit its report within 3 months from the date of this Order. In its absence the Commission shall be constrained to consider true-up of AP sales."

3. While submitting energy balance for DHBVN, the Licensee has mentioned in Table 46 that there will be lot of surplus power during FY 2020-21 and in the subsequent years of the control period. FY 2019-20. The relevant figures given in Table 21 on Page 45 of the ARR filing are reproduced hereunder for kind reference,

Energy Balance	Unit	FY 2020-21	FY 2021-22
Power Purchase at State Periphery	MUs	36,371	38,347
- 1 - /			
Surplus	MUs	4,785	4,718

Surplus power available during the MYT Control Period is proposed to be sold entirely through power exchange at average variable power purchase cost of the corresponding years.

The above statement shows that the Licensee is projecting huge surplus in power availability all through the Control Period and this surplus power is proposed to be sold at average variable power purchase cost. This is to be appreciated that if the Licensee does not require this power then why should the Licensee buy extra power in the first place and then sell it at a loss. It would further be noted that every now and then Licensee is approaching the Commission seeking permission to buy additional power on one pretext or other.

If the Licensee is surplus of power then it is absurd to approach the Commission seeking permission to buy extra power at high rates on the ground of shortage in power availability and then sell this power at a low rate. We have been raising this issue during various hearings relating to the proposal for new power purchases. Hon'ble Commission may kindly consider this fact while approving any new power purchase proposal. Such action of the Licensee results in,

- a) Increased cost of power purchased and sale of surplus power at a rate lower than the purchase rate and resultant revenue gap;
- b) Inflated figures of so called stranded power, which results in higher Additional Surcharge to be paid by consumers availing open access facility.
- 4. In Table 49 the Licensee has projected R&M expenses or the Control Period with normal increase every year. As already pointed out the Licensee has successively not been able to spend the earmarked amount on this activity. Hence a realistic provision

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may kindly be allowed instead of un-necessarily inflating the Annual Revenue Requirement.

- 5. In Table 58 of the filing Net Interest & Financing Charges have been projected for FY 2020-21 to FY 2024-25. There is large increase in 'Long Term CAPEX Loans' over the years. These provisions may kindly be approved evaluating the expected improvement in the distribution system and ultimate benefit to be accrued to the consumers.
- 6. The Licensee has been recovering large amount by way of FSA from different categories of consumers, and other charges such as Wheeling Charges, Cross Subsidy Surcharge and Additional Surcharge from Open Access Consumers which have not been reflected in revenue projections. Due provisions for these revenues may please be ensured while allowing the total revenue requirement.
- 7. The Licensee has projected the same figure of Rs.307.66 Crore as 'Non-Tariff Income' right through since FY 2018-19. This should be approved looking at the actual figures of receipt in the past.
- 8. In Table 66 of the ARR filing the Licensee has indicated that there will be huge revenue gap throughout the Control Period. Nothing has been proposed for bridging this gap or steps to be taken to meet this gap. This gap can only be closed by improving the performance of the Licensee and plugging holes where there is perpetual loss of revenue, like recovery of long outstanding dues from the defaulting consumers and effective control on theft of energy.

#### **Commission's Observations:**

The Commission has carefully perused the ibid objections filed by the Intervener. On the issue of HT Sales, the Commission observes that sales projections are done by the Commission keeping in view the past trend and revenue is assessed based on the tariff in vogue including the connected load / contract demand (for demand / fixed charges). Similarly, AP Sales is estimated based on the data largely emanating from 11 kV segregated AP Feeders. However, some aberrations may creep in because of AP Supply from feeders other than segregated AP Feeder and the normative distribution loss assumed for working out sales / consumption at the Consumers end. The Commission is seized of the issue to address the aberrations so that the RE Subsidy is not over / under assessed. Further, interest on term loan is considered as per the actual loans availed and interest thereto, while interest on normative working capital is estimated based on prevailing MCLR for the relevant financial year plus an

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appropriate margin of 1.25% as per the Regulations in vogue. Although the Discoms have projected surplus energy and priced thus surplus at a lower rate yet the Commission, considers the power purchase cost of intrastate sales of power only as projected by the Commission in the ARR / Tariff. FSA is a matter separately dealt with by the Commission. Lastly, new power purchase source / PPAs are approved by the Commission after due diligence including assessment of long-term demand – supply position as well as renewable purchase obligation and peak power demand.

# IV. Some of the important issues needing immediate attention of the Commission:

That a couple of issues which are being brought for the kind notice of the Commission during successive hearing on the Aggregate Revenue Requirements of the Distribution Licensee and would result in reducing burden on the electricity consumers in the State are as under:

#### 1. Need for rationalization/reduction of levy of Additional Surcharge:

We have been raising this issue in every hearing on the subject including the time of approval of ARR of the Distribution Licensees. Some of the major issues raised included,

- A. Multiplicity of recovery of so-called Fixed Charges paid to the generating companies;
- The Fixed Cost is fully booked in the cost of power purchase allowed to the Licensee through every successive ARR order;
- ii. The Fixed Demand Charges recovered from the consumers include substantial part of the fixed cost borne by the Licensee;
- iii. During True up of ARRs at the end of each Financial Year, the difference in approved and actual power purchase cost is allowed to the Licensee and hence the total fixed cost is accounted for in the annual expenditure of the Licensee;
- iv. While computing the FSA, any unrecovered gap in the cost of power purchase is fully figured in.
- v. The Licensee has stated in the ARR filing that it will sell the surplus power over the Power Exchange Platform. Thus, the power so sold brings revenue

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to the Licensee. Moreover, the Licensee also buys substantial power over the Exchange.

- vi. The power claimed to have been surrendered/backed down depends on what was the PLF of the specific generating stations.
- vii. Moreover, the power scheduled by the Open Access consumers is not Round the Clock power but only in certain time blocks. This has impact on the calculations submitted by the Licensee for determination of Addl. Surcharge.
- viii. The Petitioner needs to certify that the backing down was as per their instructions and not a fait accompli.
  - ix. It has to be certified that the backing down was done on merit order basis and not by pick and choose method.
- B. It needs to be appreciated that in majority of States no Addl. Surcharge is levied on Open Access Consumers. Any such levy proves a dis-incentive to buy cheaper power available over the Power Exchange from outside the State sources and frustrates the very purpose of facilitating the concept of Open Access provided under the Electricity Act, 2003 and Tariff Policy framed thereunder.
- C. As a result of these exorbitant additional cost levied on open access consumers in the State makes this power to be availed by consumers in other States and denying this benefit tot eh State's own consumers.

Thus, there is urgent need for review of these issues and save the industrial consumers from this multiple charging of the fixed cost by the Licensee in the shape of Additional Surcharge.

# Commission's View:

The Commission has considered the objections (Supra) and shall deal with the same in the paragraphs on Additional Surcharge in the present Order.

2. Need for determination of Cost of Service and Cross Subsidy Surcharge for each voltage level:

The intervener has submitted that the Commission has been repeatedly giving directions to the Distribution Licensees to submit voltage-wise cost of service but the Licensees have failed to comply with this direction. The result is that the Commission

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decides the CoS for two major groups i.e. LT and HT supply. This leads to unrealistic determination of CoS for consumers getting supply at different voltages i.e. the consumers getting power supply on 11 kV, 33 kV, 66 kV, 132 kV, 220 kV or 400 kV are being clubbed together. If we look at the practice being followed in other States we will notice that the Cross Subsidy Surcharge is determined for each voltage level. Even the tariff schedule approved by the Commission recognizes the impact of difference in CoS at different voltage levels. We would request the Commission to fix the CoS for different voltages.

#### Commission's View:

The Commission has taken note of the submission made by the Intervener and will address the issue at appropriate place.

Need for simplifying the Schedule of Tariff for Industrial consumers with special reference to the Time of Use tariff:

While introducing the Time of Use Tariff in the ARR order dated 11.07.17, Hon'ble Commission had allowed a rebate of 15% on the normal tariff during off-Peak night hours (10 PM to 05-30 AM). This was however, changed in subsequent ARR order to 10%. In the last ARR order dated 07.03.2019 this benefit has been practically withdrawn, which reads as under,

Note: This rebate shall be allowed only to the consumers who install Smart Meter/Smart Grid, irrespective of the consumer category. The same may be installed by the DISCOMs as well as by the consumer themselves as per the directions of DISCOMs. Further, if such consumer install rooftop solar system also then the rebate shall be increased to 15% and in case the rooftop solar system is accompanied by battery storage system (minimum 15% of Sanctioned Load), the rebate shall increase to 20%. The consumers may be allowed to avail these benefits by giving an undertaking to comply with the terms and conditions mentioned herein above within seven months of the date of undertaking. In case any consumers fails to comply with the undertaking within the period of seven months, the benefits so availed shall have to be refunded immediately alongwith the interest of 17% per annum. The ToD tariff shall not be applicable to the consumers, who source their power from Captive Generation or Open Access at any point of time after 15.06.2019.

The fact remains that this ToD benefit is a non-existing rebate. In the absence of Smart Grid (which is to be provided by the Licensee) these rebates are illusionary only. The fact is that the night time rebate in tariff has been disallowed.

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#### Commission's View:

The Commission has taken note of the objection on ToD Tariff in vogue and will reckon with the same while deciding ToD Tariff in the present Order.

## 3. Need for reduction in electricity tariff for lindustrial Consumers:

As is very well known, the industry is passing through a serious slow down phase. This is also an undisputed fact that industry is the largest revenue earner for the State. Therefore, all out efforts need to be made to promote industrial activity in the State by giving maximum reliefs. In order to promote industry in the State electricity tariffs for industrial consumers need to be reduced. We would urge the Commission to reduce the tariff for industrial consumers and reduce the cross subsidy being paid by the industrial consumers through higher tariff rates. Let every consumer pay for the cost of service.

#### Commission's View:

The Commission has taken note of the above submissions on HT tariff and observes that HT Industrial consumer tariff is higher than the HT CoS but within the +/- 20% range stipulated in the National Tariff Policy. It needs to be noted that the Cross Subsidy generated from the HT Industry is allocated largely to the Domestic Consumers. In its absence for a large segment of the DS consumers / lifeline DS consumers electricity may become un-affordable leading to theft / un-authorised use and revenue leakages adding to commercial losses thereto.

# 4. Need for implementation of Solar Policy and Bio-energy Policy notified by the State Government:

The State Government notified the Solar Policy, 2016 on 14.03.2016 and Bio-energy Policy on 09.03.2018. Through these Policies large number of incentives/waivers were given to the developers. In respect to wheeling of such RE power, some of the incentives given through these Policies were as follows,

Clause 4.3 of Solar Policy, 2016

Exemption of Electricity Duty & Electrical Taxes & Cess, Wheeling, Transmission & Distribution, cross subsidy charges, surcharges and Reactive Power Charges:

All electricity taxes & cess, electricity duty, wheeling charges, cross subsidy charges, Transmission & Distribution charges and surcharges will be totally waived off for Ground mounted and Roof Top Solar Power Projects.

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Clause (F) under Chapter-3 (Incentives) of Bio-Energy Policy, 2018

Exemption of Transmission & Distribution, cross subsidy charges, surcharges and Reactive Power Charges:

All cross subsidy charges, Transmission & Distribution charges, surcharges and reactive power charges will be totally waived off for any biomass projects set up in the State.

However, Commission has not so far given these benefits to these RE Generators. Due to this prevailing condition, the growth of power generation from Solar and Biomass sources is one of the lowest in Haryana compared to other States in the country. Recently Hon'ble Chief Minister had taken a serious note of this situation and suitable directions would be forthcoming from the Govt. in this regard. There is need for taking a comprehensive view so that these RE sources of power could be harnessed for benefit in the State.

Commission's View: The Commission had taken note of the above submissions and observes that the dispensation for RE Power is governed by the RE Regulations in vogue.

# 5. Need for revisiting the concept of Advance Consumption Deposit:

Although S.47 of the EA-2003 and Reg. 5 of HERC/34/2016 Regulations permit the Licensee to recover Reasonable Security from the consumers but this has to be commensurate the purpose for which this is charged. At present this Regulations allows recovery of 1.5 times the Average Monthly Bill from HT Industrial consumers. Such an amount of Security amounts to a huge amount for the industrial consumers who are already working under adverse financial scenario. Moreover, it needs to be appreciated that the industrial consumers are required to pay their monthly electricity bills within 7 days of issue of bill, other categories are allowed 15 days.

Moreover, the Licensee is allowed Working Capital which includes revenue recoverable equivalent to 2 months billing. Therefore, there is need to reduce the Security being charged from HT Industry from existing 1.5 times of average bill to maximum 1 time.

Commission's View: The Commission had taken note of the above submissions and observes that the dispensation on ACD is governed by the relevant Regulations in vogue which is not the issue of ARR / Tariff Petition(s) under consideration. Working Capital and Interest thereto is determined in line with the provisions of the MYT Regulations in vogue.

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#### 6. Need to merge the Fuel Surcharge Adjustment at the time of ARR:

In fact the concept of Fuel Surcharge Adjustment was introduced under the Electricity Act, 2003 to avoid need for frequent amendment in the tariff. But it has become a necessary evil and is continuing since the initiation.

S.62 (4) of the Electricity Act, 2003 reads as under,

62 (4) No tariff or part of any tariff may ordinarily be amended, more frequently than once in any financial year, except in respect of any changes expressly permitted under the terms of any fuel surcharge formula as may be specified.

Therefore, the Fuel Surcharge Adjustment is to be allowed for mid-year tariff adjustment and not as a perpetual levy. Thus, the prevailing FSA should be reduced to zero while determining the Distribution Retail tariff for each Financial Year.

Commission's View: The Commission had taken note of the above submissions and observes that merging FSA in the ARR has its own merits and demerits. In Order to cushion the impact of FSA on the electricity bills of the consumers, the FSA recovery, so far, have been staggered and automatic recovery the Discoms capped as per the MYT Regulations. An important objective of the FSA mechanism is to keep the cost of power and recovery of the same aligned it may be negative or positive in a particular quarter. Merging the FSA in the ARR will undermine this flexibility as the base tariff, as per the Act, normally ought not to be altered more than once in a year.

# 7. Assets taken over from Consumers/Colonisers/ Developers against Self Execution Schemes/ Deposit Estimates:

Large sums are recovered from consumers/ colonizers/ developers against Deposit Estimates or Self Execution Works. There is no such fact mentioned in the ARR filing. The assets as taken over by the Licensee should appear in the total Assets created during the year through consumer contribution /taken over from third party free of cost.

Commission's View: The Commission has perused the aforesaid submissions and observes that the details of consumers contribution are being provided by

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the Licensee and the same is reckoned with by the Commission while estimating the relevant parameters of the ARR.

- 2.3.2 Additional Observations From M/S Jindal Stainless (Hisar) Limited, Hisar (submitted after reply of DHBVNL)
  - I. PROCEEDINGS DURING HEARING HELD ON 12.02.2020

#### TRUE-UP OF EXPENSES FOR FY 2018-19:

That 'Cost of Power Purchase' is a Controllable Parameter, whereas in reply to these observations DHBVNL claimed that it is un-controllable as per MYT Regulations 8.3.8.

It was clarified that the reply of DHBVNL is wrong. The Regulation 8.3 mentions as under,

Power Purchase Price (other than for short-term power purchase and UI)	Uncontrollable
Power Purchase Price for short-term power and UI	Controllable
Power Purchase Quantum (MUs)	Controllable

Thus, the provision under MYT Regulation talks of the 'Price' of power being 'Uncontrollable' and not the 'Power Purchase Cost'. The 'Power Purchase Cost' is multiple of 'Power Purchase Price' and the 'Power Purchase Quantum'. The 'Power Purchase Quantum' is a Controllable Parameter.

Commission's View: The Commission has taken note of the additional submission of the Intervener in view of DHBVN's reply. The Commission is bound by its own Regulations in the matter and shall act accordingly.

#### **ANNUAL REVENUE REQUIREMENT FOR FY 2020-21:**

The Intervener has submitted that while presenting views on this ARR Estimates for control period FY 2020-21 to FY 2024-25, reference was drawn to Table-46 (Page 101), Table-49 (Page 107), Table-58 (Page 119) and Table-66 (Page 127 & 128). Inadvertently the Page Numbers were wrongly co-related. The Page Numbers mentioned above are correct. A few other issues needing immediate attention of the Commission raised by the Intervener herein are as under: -

## Need for rationalization/reduction of levy of Additional Surcharge:

A statement showing the Additional Surcharge determined by various State Regulatory Commissions was submitted. A copy of this statement is attached for record.

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Need for determination of Cost of Service and Cross Subsidy Surcharge for each voltage level:

A statement showing the Cross Subsidy Surcharge determined by various State Regulatory Commissions was submitted. A copy of this statement is attached for record.

Need for simplifying the Schedule of Tariff for Industrial consumers with special reference to the Time of Use tariff:

While commenting on the Time of Use Tariff in the ARR order dated 07.03.19, it was submitted that the ToU tariff was introduced by the Hon'ble Commission in the year 2017 to make available heretofore surplus power of the Discoms in the 'off-peak hours' to industrial consumers at concessional rate. Hon'ble Commission had amended the earlier rebate of 15% on the normal tariff during off-Peak night hours (10 PM to 05-30 AM), which was reduced to 10% in ARR order of 07.03.19 and that too with an unrealistic condition which reads as under.

Note: This rebate shall be allowed only to the consumers who install Smart Meter/Smart Grid, irrespective of the consumer category. The same may be installed by the DISCOMs as well as by the consumer themselves as per the directions of DISCOMs. Further, if such consumer install rooftop solar system also then the rebate shall be increased to 15% and in case the rooftop solar system is accompanied by battery storage system (minimum 15% of Sanctioned Load), the rebate shall increase to 20%. The consumers may be allowed to avail these benefits by giving an undertaking to comply with the terms and conditions mentioned herein above within seven months of the date of undertaking. In case any consumers fails to comply with the undertaking within the period of seven months, the benefits so availed shall have to be refunded immediately along with the interest of 17% per annum. The ToD tariff shall not be applicable to the consumers, who source their power from Captive Generation or Open Access at any point of time after 15.06.2019.

With the above condition having been introduced in ToU, it became un-economical for the Industry to avail this ToU rebate as the Smart Grid was not to be set up by the consumers but it was to be done by the Licensee. Thus there was no use of such a provision in the Tariff Order which is only on paper and not available to any consumer.

Moreover, the surplus power available with the Discoms during night hours is not being utilized by the Industry and this power remains unutilized.

A copy of the article on Smart Grid was handed over to the Hon'ble Commission and a copy of the same is attached for record.

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#### **Need for revisiting the concept of Advance Consumption Deposit:**

While commenting on this issue the Hon'ble Commission was requested to consider the following suggestions;

- 1. To reduce the ACD for HT Industry to one month average bill as the industry is given 7 days' time to pay the monthly bill and moreover, the Discoms are already taking into account 2 months receivables towards 'Working Capital Cost and Interest on Working Capital'.
- 2. While working out the Average Monthly Bill, the Discoms are taking the bills issued for gross energy consumption, which includes the power purchased by the consumers through open access. Hence the cost of power purchased through open access is accounted towards Utility power. This computation is totally wrong and results in payment of ACD on the power otherwise purchased through open access. The average bill should be calculated after adjusting the open access power.

# Need to determine Distribution Retail Supply Tariff for the two Discoms based on their individual ARRs:

It was suggested that as there is vast difference in the performance level of the two Discoms, therefore the Distribution Retail tariff should also be determined for each of the Discoms separately. At present the impact of a low performing Discom (UHBVN) is being passed on to the better performing Discom (DHBVN). There should be incentive to the consumers of DHBVN rather than to compensate for the losses of UHBVN.

The above additional comments, although presented during the hearing on 12.02.20, are being submitted for reference and record of the Commission.

Commission's View: The Commission has taken note of the submissions of the Intervener on Additional Surcharge, Cross-Subsidy Surcharge, HT Tariff, Time of Day / Use tariff, separate schedule of tariff for the two Discoms and ACD. As previously observed in the present Order ACD is not an issue being dealt with in the present Order as it flows from a separate set of Regulations. All other issues shall be dealt with by the Commission at the relevant paragraphs of the instant Order.

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#### DHBVN Reply on the Objections by M/s JINDAL Stainless

#### 1. True-Up of Expenses for FY 2018-19:

**Objections** Replies There are large variations It is submitted that the cost of power purchase is an uncontrollable item under even on the controllable parameters i.e. Cost of Power Regulation 8.3.8 of HERC MYT Tariff Purchase and Interest & Financing Regulations, 2012. DHBVN submits that Cost, which need to be disallowed. the figures considered for Truing Up for FY Reg. 13.2 of MYT Regulations, 2018-19 are as per the audited accounts of FY 2018-19. 2012 reads as under. 13.2 Truing-up of uncontrollable items shall he carried out at the end of each year of the control period through tariff resetting for the ensuing year and for controllable items shall be done only on account of force majeure conditions and variations attributable uncontrollable to factors. would Nigam submits that Nigam has lt kindly appreciated that every year such achieved AT&C losses of 14.90% in FY non-compliance of performance 2018-19 against the target of 15% given by targets fixed by the Hon'ble the Hon'ble Commission. Moreover, in Commission result in accumulation spite of having revenue gap in each year of of losses of the Utilities which the 2<sup>nd</sup> MYT control period, FY 2020-21 to ultimately are carried over to the FY 2024-25, Nigam has not sought any next ARR and are to be made tariff hike. good from the corresponding tariff increase and ultimate financial burden to the electricity consumers. Reduced expenditure on Nigam is focused on preventive Repair & Maintenance should be maintenance of assets ensure to taken seriously as this reflects uninterrupted operations and in FY 2018-

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directly on the lack of proper

19, amount of Rs 106.88 Crore has been

Objections	Replies
maintenance of the distribution	spent on R&M activities which is
system which ultimately impacts	approximate to the commission's approved
the quality of power supply to the	cost.
consumers;	

The capital expenditure allowed to the Licensee should be linked with corresponding increase in revenue and quality of power supply otherwise it is an avoidable burden on the consumers. The Licensee need to implement the Smart Grid system in the State as the grant of concession in ToD is subject to this facility.

Nigam submits that the Power Discoms are in process of to provide 24x7 power in the state in line of the government policy of 24x7 power supply to all. Capital expenditure for loss reduction is required. Smart Grid project in Gurgaon is under implementation, once the capacity building is achieved, the capital expenditure will also be stabilized. DHBVN would like to submit that the main thrust over the capital expenditure for the sector is to improve efficiency and meet the growing demand from the existing and new consumers. Hence, in order to ensure that the consumers are benefitted by the various schemes adopted by the Discom a meticulous planning and analysis has been done before finalizing the expenditure over the areas in order to supply quality power, and with T&D losses have been reduced from 24.47% in FY 2015-16 to 15.34% in FY 2018-19.

Due to non-furnishing of voltage-wise cost of service the Commission had to adopt the average CoS for major two categories i.e. LT & HT. It results in distortion of COS to various consumers falling in HT categories (including 11 kV, 33 kV, 66 kV, 132 kV, 220 kV and 400 kV) which

DHBVN submits that the information is being furnished from time to time as and when required by the Hon'ble Commission. It is pertinent to mention here that Nigam has submitted actual voltage wise losses for FY 2018-19 with HERC along with additional information sought by HERC on ARR Petition for FY 2020-21.

In regard to the voltage wise CoS,

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affects the determination of Cross Subsidy Surcharge for the Industrial consumers using open access facility. While in many of the progressive States the Cross Subsidy Surcharge is determined for each voltage category of consumers.

#### Replies

Nigam submits that in line with the APTEL judgment dated 30.05.2011 in Appeal No. 102,103 & 112 of 2010 the Commission been approached to adopt the methodology suggested by the Hon'ble APTEL in the ibid judgment dated 30.05.2011 for broadly working out voltage wise CoS for the FY 2016-17. However, Nigam further submits that for the computation of CSS, the Commission has considered the National Tariff policy. In addition, Nigam has already submitted the proposal for methodology for computation of voltage wise CoS for which Hon'ble Commission is yet to accord its approval on the same.

disheartening that every year the Licensees report huge revenue deficit which is carried forward and attracts the resultant carrying cost as well. DHBVN alone has reported a net revenue gap of Rs. 706.53 Crore for FY 2017-18 which after taking into account the carried forward revenue gap of Rs.743.47 Crore for FY 2015-16 and the carrying cost comes to a huge gap of Rs.1651.04 Crore. Due to the inefficient working of the Discoms the consumers are unnecessarily burdened by way of huge revenue deficits and ultimate impact the consumer tariffs.

Nigam finds this query irrelevant with the submitted MYT petition, as the current filed petition dealt with truing up of FY 2018-19, however, it is observed that the intervener has quoted the numbers of truing up of FY 2015-16 and FY 2017-18.

The Utility has approached Nigam submits that the revenue

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the Hon'ble Commission to allow a consolidated true gu Rs.18144.74 Crore for FY 2018-19. Moreover, the Licensee has requested the Hon'ble Commission to allow carry forward a revenue gap of Rs.3711.33 Crore. Such a proposal is an attempt to camouflage the inefficiency by the Utility and seek relaxations over the figures approved the Hon'ble bγ needs to be Commission. lt appreciated that if such relaxations are to be allowed, then the very purpose of the detailed exercise of ARR approving and other performance parameters becomes in-fructuous. Ultimately consumers have to bear the difference by way of successive tariff increase. Moreover, these figures do indicate the lack of seriousness of the licensee to achieve the fixed parameters.

# Replies

gap in the ARR arises out of the difference between the Actual expenditure of the Nigam and the Projected Expenditure as approved by the Hon'ble Commission. Further, Nigam submits that the objector has made the objections against the Nigam in the name of inefficiency of the Nigam without considering the principles which allow Nigam to claim the actual expenditure. In addition to above, it is evident from the past years tariff orders issued by the Hon'ble Commission time to time that in spite of such huge revenue gap being carried by the DHBVN over the years, the consumers are not being burdened and are eased with no tariff hikes.

#### 2. Annual Performance Review of 2019-20:

#### **Objections**

Against the estimated gap of Rs.346.98 Crore for UHBVN & DHBVN combined for FY 2019-20, these Utilities have projected a total revenue gap of Rs.1365.80 Crore. The net result is that there is resultant drop in revenue of over Rs.1000 Crore for the two Licensees

#### Replies

It is submitted that the Nigam has reported improvement in their working. The petition against which the Hon'ble Commission issued Tariff Order dated 07.03.2019 was filed on 30.11.2018 and the projections for FY 2019-20 were submitted at that time. However, at the time of filing petition for ARR for FY

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since the last ARR order. This is bound to result in increased financial burden to the consumers. This is inspite of the fact that Government of India had come up with UDAY Scheme under which large sums of accumulated losses of the Utilities were passed on to the State Government so that the financial health of the Distribution Utilities could be improved and the consumers are not unnecessarily burdened by way of increased tariffs. The continuation of such poor performance of the Utilities forfeits the very purpose of Government initiative.

Hon'ble Commission may take necessary corrective measures so that the operational efficiency of the Licensees is improved and the expenses are curtailed and to save the consumers from ever increasing burden on their electricity bills.

The observations made on the True-up of ARR for FY 2018-19 also apply to the revised ARR for FY 2019-20, which may kindly be considered.

#### Replies

2020-21, projected figures of FY 2019-20 have been revised based on the actuals of H1 of FY 2019-20& projections for H2 have been submitted to the Hon'ble Commission under MYT Regulations, 2012.

In regard to the objector's query on the APR for FY 2019-20, the Petitioner had already given its reply on the same issues for True-up of FY 2018-19 and the same shall be considered for the brevity to the petitioner replies for Annual Performance Review for FY 2019-20.

In continuation to above, various initiatives have been undertaken to reduce the AT&C losses of DHBVN and has reduced significantly from 26.89% in FY 2015-16 to 14.90% by FY 2018-19.

# 3. Annual Revenue Requirement for FY 2020-21:

Objections	Replies
Estimated sales to HT	Nigam submits that the
Industries and the energy booked to	category wise energy sales for MYT
the Agriculture Consumers need to be	Period from FY 2020-21 to FY 2024-25
examined carefully as these have	have been projected by considering

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# considerable impact on the estimated revenue receipts and ultimate revenue gap. While the error in estimates of industrial consumers would result in actual revenue receipts of the Licensee, on the other hand the extra energy booked to the agriculture sector would largely impact the amount of RE Subsidy to be received from the State Govt.

#### Replies

Compound Annual Growth Rate (CAGR) of previous years' sales. Keeping in view the category wise load growth, base year sales have been escalated with appropriate CAGR for estimating the sales for MYT Control Period in line to HERC MYT Tariff Regulations, 2019.

Hon'ble Commission had made following observations in the last ARR order for FY 2019-20,

"The Commission, in its Tariff Order dtd. 15/11/2018, had directed the Petitioners to engage a third party for authenticating the AP sales data for FY 2017-18 and supply hours visa-vis reasons of variance in supply hours and to submit analysis report at the time of next ARR filling. However, the said directive remained uncomplied as the requisite report is still awaited. The Commission now directs the Petitioners to include the FY 2018-19 AP Sales data as part of the same scope of work and submit its report within 3 months from the date of this Order. In its absence the Commission shall be constrained to consider trueup of AP sales."

Nigam would like to apprise here that all the AP feeders of DISCOM are already metered and the energy consumption data received from these meters is duly monitored and analysed by the operation wing of the Discoms. Regarding third party audit of AP feeders, it is intimated that UHBVN has already carried out third party audit of AP Sales on selected feeders through EESL and the same is being submitted to HERC on behalf of both Discoms.

While submitting energy balance for DHBVN, the Licensee has mentioned in Table 46 that there will be lot of surplus power during FY

Nigam submits that the licensee is under universal obligation to supply power to the consumer in state. The power demand is uneven

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#### **Objections**

2020-21 and in the subsequent years of the control period. FY 2019-20. The relevant figures given in Table 21 on Page 45 of the ARR filing are reproduced hereunder for kind reference.

Energy	Unit	FY	FY 2021-22
Balance		2020-	
		21	
Power	MUs	36,371	38,347
Purchase			
at State			
Periphery			
Surplus	MUs	4,785	4,718

Surplus power available during the MYT Control Period is proposed to be sold entirely through power exchange at average variable power purchase cost of the corresponding years.

The above statement shows that the Licensee is projecting huge surplus in power availability all through the Control Period and this surplus power is proposed to be sold at average variable power purchase cost. This is to be appreciated that if the Licensee does not require this power then why should the Licensee buy extra power in the first place and then sell it at a loss. It would further be noted that every now and then Licensee is approaching the Commission seeking permission to buy additional power on one pretext or other.

If the Licensee is surplus of power then it is absurd to approach the Hon'ble Commission seeking permission to buy extra power at high

#### **Replies**

against the flat supply curve. Hence, in view of minimizing the burden of cost of unutilized power, major portion of the resultant surplus power in off peak hours is being banked for utilization in peak seasons.

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Objections	Replies
rates on the ground of shortage in	
power availability and then sell this	
power at a low rate. We have been	
raising this issue during various	
hearings relating to the proposal for	
new power purchases. Hon'ble	
Commission may kindly consider this	
fact while approving any new power	
purchase proposal. Such action of the	
Licensee results in,	
a) Increased cost of power purchased	
and sale of surplus power at a rate	
lower than the purchase rate and resultant revenue gap;	
b) Inflated figures of so-called	
stranded power, which results in	
higher Additional Surcharge to be	
paid by consumers availing open access facility.	
In Table 49 the Licensee has	Nigam submits that Nigam is
projected R&M expenses or the	focused on preventive maintenance of
Control Period with normal increase	assets and as a result the expenditure
every year. As already pointed out the	in FY 2018-19 and in current years has
Licensee has successively not been	increased substantially. In FY 2018-19
able to spend the earmarked amount	amount of Rs 106.88 Crore has been
on this activity. Hence a realistic	spent on R&M, while the R&M cost for
provision may kindly be allowed	MYT Control Period has been
instead of un-necessarily inflating the	projected in line with Regulation 57.3
Annual Revenue Requirement.	of the Haryana Electricity Regulatory
	Commission (Terms and Conditions for
	Determination of Tariff for Generation,
	Transmission, Wheeling and
	Distribution & Retail Supply under Multi
	Year Tariff Framework) Regulations,
	2019.
In Table 58 of the filing Net Interest &	It is submitted that the Nigam
Financing Charges have been	has projected the interest on long term

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Objections	Replies
projected for FY 2020-21 to FY 2024-	loans as per projected capital
25. There is large increase in 'Long	expenditure filed with the Hon'ble
Term CAPEX Loans' over the years.	Commission in line to HERC MYT
These provisions may kindly be	Tariff Regulations, 2019, which is
approved evaluating the expected	being funded by Fls/Banks.
improvement in the distribution system	
and ultimate benefit to be accrued to	
the consumers.	
The Licensee has been recovering	It is submitted that FSA is not a
large amount by way of FSA from	part of ARR, while the projection of
different categories of consumers, and	ARR is in line to the HERC MYT,
other charges such as Wheeling	Regulations 2019, and the non-tariff
Charges, Cross Subsidy Surcharge	income is suitably adjusted by the
and Additional Surcharge from Open	HERC while allowing ARR to the
Access Consumers which have not	Discom.
been reflected in revenue projections.	
Due provisions for these revenues	
may please be ensured while allowing	
the total revenue requirement.	
The Licensee has projected the same	Nigam has kept the non-tariff
figure of Rs.307.66 Crore as 'Non-	income in line to the actual audited
Tariff Income' right through since FY	figures for FY 2018-19.
2018-19. This should be approved	
looking at the actual figures of receipt	
in the past.	
In Table 66 of the ARR filing the	After UDAY the DHBVN have
Licensee has indicated that there will	shown significant improvement in
be huge revenue gap throughout the	operational and financial parameters,
Control Period. Nothing has been	thus, no additional OFR requirements
proposed for bridging this gap or steps	posed and the benefits in shape of
to be taken to meet this gap. This gap	FSA reduction has already been
can only be closed by improving the	passed on to the consumers.
performance of the Licensee and	
plugging holes where there is	
perpetual loss of revenue, like	

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Objectio	ns	Replies
recovery of lor	ng outstanding dues	
from the defau	ting consumers and	
effective control	on theft of energy.	

4. Some of the important issues needing immediate attention of the Hon'ble Commission:

#### **Objections Replies** Need for rationalization/reduction of levy of The issue raised by the Additional Surcharge: intervener is already addressed and We have been raising this issue in every decided by the Hon'ble Commission hearing on the subject including the time of in its past Tariff Orders. of ARR of the Distribution However, it is submitted that approval under the Sub Section (4) of the Licensees. Some of the major issues raised Section 42 of Electricity Act-2003, included, A. Multiplicity of recovery of so called Fixed discoms have a universal supply obligation and are required to supply Charges paid to the generating companies; power as and when required by the a) The Fixed Cost is fully booked in the consumer in area supply. cost of power purchase allowed to the Considering the load and maximum Licensee through every successive demand, the discom entered into ARR order: long tern power purchase b) The Fixed Demand Charges agreements (PPAs) with seller recovered from the consumers include (generators/traders) so as to ensure substantial part of the fixed cost borne supply of power. by the Licensee; While contracting energy c) During True up of ARRs at the end of through long term PPAs, the tariff each Financial Year, the difference in payable to generator consists of two approved and actual power purchase parts i.e capacity charge and energy cost is allowed to the Licensee and charge. Therefore, the discoms has hence the total fixed cost is accounted the fixed cost obligation even when for in the annual expenditure of the there is no off take of energy through Licensee: such source. d) While computing the FSA, any Whenever any consumer unrecovered gap in the cost of power opts for open access the discoms

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continue to pay capacity charges in

lieu of its contracted capacity with

purchase is fully figured in.

e) The Licensee has stated in the ARR

#### **Objections**

filing that it will sell the surplus power over the Power Exchange Platform. Thus the power so sold brings revenue to the Licensee. Moreover, the Licensee also buys substantial power over the Exchange.

- f) The power claimed to have been surrendered/backed down depends on what was the PLF of the specific generating stations.
- g) Moreover, the power scheduled by the Open Access consumers is not Round the Clock power but only in certain time blocks. This has impact on the calculations submitted by the Licensee for determination of Addl. Surcharge.
- h) The Petitioner needs to certify that the backing down was as per their instructions and not a fait accompli.
- i) It has to be certified that the backing down was done on merit order basis and not by pick and choose method.
- B. It needs to be appreciated that in majority of States no Addl. Surcharge is levied on Open Access Consumers. Any such levy proves a dis-incentive to buy cheaper power available over the Power Exchange from outside the State sources and frustrates the very purpose of facilitating the concept of Open Access provided under the Electricity Act, 2003 and Tariff Policy framed thereunder.
- C. As a result of these exorbitant additional cost levied on open access consumers in

#### Replies

the Generating stations and the discoms are unable to sufficiently recover such fixed obligatory cost from the open access consumers. The cost recovered from the fixed charges in the tariff schedule is less than the entire fixed cost incurred by the discom for supplying energy. This leads to the situation where the discom is saddled with the stranded cost on account of its universal supply obligations.

Section 42 (4) of the electricity Act 2003 provides as under:

"where the State Commission permit a consumer or class of consumers to receive supply electricity from a person distribution other than the licensee of his area of supply, such consumers shall be liable to pay an additional surcharge on the charges of wheeling, as may specified by the State Commission, to meet the fixed cost of such distribution license arising out of his obligation to supply".

When embedded consumers move out of the system of the distribution licensee, the distribution licensee has to bear stranding power under long term PPAs causing financial loss to the distribution licensees and the

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#### Objections

the State makes this power to be availed by consumers in other States and denying this benefit tot eh State's own consumers.

#### **Replies**

same needs to be compensated by way of additional surcharge as determined by the State Electricity Regulator in terms of the applicable Regulations.

In view of the adverse financial situation caused by arrangements made for complying with the obligation to supply, Section 42(4) of the Electricity Act, 2003 provides as under:

"Where the State Commission permits a consumer or class of consumers to receive supply of electricity from a person other than the distribution licensee of his area of supply, such consumer shall be additional liable to pay an surcharge on the charges of wheeling, as may be specified by the State Commission, to meet the fixed cost of such distribution licensee arising out his obligation to supply."

Section 8.5 of the Tariff Policy 2016 also provides;

"The additional surcharge obligation to supply as per section 42(4) of the Act should become applicable only if it is conclusively demonstrated that the obligation of a licensee, in terms of existing power purchase commitments, has been and continues to be stranded. or there is an

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Objections	Replies
	unavoidable obligation and
	incidence to bear fixed costs
	consequent to such a contract.
	The fixed costs related to network
	assets would be recovered
	through wheeling charges."
	Further, clause 5.8.3 of the
	National Electricity Policy notified by
	the Ministry of Power, Govt. of India,
	reads as under:
	"5.8.3
	An additional surcharge may also
	be levied under sub-section (4) of
	Section 42 for meeting the fixed
	cost of the distribution licensee
	arising out of his obligation to
	supply in cases where consumers
	are allowed open access.
	"
	The Tariff Policy and Regulations
	putting the onus on DISCOMs to
	conclusively demonstrate that the
	power purchase commitments have
	been and will continue to remain
	stranded. However, with consumers
	frequently switching their mode of
	supply between DISCOM and open
	access, it becomes difficult for the
	DISCOM assess the quantum of
	power that will continue to remain
	stranded. Moreover, the quantum of
	stranded power does not remain
	constant throughout the year or a
	month or a week or even a day.
	It is factual that DISCOMs may also

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Objections	Replies
	surrender power due to other reasons
	like seasonal variations, purchases
	from Power Exchange, RTC short
	term power purchases of DISCOMs
	etc. In some cases, additional
	renewable capacity may have been
	added to ensure compliance to RPO
	and not to meet demand. The burden
	of surrender of power excluding
	stranded due to open access is being
	shared by all consumers through
	tariff.
	However, in order to differentiate
	between stranded capacity due to
	open access and other factors,
	minimum of power backed down/
	surrendered and open access
	quantum is being considered for
	computation of additional surcharge.
	Thus, stranded capacity due to open
	access is being considered for
	determination of additional surcharge
	under prevailing regulations as stated
	by the objector.
	In order to cater the demand or load,
	utility has to develop a healthy
	distribution network keeping in view
	the maximum load and the load which
	is likely to come in near future. The
	Demand charges only cover
	Licensee's fixed costs of providing a
	certain level of energy to its
	consumers.
	A perusal of the aforesaid mentioned
	facts amply clears that the demand

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Objections	Replies
	charges and Additional Surcharge are not correlated. The demand charges are recovered on account of investment in the distribution network made by the Licensee whereas additional surcharge is meant to compensate Discoms for fixed cost of the stranded capacity due to Open Access Consumers and is borne by the licensee.
Need for determination of Cost of Service and Cross Subsidy Surcharge for each voltage level: Hon'ble Commission has been repeatedly giving directions to the Distribution Licensees to submit voltage-wise cost of service but the Licensees have failed to comply with this direction. The result is that the Commission decides the CoS for two major groups i.e. LT and HT supply. This leads to unrealistic determination of CoS for consumers getting supply at different voltages i.e. the consumers getting power supply on 11 kV, 33 kV, 66 kV, 132 kV, 220 kV or 400 kV are being clubbed together. If we look at the practice being followed in other States we will notice that the Cross-Subsidy Surcharge is determined for each voltage level. Even the tariff schedule approved by the Hon'ble Commission recognizes the impact of difference in CoS at different voltages.	In this regard reply has already been submitted above and not repeated here for the objector's sake of brevity. Nigam request the Hon'ble Commission to consider the same.
Need for simplifying the Schedule of Tariff	It is submitted that the Smart Metering

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#### **Objections**

for Industrial consumers with special reference to the Time of Use tariff:

While introducing the Time of Use Tariff in the ARR order dated 11.07.17, Hon'ble Commission had allowed a rebate of 15% on the normal tariff during off-Peak night hours (10 PM to 05-30 AM). This was however, changed in subsequent ARR order to 10%. In the last ARR order dated 07.03.2019 this benefit has been practically withdrawn, which reads as under,

Note: This rebate shall be allowed only to the consumers who install Smart Meter/Smart Grid. of irrespective the consumer category. The same may be installed by the DISCOMs as well as by the consumer themselves as per the directions of DISCOMs. Further, if such consumer install rooftop solar system also then the rebate shall be increased to 15% and in case the rooftop solar system accompanied by battery storage system (minimum 15% of Sanctioned Load), the The rebate shall increase to 20%. consumers may be allowed to avail these benefits by giving an undertaking to comply with the terms and conditions mentioned herein above within seven months of the date of undertaking. In case any consumers fails to comply with the undertaking within the period of seven months, the benefits so shall have to be refunded immediately alongwith the interest of 17% per annum. The ToD tariff shall not be applicable to the consumers, who source

#### **Replies**

is being implemented in Gurugram and Faridabad cities under pilot project. DHBVN has planned to roll out 5 Lakhs smart meters through under **OPEX EESL** mode by March'2021. The smart metering project is expected to get commissioned by the end of FY 2020-21. DHBVN has also planned to roll out smart metering in balance part of urban areas for which tendering is under process.

However, regarding rebate on ToU tariff, rebate shall be allowed only to the consumers who install Smart Meter in line with Commission's directives.

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Objections	Replies
their power from Captive Generation or	
Open Access at any point of time after	
15.06.2019.	
The fact remains that this ToD benefit is a	
non-existing rebate. In the absence of Smart	
Grid (which is to be provided by the	
Licensee) these rebates are illusionary only.	
The fact is that the night time rebate in tariff	
has been disallowed.	
Need for reduction in electricity tariff for	It is submitted that the tariff of
industrial consumers:	different states cannot be compared
As is very well known, the industry is	due to difference in power purchase
passing through a serious slow down phase.	mix, loss levels, Consumer Mix and
This is also an undisputed fact that industry	thereby the Cost of Supply. The
is the largest revenue earner for the State.	comparison of tariff in various states
Therefore, all out efforts need to be made to	should be judged against respective
promote industrial activity in the State by	average power purchase cost as the
giving maximum reliefs. In order to promote	tariff rationalization is based on the
industry in the State electricity tariffs for	overall approved annual revenue
industrial consumers need to be reduced.	requirement of the DISCOMs, out of
We would urge the Hon'ble Commission to	which around 85% to 90%
reduce the tariff for industrial consumers and	corresponds to the net power
reduce the cross subsidy being paid by the	purchase cost. The Tariff for a
industrial consumers through higher tariff	particular consumer category is
rates. Let every consumer pay for the cost of	determined by the Commission on the
service.	basis of the Annual Revenue
	Requirement approved for a particular
	year. The tariff comparison of HT
	consumers in Haryana and the
	neighboring states is given below for
	ready reference:
	Particulars Haryana Delhi Punjab Rajasthan U.P.
	Energy Charges 7.28 8.61 6.64 7.30 7.56

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FSA/FCA

Duties Taxes

Fixed Cost

0.34

1.57

0.58

1.25

0.60

0.37

0.26

0.39

0.39

0.40

0.32

0.60

0.50

Objections	Replies
	Total Rate (Rs/unit) 8.30 11.09 8.49 8.41 8.6
	From the above, it can be
	inferred that the effective industrial
	tariff in the neighbouring states with
	comparable sources of power
	purchase is higher than the industrial
	tariff in Discoms of Haryana.
Need for implementation of Solar Policy and	In order to promote RE generation in
Bio-energy Policy notified by the State	the state of Haryana, Nigam is
Government:	entering into power purchase
The State Government notified the Solar	agreements with RE generators,
Policy, 2016 on 14.03.2016 and Bio-energy	promoting rooftop solar under various
Policy on 09.03.2018. Through these	schemes, promoting off grid solar
Policies large number of incentives/waivers	pump sets to agricultural consumers,
were given to the developers. In respect to	investments in infrastructure &
wheeling of such RE power, some of the	capacity augmentation to provide RE
incentives given through these Policies were	generators point for grid injections,
as follows,	etc. Nigam finds this objection of the
Clause 4.3 of Solar Policy, 2016	intervener more focused on monetary
Exemption of Electricity Duty & Electrical	benefits to an individual suppressing
Taxes & Cess, Wheeling, Transmission &	the above efforts of the Nigam to
Distribution, cross subsidy charges,	promote RE generation in the state of
surcharges and Reactive Power Charges:	Haryana.
All electricity taxes & cess, electricity duty,	Further, regarding exemption of
wheeling charges, cross subsidy charges,	charges under Solar Policy 2016 and
Transmission & Distribution charges and	Bio-energy Policy, it is submitted that
surcharges will be totally waived off for	the Discom being a revenue neutral
Ground mounted and Roof Top Solar Power	entity, in case such exemption is
Projects.	allowed to RE generator then the
Clause (F) under Chapter-3 (Incentives) of	burden of same is either to be passed
Bio-Energy Policy, 2018	on to the consumers in form of tariff or
Exemption of Transmission & Distribution,	is to be neutralized by the State
cross subsidy charges, surcharges and	Government in form subsidy under
Reactive Power Charges:	Section 65 of the Electricity Act 2003,
All cross-subsidy charges, Transmission &	reproduced here as under:

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#### **Objections**

Distribution charges, surcharges and reactive power charges will be totally waived off for any biomass projects set up in the State.

However, Hon'ble Commission has not so far given these benefits to these RE Generators. Due to this prevailing condition, the growth of power generation from Solar and Bio-mass sources is one of the lowest in Haryana compared to other States in the country. Recently Hon'ble Chief Minister had taken a serious note of this situation and suitable directions would be forthcoming from the Govt. in this regard. There is need for taking a comprehensive view so that these RE sources of power could be harnessed for benefit in the State.

Need for revisiting the concept of Advance Consumption Deposit:

Although S.47 of the EA-2003 and Reg. 5 of HERC/34/2016 Regulations permit the Licensee to recover Reasonable Security from the consumers but this has to be commensurate the purpose for which this is charged. At present this Regulations allows

#### Replies

"If the State Government requires the grant of any subsidy to any consumer or class of consumers in the tariff determined by the State Commission under section 62, the State Government shall. direction notwithstanding any which may be given under section 108, pay, in advance and in such manner as may be specified, the amount to compensate the person affected by the grant of subsidy in the manner the State Commission may direct, as a condition for the license or any other person concerned implement the to subsidy provided for by the State Government:

Provided that no such direction of the State Government shall be operative if the payment is not made in accordance with the provisions contained in this section and the tariff fixed by State Commission shall be applicable from the date of issue of orders by the Commission in this regard."

It is submitted that the demand of additional Advance Consumption Deposit (ACD) based on consumption pattern in accordance with the Regulation 5.9 (1) of Commission Regulation No. HERC/34/2016 dated 11th July, 2016 of Haryana Electricity Regulatory Commission (Duty to

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#### **Objections**

recovery of 1.5 times the Average Monthly Bill from HT Industrial consumers. Such an amount of Security amounts to a huge amount for the industrial consumers who are already working under adverse financial scenario. Moreover, it needs to be appreciated that the industrial consumers are required to pay their monthly electricity bills within 7 days of issue of bill, other categories are allowed 15 days.

Moreover, the Licensee is allowed Working Capital which includes revenue recoverable equivalent to 2 months billing. Therefore, there is need to reduce the Security being charged from HT Industry from existing 1.5 times of average bill to maximum 1 time.

#### Replies

supply electricity on request, Power to recover expenditure incurred in providing supply and Power to require security) Regulations, 2016, the relevant excerpt of the aforesaid regulation is reproduced here as under:

"At the beginning of the financial year, the licensee shall review the consumption pattern of the consumer for the adequacy of the security deposit from April to March of the previous year. A consumer, except the HT industrial supply consumer, is required to maintain a sum equivalent to his average payment for the period of two billing cycles. An HT industrial supply consumer, is required to maintain a sum equivalent to his average payment for the period of one and half billing cycles."

Need to merge the Fuel Surcharge Adjustment at the time of ARR:

In fact the concept of Fuel Surcharge Adjustment was introduced under the Electricity Act, 2003 to avoid need for frequent amendment in the tariff. But it has become a necessary evil and is continuing since the initiation.

S.62(4) of the Electricity Act, 2003 reads as under,

62(4) No tariff or part of any tariff may ordinarily be amended, more frequently than once in any financial year, except in respect It is submitted that the Dakshin Haryana Bijli Vitran Nigam (DHBVN) levied Fuel Surcharge Adjustment as a pass-through cost to its consumers in accordance with HERC (Terms and Conditions for Determination of Tariff for Generation, Transmission. Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2012 on a The quarterly basis. relevant regulation is as under:-

"66.1 The distribution licensees shall

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#### Objections Replies

of any changes expressly permitted under the terms of any fuel surcharge formula as may be specified.

Therefore, the Fuel Surcharge Adjustment is to be allowed for mid-year tariff adjustment and not as a perpetual levy. Thus, the prevailing FSA should be reduced to zero while determining the Distribution Retail tariff for each Financial Year.

recover FSA amount on account of increase in fuel and power purchase costs from the consumers on a quarterly basis so as to ensure that FSA accrued in a quarter is recovered in the following quarter without going through the regulatory process i.e. FSA for the quarter "July to September" is recovered in the following quarter "October to December".

That Power generation companies, on account of increase in variable cost due to uncontrollable parameters. primary charge the fuel price adjustment to the Discoms. The fuel price adjustment is calculated as per the methodology defined in section 33 of the Haryana Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff Transmission, for Generation, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2012.

Hence, per unit fuel cost pass-through has been calculated based on the norms and guidelines laid down by Hon'ble Haryana Electricity Regulatory Commission and is being imposed in accordance with the regulations of the Hon'ble Commission.

Assets taken over from consumers/ colonizers/ developers against selfNigam submits that the Gross Fixed Assets of DHBVN has already

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Objections	Replies
execution schemes/ deposit estimates:	includes the assets created out of
Large sums are recovered from consumers/	consumer contribution and grants,
colonizers/ developers against Deposit	however, the depreciation claimed
Estimates or Self-Execution Works. There is	under petition has already deducted
no such fact mentioned in the ARR filing.	the value of assets created from
The assets as taken over by the Licensee	consumer contribution & grants.
should appear in the total Assets created	In continuation to above, assets
during the year through consumer	created out of consumer contribution
contribution /taken over from third party free	and grant is already shown separately
of cost.	under Reserves & Surplus head in
	audited accounts of the Discom.

Commission's View: The Commission has taken note of the objections of the Intervener as well as the reply filed by the Nigam and shall keep the same in mind while dealing with the ARR / Tariff Petition under consideration.

#### 2.3.3 Comments by Cold Chain Supply.

### The objections filed by the Cold Chain Supply are briefly stated below: -

It has been submitted that the Haryana Government has decided to encourage small Agrobased Industry including Cold Supply Chain by making electricity available to them @ 2.50 / Unit with an objective to generate employment, income and earnings in the sector. So far, for such activities, under HT and LT Supply the existing tariff ranges from Rs. 8.00 to Rs. 8.35 / Unit. This, as per the State Govtt., has been reduced to 2.50 / Unit and 4.50 / Unit. The Agriculture / Horticulture Department has been mandated to provide the requisite grant by means of Direct Benefit Transfer (DBT). A list of beneficiaries (provided by the Intervener) to be supplied electricity at Rs. 2.50 / Unit and Rs. 4.50 / Unit is as under: -

- 1. पैक हाऊस व इसके अन्तर्गत की जाने वाली गतिविधियां जैसे की राईपनिंग, प्रिक्लिंग, कोल्डरूम, ग्रेडिंग लाइन इत्यादि।
- 2. मशरूम हाईटेंक एवं मशरूम कम्पोस्ट इकाई।
- 3. शहद प्रसंस्करण इकाई
- 4. टिशू कल्चर लैंब
- 5. दुग्ध से संबधित बल्क मिल्क चेंबर

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# बागवानी संबधित इकाईयां जिन पर बिजली दर 4.50 रूपये प्रति यूनिट की गई

- 1. कोल्ड स्टोर
- सी.ए. स्टोर

ये दर जिस क्षेत्र में लागू होगी

- 1. ग्रामीण क्षेत्र
- 2. शहरी क्षेत्र

लाभार्थी जो इस योजना के पात्र होगें

- 1. किसान
- 2. कृषक उत्पादक संघ जो एस.एफ.ए.सी.एच (लघ् कृषक व्यापार संघ हरियाणा) से सूचीबध्द
- 3. को-ओप्ररेटिव समितियां
- 4. व अन्य बागवानी संबधित एम.एस.एम.ई. ईकाईयां

#### Commission's View:

The small Agro-Industries in Haryana viz. Pisciculture, floriculture, sericulture, animal husbandry, poultry, mushroom, dairy, cold storage, FPO, pack house, grading, packaging, pre-cooling & ripening chamber, honey – bee keeping, tissue culture, pig farms etc. are, so far, considered under General Purpose category / NDS Supply. The tariff issue of such electricity consumers was deliberated at length in the Public Hearing on the ARR / Tariff Petition filed by the Haryana Power Utilities as well as in the State Advisory Committee (SAC).

The Commission agrees with the stakeholders that such Industries have very strong backword and forward linkage with the State Agrarian Economy in terms of employment, income and earnings. Additionally, such consumers have very limited ability to pass – on the 'input cost' including cost of electricity to their ultimate consumers unlike the established Industrial Consumers of electricity. Hence, the Commission is inclined to accept the contention of the stakeholders that some cushion ought to be provided to such consumers without disturbing the revenue balance of the Distribution Licensee(s) in Haryana. The Commission, while determining consumer category wise tariff shall reckon with the same.

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#### 2.3.4 Comments of Bharti Infratel Ltd

(Plot No -1, Anantraj Tech Park, 8th Floor South Side Sector 22, IT Park Panchkula - 134109, Harvana)

- 1. That the Applicant M/s Bharti Infratel Limited, a Limited Company incorporated under the provisions of the Companies Act, 1956, having its Registered office at Bharti infratel Ltd,901, Park Centra, Sec-30, NH-80, Gurugram, Haryana-122001 and Circle Office at 8th Floor, Anant Raj Technology Park. Plot no-L, Sec-22, Panchkula, Haryana- 134109. The Applicant Company is registered as infrastructure provider category-I i.e. (IP-I), by the government of India Ministry of Communication and IT, Department of Telecommunication, New Delhi.
- 2. That we have obtained around 777 electricity connections in various circle of DHBVN for our cell sites/Towers and are paying approximately Rs.3 Cr./month towards the electricity charges/bills. It is pertinent to mention here that around 95% of our bills are being paid within the due date fixed by your department and the balance 5% are those cases where we encounter or face any issues like (Non-Metered, High average, received after due date or bills issued before 2-3 days from due date). Therefore, in a way we have been paying 100% Electricity ills well within the due date.
- 3. That we would like to bring in to the notice of this Hon'ble Commission that state like Bihar have two power distribution company (NBPDCL/SBPDCL) and both companies have been providing monthly rebate to all the consumers (As per tariff ordered FY 19-20) in below two categories.
  - i) Rebate for payment within Due date: The due date for making payment of energy bills or other charges shall be 15 days from the date of issue of the bill. Rebate of 1.5% on the billed amount for payment of the bills with in the due date.
  - ii) Rebate for online payment :- To motivate the consumers to make online payment of the bills through online web portal a rebate of 1 % of the billed amount in addition to rebate @ 1.5% shall be allowed. However, online payment rebate shall be applicable if the consumer makes full payment of the bill within due date Copy of Tariff order attached for reference (Page no.439 and point no.2, Bihar Electricity Regulatory Commission, Tariff Ordered, Truing up for FY 2017- 18, Annual Performance Review for FY

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2018-19, Business Plan and Annual Revenue Requirement (ARR) for tie Control Period of FY 2019-20 to FY 2021-22 and Determination of Retail Tariff for FY 2019-20)

4. Similarly, in Odisha state, there are four power distribution company (NESCO, WESCO, SOUTH and CESU) and all company have been providing monthly rebate to consumers (As per tariff ordered FY 19-20) in below categories.

Incentive for making payment within due date:- The Commission examined the existing method of incentive and its financial implications. The Commission has decided to grant incentive for making payment within due date as below:

a) A rebate of 1 paise/unit shall be allowed on energy charges if the payment of the bill (excluding all arrears) is made by the e date indicated in the bill in respect of the following categories of consumers.

LT: Domestic, General purpose < 110 KVA, Irrigation Pumping and Agriculture, Allied Agricultural Activities and LT Industrial (S), Public Water Works and Sewerage Pumping.

HT: Bulk supply Domestic, Irrigation Pumping and Agriculture, Allied Agricultural activities, General purpose >70< 110 KVA, Public water work and sewerage pumping.

Copy of Tariff order attached for reference. (Page no. 134 and point no.440, Odisha Electricity Regulatory Commission, date of ordered 29-03-2019, in the matter of: Applications under Section 42 of the Electricity Act, 2003 read with Regulations 4 (1) (xiv), 2 (vii) and 3 (vi) of the OERC (Determination of Open Access Charges) Regulations, 2006 and other enabling provisions of the OERC (Terms and Conditions of Open Access) Regulations, 2005 of DISCOM Utilities namely NESCO, WESCO, SOUTHCO and CESU for approval of wheeling charge, surcharges and additional surcharges for FY 2019- 20).

Therefore, in view of the detailed submissions made above, we submit our suggestions / request to the Commission for considering our request for providing some rebate for making payments within due date and Online payments similarly in line with the tariff cases elaborated above for the State of Bihar & Odisha.

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# Commission's View – The Commission has taken note of the relief sought by the Intervener.

#### 2.3.5 Comments of Delhi Metro Rail Corporation Ltd.

- That this Hon'ble Commission vide public notice has invited objections/suggestions on the petition(s) filed by HPGCL, HVPNL, UHBVNL and DHBVNL for approval of true-up for the FY 2018-19, Annual (Mid-year) performance review for the FY 2019-20, Multiyear Tariff for the control period FY 2020-21 to FY 2024-25.
- That the instant objections have been filed inter-alia praying for determination of special tariff in respect of Objector namely Delhi Metro Rail Corporation Ltd and inclusion of directions regarding differential payment to DHBVNL & UHBVNL inter-alia on the following grounds: -
  - (i) That the Applicant/objector is engaged in the activity of providing Mass Rapid Transit System for National Capital Region of Delhi including Gurugram and Faridabad and is performing a public utility function having social benefits. In connection with the above activities, DMRC requires electricity to run metro trains, for ancillary activities, for operational requirements, for supply to commercial, domestic and other establishments inside the metro stations and for real estate development outside the metro stations.
  - (ii) In order to ensure safety to its passengers, providing subsidized fares, reduction in financial burden upon the commuters, the applicant/objector/DMRC has established various metro stations having commercial establishments, which is being used by various entities including companies, individuals etc. In order to assist them, in running the establishments, DMRC is providing electricity to such establishments situated within the premises of Metro Stations from its own network of 33 KV/415 KV from sub-station situated at each metro station.
  - (iii) That the applicant/objector takes power supply from DHBVN and UHBVN at 66 KV & 132 KV voltage level for running of metro trains and supporting auxiliary services of the stations, air conditioning, Lift & escalators and lightening etc, to run the amenities of the stations. Further, a part of its power supply infrastructure is used to extend power supply to DMRC's commercial consumers.

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- (iv) That the applicant has set up sub-stations and cable network to meet the station auxiliary power requirements. In case DISCOMs (DHBVNL & UHBVNL) have to extend the supply of power to commercial consumers of DMRC within the stations footprints, then, DISCOMs (DHBVNL & UHBVNL) would have to build additional infrastructure and incur capital cost for transformation of power from 66/132 KV voltage level to 415 KV voltage level for supplying the same to the commercial establishments of DMRC. Presently, DMRC has provided the entire requisite infrastructure for the purposes of transformation and supply of power from 66/132 KV voltage level to 415 KV incurred for its commercial establishments within the station footprints. The DISCOMs (DHBVNL & UHBVNL) would further require the space for installation and erection of substations and ancillary equipments, if connected separately.
- (v) That the applicant receives the power supply at higher voltage from DISCOMs and further step down the same at the receiving substation of DMRC in two parts which is as under:-
  - (a) Power supply at 25 KV:-

This power is directly taken to overhead traction lines of DMRC at 25 KV for running of Metro trains

(b) Auxiliary Power Supply: -

The power supply is stepped down to 33 KV and taken to different Metro Stations in loop in and loop out configuration. 33 KV power supply is further stepped down to 415 V for auxiliary requirements of stations such as signaling equipment, telecommunication, lift, light, fan and escalator etc. in the station premises.

Power is also given to commercial establishments at the stations. Separate billing is being done by DMRC to these commercial units. Differential amount (between commercial tariff and DMRC's tariff) is calculated and deposited to DISCOMs.

For better understanding of this arrangement, a brief Schematic of above-mentioned arrangement is attached as Annexure-A.

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- (vi) That the applicant/objector operates and maintains the above mentioned network and bears the transformation & distribution losses below 66/132 KV level. DISCOMs do not incur any additional expenses beyond the metering point which is provided at 66 KV/132 KV level.
- (vii) That the applicant raises electricity bills & collects the electricity charges from commercial consumers as per applicable tariff issued by Hon'ble commission, which further relieves the DISCOMs (DHBVNL & UHBVNL) from metering, billing & collection.
- (viii) That the applicant, attempted to deposit the differential amount to DHBVNL which was not accepted by them during the year 2016. Later on, DMRC had started making payments through online bank transfer of the differential amount.
- (ix) That the applicant/DMRC, in the part of Delhi Region, was allowed to raise the bills for commercial establishments at Metro station premises on behalf of the distribution licensee of Delhi and is allowed to retain a part of the total amount collected from the commercial establishments against the supply of energy. A copy of the relevant extracts of the Order on ARR and Tariff Petition of North Delhi Power Ltd. for FY 2004 -05 is attached hereto and marked as Annexure B.
- (x) That the same order was further made applicable to the other distribution companies in Delhi i.e. BSES Yamuna Power Ltd and BSES Rajdhani Power Ltd. vide Tariff Order for FY 2011-12 passed by the Hon'ble DERC. The same is attached hereto and marked as ANNEXURE 'C'.
- (xi) That the applicant/DMRC was allowed by DERC to retain 5% of tariff along with an additional retention amount of 4% (for source connected at 66 KV) or 5% (for source connected at 220KV) vide order dated 29.02.2012 passed by DERC & read with Tariff order for FY 2018-19, w.e.f 01.04.2018. A copy of the order dated 29.02.2012 passed by the Hon'ble DERC & relevant pages of Tariff order for FY 2018-19, w.e.f 01.04.2018 passed by DERC is attached hereto and marked as ANNEXURE 'D'.
- (xii) That the applicant/DMRC is thereafter collecting, calculating differential amount and depositing the same with the distribution licensees after retaining a portion of amount so collected, against the services rendered by DMRC.

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- (xiii) The arrangement as approved by Delhi Electricity Regulatory Commission is based on sound commercial principle as well as in line of object of Electricity Act, 2003 for promotion of efficient policies and economic use of resources by optimizing investments.
- (xiv) That the applicant/DMRC herein requests the Hon'ble Commission to allow similar rebate in case of Haryana i.e. 9 % for taking power supply at 66 KV and 10 % for taking power supply at 132 KV/220 KV.
- (xv) That the applicant herein submits a draft proposal of procedure for differential payment to be done to DISCOMs. The same is attached hereto and marked as Annexure 'E' for better appreciation of the Hon'ble commission.
- 3. That it is submitted that the DISCOMs (DHBVNL & UHBVNL) in its prayers has asked the Hon'ble commission to allow recovery of additional surcharge of Rs. 1.15 per unit from Open Access consumer.
- 4. That the applicant/DMRC and Govt. Of Haryana had executed an agreement dated 17.11.2006 and Clause 3 of Agreement states that:
  - ".....Government of Haryana shall also arrange to provide electricity on cost price to Transco under open access system...."

A copy of relevant pages of said agreement is attached hereto and marked as ANNEXURE 'F'.

- That from the above clause it is clear that DMRC may be exempted from payment of additional surcharge and any other charges for open access.
- 6. In view of above points, it is clear that provision of power supply to commercial establishments directly from stations is in the benefit of the DISCOMs as well.
- 7. That no prejudice shall be caused to the DISCOMs in case the instant objection is allowed by this Hon'ble Commission.
- 8. That the instant objections has been filed bona fide and in the interest of justice.
- 9. The following prayer is made:
  - (i) To allow/regularise DMRC for carrying out metering, billing & charging of its commercial consumers within the premises of the DMRC for electricity consumption at the rates prescribed by this Hon'ble commission in Tariff

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Order in the line with Delhi Electricity Regulatory Commission (DERC) for Delhi Metro Rail Corporation (DMRC).

- (ii) To allow DMRC to retain the rebate of 9% for supply on 66 KV and 10 % for supply on 132 kV on account of the transformation of energy & line losses etc. in the line with Delhi Electricity Regulatory Commission (DERC) for Delhi Metro Rail Corporation (DMRC).
- (iii) To allow to deposit the calculated differential amount to DISCOMs in the line with Delhi Electricity Regulatory Commission (DERC) for Delhi Metro Rail Corporation (DMRC).
- (iv) To exempt DMRC from payment of any charges or Surcharges for open access on account of agreement executed between Govt. Of Haryana and DMRC dated 17.11.2006.
- (v) Any such other order(s) be passed, in the interest of justice, as this Hon'ble Court deems fit under the facts and circumstances of the case.

#### DHBVN reply on Delhi Metro Rail Corporation objections

The following reply is submitted by DHBVNL:

Delhi Metro Rail Corporation (DMRC) vide its objections has proposed the Hon'ble Commission as per details given below:

- A. Allow/regularise DMRC for carrying out metering, billing and charging its commercial consumers within the premises of the DMRC for electricity consumption at the rates prescribed by the Hon'ble Commission in Tariff Order
- B. Allow DMRC to retain rebate of 9% for supply on 66KV and 10% for supply on 132 KV on account of the transformation of energy & line losses etc.
- C. Allow to deposit the calculated differential amount to DISCOM in line with Delhi Electricity Regulatory Commission (DERC) for DMRC.
- D. Allow the exemption of payment of additional surcharge and any other charges for open access on account of agreement executed between Govt. of Haryana and DMRC dated 17.11.2006.

Nigam submits that the Hon'ble Commission while determining tariff for DMRC in its Tariff Order dated 13.09.2010 for FY 2010-11, gave specific directions that all other

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terms and conditions applicable to Railway (Traction) are applicable to DMRC, same is reproduced here, as under:

"All other terms and conditions applicable to Railway (Traction) shall be applicable to DMRC as well."

DMRC has existing 8 Nos of connections with DHBVN at 66 KV and 132 KV voltage level based on the load and the prevailing HERC Supply Code Regulations for the traction purpose of DMRC in the distribution licensee area of Nigam which do not cover the commercial establishments of DMRC. Moreover, the Hon'ble Commission in the above said Tariff Order also gave the direction that power supplied to various commercial establishments shall be charged at the rates applicable for respective categories determined by the Commission, same is reproduced here as under:

"However, the power supplied to various commercial establishments, hoardings, lighting etc. shall be charged at the rates determined by the Commission for those purposes i.e. in the tariff category that they fall."

Pertinently, DMRC is not authorized to intermix two categories of consumer against connection under one category. It is submitted that Nigam has provided above said connections to DMRC for traction purpose only and electricity consumption against operations of DMRC Stations (excluding traction) does not fall under the said category. Hence, the DMRC station (excluding traction) is a commercial establishment and under prevailing regulations DMRC is required to take separate connection for operations of DMRC station (excluding traction), similar to the procedures being adopted in case of Railways and in line with the Hon'ble Commission's direction in its Tariff Order for FY 2010-11 dated 13.09.2010.

In regard to the prayer for allowing DMRC to carry out metering, billing and charging activities, it is submitted that Nigam is vested with the power to recover charges from its consumers against supply of electricity falling under its licensed area of supply under Electricity Act 2003, the responsibility of metering, billing and collection in its licensed area of supply falls within the purview of the Nigam only. Therefore, DMRC cannot be allowed for carrying out metering, billing and charging its commercial consumers within the premises of the DMRC for electricity consumption as proposed.

In regard to the prayer for allowing DMRC to submit the calculated differential amount to DISCOM (as the procedure proposed under Annexure-E), it is submitted that DMRC cannot intermix two categories and thereby provide differential amount.

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As explained above DMRC station (excluding traction) is a commercial establishment and similar tariff is applicable for commercial consumers of DMRC, requirement of differential payment mechanism does not arise.

In regard to the prayer for allowing DMRC to retain rebate of 9% for supply on 66KV and 10% for supply on 132 KV on account of the transformation of energy& line losses etc., it is submitted that Nigam has issued electricity connection at such voltage level based on the load and prevailing Supply Code Regulations. And as per the definition of point of supply, the Nigam is liable to provide electricity along with necessary infrastructure up to the point of supply while incurring all such losses till the point of supply. It is implicit that any loss beyond such point of supply is to be borne by respective consumer only and allowing any rebate on such ground may prove to be inconsistent with the regulations. Same is being followed for all types of consumer categories within the license area of supply of Nigam. Furthermore, determination of tariff for a consumer or a class of consumers is the sole prerogative of the Hon'ble Commission under Electricity Act, 2003 and as per the section 62 (3) of the Electricity Act 2003, the Hon'ble Commission should not provide undue preference to any consumer while determining tariff, same is reproduced here, as under:

"(3) The Appropriate Commission shall not, while determining the tariff under this Act, show undue preference to any consumer of electricity but may differentiate according to the consumer's load factor, power factor, voltage, total consumption of electricity during any specified period or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required."

Moreover, Nigam being a revenue neutral entity, allowing such rebate to DMRC will result in passing that rebate onto other consumers by the way of increasing the tariff of those consumers inter-alia burdening them with the proposed rebate of DMRC. Therefore, DMRC cannot be allowed to retain rebate of 9% for supply on 66KV and 10% for supply on 132 KV on account of the transformation of energy & line losses etc.

Further in the context of DERC orders for DMRC, it is submitted that the Hon'ble Commission has issued sufficient regulations under the Electricity Act 2003 to allow distribution licensees to disburse their duties in the licensee area of supply and does not require additional efforts from consumers to perform the duties of Nigam.

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With reference to objection regarding exemption from levy of open access charges in line with the agreement signed between DMRC and Govt. of Haryana dated 17.11.2006, which is reproduced here as under:

"Govt. of Haryana shall also arrange to provide electricity on cost price from Transco, under open access system. DMRC shall pay billing charges as decided by Haryana state Electricity Regulatory Authority as applicable from time to time"

Nigam submits that the power tariff applicable including various other charges like (Open Access Charges, FSA, ED, Municipal tax, etc.) on various categories of consumers is determined by the Haryana Electricity Regulatory Commission under the Electricity Act, 2003. The orders passed by the regulator are final and binding. The distribution companies cannot charge tariff lower or higher than determined by the regulator and cannot give any kind of exemptions to any consumer.

If an assurance is to be made by the State Government for granting rebate or granting exemption from surcharge to any specific category of consumer, the Government will have to provide subsidy to that extent in its budget.

Further, section 65 of the Electricity Act 2003 mandates upfront payment of subsidy in case state government wishes to grant a rebate to a consumer/category of consumers. The relevant extract of the Electricity Act has been given herewith for the ready reference.

"If the State Government requires the grant of any subsidy to any consumer or class of consumers in the tariff determined by the State Commission under section 62, the State Government shall, notwithstanding any direction which may be given under section 108, pay, within in advance in the manner as may be specified, by the State Commission the amount to compensate the person affected by the grant of subsidy in the manner the State Commission may direct, as a condition for the licence or any other person concerned to implement the subsidy provided for by the State Government:

Provided that no such direction of the State Government shall be operative if the payment is not made in accordance with the provisions contained in this section and the tariff fixed by State Commission shall be applicable from the date of issue of orders by the Commission in this regard."

Furthermore, it is quite pertinent to mention here that the Hon'ble Commission vide Tariff Order for FY 2018-19 dated 15.11.2018 (ref-i) (page 146) has already

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dismissed the Review Petition No. HERC/RA-4 of 2017 filed by M/s Delhi Metro Railway Corporation, the relevant excerpt of the aforesaid Tariff Order is reproduced as under:

"It is observed that the Commission has already deliberated the issues in detail in its Order dated 29.05.2014 in case no. HERC/PRO-41 of 2013, HERC/PRO-42 of 2013 & HERC/PRO-43 of 2013. Additionally, It is evident from the grounds of appeal and the language used thereto, that the review petition rather than justifying the review sought on the basis of any new / important matter of evidence or any other sufficient reasons is more in the nature of assertion that certain facts and figures were not considered or not taken up by the Commission in the right perspective. Consequently, in the considered view of the Commission such plea i.e. issues on which the Commission has already deliberated and passed Order and the same being re-submitted for favour of consideration cannot also fall under the purview of section 78(2)(c) of HERC (Conduct of Business) Regulations, 2004.

Commission's View: The Commission has perused the submissions of DMRC as well as the issue wise reply filed by the Nigam. Given the peculiar and commercially win-win situation for both DHBVNL and DMRC, the Commission considers it appropriate to relax anything to the contrary contained in the Single Point Supply Regulations and directs that DMRC shall carry out metering, billing and revenue collection for the commercial consumers within its premises subject to installation of correct meters as per CEA norms duly tested and jointly sealed with Discoms. The difference between DMRC (Traction) Tariff and NDS Tariff as determined by the Commission shall be credited by the DMRC into the accounts of the Discom concerned as per the billing cycle.

#### 2.3.6 Objections filed by Faridabad Industries Association

Supply Voltage wise and Consumer category wise distribution and AT & C Losses.

- DHBVN has again flouted the directions of the Commission by its failure to submit information on supply voltage wise and Consumer category wise distribution and AT & C losses. This issue is pending for over 6 years. We request the Commission once again to take a serious view of the matter including invoking Section 142 of the EA.
  - 1 (a) Tariff philosophy

As per National tariff policy, cross subsidy should be reduced every year.

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DHBVN has not submitted any measures or plan to reduce the inter category cross subsidy which is a vital requirement of tariff policy and MYT Regulations. We request the Commission to keep this aspect in mind while fixing tariff for FY 2020-21.

#### **Additional Surcharge**

- 2. At the very outset we disapprove the levy of Addl. Surcharge because each consumer has entered into contract with the Nigam and the latter is required to supply the same irrespective of the fact whether the consumer uses it or otherwise. Thus, a consumer who procures OA power is not causing any loss to the Nigam; more so, information on day ahead basis is being provided to the Nigam.
- 3. Further, Fixed Charges are being paid by the consumer on the Contract Demand, then why this aspect is not deducted from the so called 'Stranded Power' when calculating the Additional Surcharge. As a matter of fact the Regulator is required to provide an even playing field to both the Discom and the consumer including in Open Access but to the contrary, levy of unjustified Additional Surcharge makes OA Power comparatively unviable. So, Commission is requested to reduce the demand charges or fixed charges or not to charge the additional surcharge from open access consumers.
- 4. We request the Commission to direct the Nigam for better demand side management and review their long-term agreements thereby curtailing the Addl. surcharge to a negligible amount.

#### Cost of Industrial power in Haryana

- 5. The manufacturing sector of India is witnessing stagnancy and de-growth. Both the Central and State Govt. are introducing measures to promote the growth of this sector. The Commission may kindly appreciate that as the State industries have to compete in the National/International markets, they need to get assured, cheap, reliable and un-interrupted power at competitive rates.
- The current energy tariff to industry at 11 kV voltage level taking into consideration
  the associated levies of fixed charges, PLEC, FSA etc, the overall industrial tariff
  becomes extremely high as compared to the industrial tariffs of other neighbouring
  States.
- 7. It is a fact that the power cost constitutes approx. 10-15% of manufacturing cost on an average for industry and the percentage of manufacturing cost is much higher for

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- power intensive industries. Hence, this high cost of power is resulting in industry of Haryana becoming sick, non-competitive as their production cost is higher by an average of 4-5% than other States. Haryana is witnessing very low industrial growth in recent years as compared to previous years.
- 8. This high cost of power being charged to industry is attributable to various malpractices, mismanagement, inefficiency and incompetency of DHBVN which should not be allowed to be passed on to the consumers of Haryana, and especially the industry which are an engine of economic growth.
- 9. Commission is requested to carry out due diligence of above submissions and take necessary steps to rationalize the charges for industrial power.

#### Refund of Fuel Surcharge (FSA)

- 10. The Commission had decided that FSA @ 37 paisa per unit would continue from 1<sup>st</sup> July, 2017. The total unrecovered amount was to be recovered by the end of November, 2017 keeping the achievement of target of estimated Sales of 10938.13 MU. The final order of the Commission was that the recovery of FSA shall continue @ 37 paise per unit till the total amount as determined in the order is fully recovered. Thus, after 30 Nov. 2017, the FSA should have been stopped. Unfortunately, the Discoms have been charging FSA at the same @ 37 paise per unit even after 30<sup>th</sup> Nov. 2017. Till date No reason has been given by the Discoms to continue the same FSA even after the recovery of the total amount of FSA.
- 11. In view of the above, the Hon'ble Commission is requested to order Discom to refund the amount recovered by them @37 paisa per unit since 1<sup>st</sup> December, 2017 till date to the consumers.

#### Peak Load Exemption Charges (PLEC)

12. PLEC on Open Access consumers was introduced vide HERC 1<sup>st</sup> Amendment dated 3<sup>rd</sup> December 2013 due to overloading of the power infrastructure during peak hours. However, now the power infrastructure in Haryana has been considerably upgraded and there is no constraint on HVPNL/DISCOM infrastructure. In the present scenario levy of PLEC on all consumers including Open Access consumer is unjustified, hence Commission is requested to discontinue levy of PLEC on all consumers including Open Access consumers.

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#### **RPO Obligation for OA Consumers**

13. The proviso for introduction of RPO Obligation for short term OA consumers should be removed due to non-availability of Solar Power through any exchange; once the system is in place it can be re-introduced.

#### Replacement of Defective Meters.

14. Review of the Capex Plan reveals that electro mechanical meters have still not been completely replaced. We request the Commission to direct the Nigam to complete this exercise in a given time frame.

#### Time of Day/ToU Tariff

- 15. The Commission in its Order of 7<sup>th</sup> March, 2019 had laid down such pre-conditions which made it impossible to opt for Time of Day/ToU during 2019-20. The Nigam has now proposed a revised procedure which includes a third ToD segment charge.
- 16. The scheme approved initially by the Commission was aimed at flattening the demand curve. For any new scheme it takes time for the same to be accepted by the consumer. Unfortunately, the scheme was mismanaged at the field level to the extent that consumers who had utilised the scheme in October, 2018 March, 2019 have not been paid their dues till date. Secondly there was lack of awareness of the system at the grass root, level; the scheme needs to be marketed properly and we are certain it will achieve desired results.
- 17. We do not agree with the proposal to levy a higher rate of tariff for normal hours for consumers who opt for the scheme. We request the Commission to continue the scheme on the same lines as approved in 2017 without the pre-conditions of smart meters and solar power.

#### **Collection Efficiency**

18. We have earlier also requested the Nigam to mention circle wise collection efficiency achieved in the previous year which will bring more transparency in the filing of ARR. We request the Commission to direct the Nigam to share the collection efficiency, circle wise, for FY 2018-19 before the hearing.

#### Revenue Gap FY 2020-21

19. A net revenue gap of 4030.39 cr has been shown for both Discoms inspite of the fact that they have surplus power. This reflects very poorly on the efficient management

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of the Nigam. Although they have not projected any increase in tariff but we are of the considered opinion that in case, the Nigam was as efficient as any other organisation should be in the current scenario, there is scope of reduction particularly in industrial tariff.

#### **Energy Sales Statement Table 42**

20. DHBVN has projected a Sales figure of 26394.41 MU for FY 2020-21 based on 5.74% CAGR. Considering the slow down in the economy and reduced industrial output, there is a need to review the Sales estimate for both HT and LT industry. It is pertinet that in FY 2019-20, DHBVN has projected a drop of nearly 396 MU.

#### **Distribution Losses**

- 21. DHBVN has considered distribution loss of 15% for FY 2019-20 against 14.14% approved by the Commission. Similarly, they are projecting 14.60% loss trajectory for FY 2020-21.
- 22. Commission is requested to approve the energy balance after considering better targets for AT & C losses, distribution losses and collection efficiency. The projected loss of 14.60% for FY 2020-21 has to be definitely less than the approved target of 14.14% for FY 2019-20.

#### Admn. & General Expenses.

- 23. Commission had approved Rs. 81.69 Cr. while DHBVN has projected Rs. 116.56 Cr for FY 2019-20. DHBVN has applied escalation factor of 4.66 % against Commission's approved factor of 3.64% per annum. There is no justification for DHBVN to inflate the escalation factor and thus the Commission is requested not to allow any increase in the revised projection of A & G expenses for FY 2019-20.
- 24. Similarly, DHBVN has projected a figure of 121.22 cr. for 2020-21 applying a 4.6% indexation factor. Commission is requested to down size the projected figure for FY 2020-21 realistically.

#### **Employee Expenses**

25. Commission in its Tariff Order for 2019-20 had approved indexation factor of 3.04% per annum of employee expense while DHBVN in Para 4.11.1 of their filing have indexed at 4% for FY 2018-19 and 4.66% for 2019-20. Commission is requested to approve employee expenses based on the escalate factor of 3.04%.

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#### Non-Tariff Income (NTI)

26. DHBVN has retained NTI at the same level as in the FY 2018-19. In our objections in the previous year, we had raised an issue that income due to late payment surcharge which is legitimate NTI should be taken into account; it is not clear whether DHBVN has done the same for 2018-19 or otherwise; if not the Commission is requested to bear this point in mind while approving NTI for 2020-21.

Para 3.27.1

- 27. Review of the Table 33 reflects that DHBVN has overshot the approved figures of the Commission in the following sub-heads:-
  - A & G Expenses.
  - Interest & Finance charges
  - Return on Equity Capital
  - Provision for bad & doubtful debt.

The Commission is requested to take a serious view of the above defaults while truing up.

Para 4.5.4

28. Contention of DHBVN that majority of OA consumers have shifted to grid Power after introduction of ToU Tariff is not entirely correct, the shift of consumers has taken place due to the increased levy of CSS and Addl. Surcharge which made the OA Power financially unviable.

Para 4.21.1

29. Notwithstanding Regulation 64 of MYT Regulation 2019, we request the Commission to disapprove writing off bad and doubtful debts otherwise it will give further rise to inefficiency.

In view of the above, we, the industry of Haryana look forward for your kind intervention in order to save industries from the present stalemate created due to the unwarranted attitude of the DHBVN and provide relief. Commission must therefore, take a judicious, conscious and decisive view of the situation and try to salvage industry out of the rut of power menace. It must consider steps to facilitate the supply

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of cheap and reliable power to industry and solve the various operational issues plaguing the industry.

#### Additional information filed by FIA after hearing:

Vide email received from Col. S. Kapoor, Faridabad Industries Association:

#### **Advance Consumption Deposit (ACD)**

Presently, Nigam is maintaining ACD at 1.5 times and 2 times on monthly bills in respect of HT & LT Consumers respectively.

This is very excessive, and we strongly recommend that since the billing is done on Monthly basis then the ACD amount should be restricted to average of the monthly billing. It is pertinent that given the economic slow down and restrictive cash flows, the industries are finding it difficult to pay such excessive amounts.

Interest on ACD is not being credited on time. We submit that any delay on part of the Nigam on this account should be penalised by giving additional interest to the consumer for the delayed period.

#### Refund of Imbalance charges

The imbalance charges have not been refunded since 2015 inspite of constant follow up with the Nigam. We demand a time bound repayment with penalty of 18% interest.

#### **Concessional Tariff for Exporters**

To promote export, we request concessional tariff for export oriented industries.

#### **Billing Complaints**

The bills being generated by the Nigam are not consumer friendly, they lack complete information. As a matter of fact on receipt of bills, almost 70% consumers have queries which are not being addressed by the local SDO, as the billing is done directly from Hisar.

In view of this, we request that a dedicated helpline with duly trained staff is established at Hisar to address the billing problems. This will not only reduce the harassment of every consumer but also build a comfort level between the Nigam and the consumer.

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DHBVNL reply on comments filed by Faridabad Industries Association (FIA)

## Objections

DHBVN has again flouted the directions of the Commission by its failure to submit information on supply voltage wise and consumer category wise distribution and AT&C losses. This issue is pending for over 6 years. We request the Commission once again to take a serious view of the matter including invoking Section 142 of the EA.

 a) As per National Tariff Policy, cross subsidy should be reduced every year.

DHBVN has not submitted any measures or plan to reduce the inter category cross subsidy which is a vital requirement of tariff policy and MYT Regulations. We request the Commission to keep this aspect in mind while fixing tariff for FY 2020-21.

#### Additional Surcharge

• At the very outset we disapprove the levy of Additional Surcharge because each consumer has entered into contract with the Nigam and the latter is required to supply the same irrespective of the fact whether the consumer uses it or otherwise. Thus, a consumer who procures OA power is not causing any loss to

# Replies

DHBVN submits that the information is being furnished from time to time as and when required by the Hon'ble Commission. It is pertinent to mention here that Nigam has submitted actual voltage wise losses for FY 2018-19 with HERC along with additional information sought by HERC on ARR Petition for FY 2020-21. Further in regard to the category wise distribution and AT&C losses, there is no standard methodology to cater such specific requirement of the intervener.

In regard to submission of measure or plan to reduce the inter category cross subsidy, Tariff is being charged to the consumers on the basis of average cost of supply incurred by the Discoms. Efforts are being made to reduce the AT&C losses which eventually mellow down the current level of average cost of supply of the Discoms. Therefore, in view of the above Discoms has proposed to retain the current level of tariff for FY 2020-21.

The issue raised by the intervener is already addressed and decided by the Hon'ble Commission in its past Tariff Orders.

However, it is submitted that under the Sub Section (4) of the Section 42 of Electricity Act-2003, discoms have universal supply obligation and are required to supply power as and when required by the consumer in area of supply. Considering the load and maximum demand, the discom entered into long tern

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#### **Objections**

the Nigam; more so, information on day ahead basis is being provided to the Nigam.

- Further, fixed charges are being paid by the consumer on the contract demand, then why this aspect is not deducted from the so called 'Stranded Power' when Additional calculating the Surcharge. As a matter of fact the Regulator is required to provide an even playing field to Discom both the and the in Open consumer including Access but to the contrary, levy of unjustified Additional Surcharge makes OA power comparatively unviable. So. Commission is requested reduce the demand charges of fixed charges or not to charge the additional surcharge from open access consumers.
- We request the Commission to direct the Nigam for better demand side management and review their long-term agreements thereby curtailing the Additional Surcharge to a negligible amount.

#### Replies

power purchase agreements (PPAs) with seller (generators/traders) so as to ensure supply of power.

While contracting energy through long term PPAs, the tariff payable to generator consists of two parts i.e capacity charge and energy charge. Therefore, the discoms has the fixed cost obligation even when there is no off take of energy through such source.

Whenever any consumer opts for open access the discoms continue to pay capacity charges in lieu of its contracted capacity with the Generating stations and the discoms are unable to sufficiently recover such fixed obligatory cost from the The access consumers. cost open recovered from the fixed charges in the tariff schedule is less than the entire fixed cost incurred by the discom for supplying energy. This leads to the situation where the discom is saddled with the stranded cost on account of its universal supply obligations.

When embedded consumers move out of the system of the distribution licensee, the distribution licensee has to bear stranding power under long term PPAs causing financial loss to the distribution licensees and the same needs to be compensated by way of additional surcharge as determined by the State Electricity Regulator in terms of the applicable Regulations.

In view of the adverse financial

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Objections	Replies
	situation caused by arrangements made for
	complying with the obligation to supply,
	Section 42(4) of the Electricity Act, 2003
	provides as under:
	"Where the State Commission
	permits a consumer or class of
	consumers to receive supply of electricity
	from a person other than the distribution
	licensee of his area of supply, such
	consumer shall be liable to pay an
	additional surcharge on the charges of
	wheeling, as may be specified by the
	State Commission, to meet the fixed cost
	of such distribution licensee arising out of
	his obligation to supply."
	Section 8.5 of the Tariff Policy 2016 also
	provides;
	"The additional surcharge for
	obligation to supply as per section 42(4)
	of the Act should become applicable only
	if it is conclusively demonstrated that the
	obligation of a licensee, in terms of
	existing power purchase commitments,
	has been and continues to be stranded,
	or there is an unavoidable obligation and
	incidence to bear fixed costs consequent
	to such a contract. The fixed costs
	related to network assets would be
	recovered through wheeling charges."
	Further, clause 5.8.3 of the National
	Electricity Policy notified by the Ministry of
	Power,Govt. of India, reads as under: "5.8.3
	An additional surcharge may also be
	levied under sub-section (4) of Section

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Objections	Replies
	42 for meeting the fixed cost of the
	distribution licensee arising out of his
	obligation to supply in cases where
	consumers are allowed open access.
	"
	The Tariff Policy and Regulations
	putting the onus on DISCOMs to
	conclusively demonstrate that the power
	purchase commitments have been and will
	continue to remain stranded. However, with
	consumers frequently switching their mode
	of supply between DISCOM and open
	access, it becomes difficult for the DISCOM
	assess the quantum of power that will
	continue to remain stranded. Moreover, the
	quantum of stranded power does not remain
	constant throughout the year or a month or a
	week or even a day.
	It is factual that DISCOMs may also
	surrender power due to other reasons like
	seasonal variations, purchases from Power
	Exchange, RTC short term power purchases
	of DISCOMs etc. In some cases, additional
	renewable capacity may have been added to
	ensure compliance to RPO and not to meet
	demand. The burden of surrender of power
	excluding stranded due to open access is
	being shared by all consumers through tariff.
	However, in order to differentiate
	between stranded capacity due to open access and other factors, minimum of power
	backed down/ surrendered and open access
	quantum is being considered for
	computation of additional surcharge. Thus,
	stranded capacity due to open access is
	Citatiana oupdoity and to open access is

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Objections	Replies
	being considered for determination of
	additional surcharge under prevailing
	regulations as stated by the objector.
	In order to cater the demand or load,
	utility has to develop a healthy distribution
	network keeping in view the maximum load
	and the load which is likely to come in near
	future. The Demand charges only cover
	Licensee's fixed costs of providing a certain
	level of energy to its consumers.
	A perusal of the aforesaid mentioned
	facts amply clears that the demand charges
	and Additional Surcharge are not correlated.
	The demand charges are recovered on
	account of investment in the distribution
	network made by the Licensee whereas
	additional surcharge is meant to
	compensate Discoms for fixed cost of the
	stranded capacity due to Open Access
	Consumers and is borne by the licensee.
Cost of Industrial Power	er in It is submitted that the tariff of different
Haryana	states cannot be compared due to difference
The manufacturing sectors	tor of in power purchase mix, loss levels,
India is witnessing stag	gnancy Consumer Mix and thereby the Cost of
and degrowth. Both the C	Central Supply. The comparison of tariff in various
and State Govt. are introd	ducing states should be judged against respective
measures to promote the g	growth average power purchase cost as the tariff
of this sector. The Comm	nission rationalization is based on the overall
may kindly appreciate that	
State industries have to co	ompete DISCOMs, out of which around 85% to 90%
in the National/Interna	
markets, they need to	o get The Commission has a two-sided
assured, cheap, reliable	
uninterrupted power	at interests of the distribution licensees and to
competitive rates.	balance the interests of various

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## **Objections**

- The current energy tariff to industry at 11 kV voltage level taking into consideration the associated levies of fixed charges, PLEC, FSA etc, the overall industrial tariff becomes extremely high as compared to the industrial tariffs of other neighboring States.
- It is a fact that the power cost constitutes approx. 10-15% of manufacturing cost on an average for industry and the percentage of manufacturing cost is much higher for power intensive industries. Hence, this high cost of power is resulting in industry of Haryana becoming sick, non-competitive as their production cost is higher by an average of 4-5% that other States. Haryana is witnessing very low industrial growth in recent years as compared to previous years.
- This high cost of power is being charged to industry is attributable to various malpractices, mismanagement, inefficiency and incompetency of DHBVN which should not be allowed to be passed on to the consumers of Haryana, and especially the industry which are an engine of economic growth.

## Replies

stakeholders. The Tariff for a particular consumer category is determined by the Commission on the basis of the Annual Revenue Requirement approved for a particular year. The tariff comparison of HT consumers in Haryana and the neighboring states is given below for ready reference:

Particulars	Haryana	Delhi	Punjab	Rajasth an	U.P.
Energy Charges	7.28	8.61	6.64	7.30	7.56
FSA/FCA	0.37	0.34	0.05	0.39	-
Duties and Taxes	0.26	1.57	1.25	0.40	0.60
Fixed Cost	0.39	0.58	0.60	0.32	0.50
Total Rate (Rs/unit)	8.30	1.09	.54	.41	.66

From the above, it can be inferred that the effective industrial tariff in the neighboring states with comparable sources of power purchase is higher than the industrial tariff in Discoms of Haryana.

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Objections	Replies
• Commission is requested to	
carry out due diligence of above	
submissions and take necessary	
steps to rationalize the charges	
for industrial power.	
Refund of Fuel Surcharge [FSA]	It is submitted that the Hon'ble
The Hon'ble Commission	Commission in ESA order dated 3rd March

The Hon'ble Commission had decided that FSA @37 paisa per unit would continue from 1st July, 2017. The total unrecovered amount was to be recovered by the end of November, 2017 keeping achievement of target of estimated sales of 10938.13 MU. The final order of the Commission was that the recovery of FSA shall continue @37 paisa per unit till the total amount as determined in the order is fully recovered. Thus, after 30 Nov 2017, the FSA should have been stopped. Unfortunately, the Discoms have been charging FSA at the same @37 paisa per unit even after 30th Nov 2017. Till date no reason has been given by the Discoms to continue the same FSA even after the recovery of the total amount of FSA.

In view of the above, the Hon'ble Commission is requested to order Discom to refund the amount recovered by them @37 paisa per unit since 1<sup>st</sup> December, 2017 till date to the consumers.

It is submitted that the Hon'ble Commission in FSA order dated 3rd March 2017 had done the consolidation of FSA amount which was accrued on account of previous FSA orders. Considering the same the Hon'ble Commission had directed the Discoms to recover an amount of Rs. 828.40 Crore up till November 2017. Discoms has levied the FSA on consumers for the period as directed by the Commission.

The recovery of the above FSA amount had been made by the Discoms within the duration till September 2017. However, in order to recover the amount of FSA accrued due to the increase in fuel and power purchase cost during the first two quarters of FY 2017-18, the Discoms had already filed a true up Petition before the Hon'ble Commission for recovery of balance FSA. The excess power purchase cost incurred by the Discoms during the first two quarters of FY 2017-18, during FY 2018-19 and during first two quarters of FY 2019-20 on account of variations in approved power cost vis-à-vis actual purchase power purchase cost, which as per the Regulation 66 of HERC (Terms and Conditions for determination of Tariff for Generation, Transmission Wheeling and Distribution & Retail Supply under Multi Year Tariff

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Objections	Replies
	Framework) Regulations, 2012, is being
	passed on to the consumer with an
	applicable rate of Rs 0.37/unit in term of
	applicable FSA regulations subjected to true
	up by the Hon'ble Commission. Thus, the
	recovery of FSA after September 2017 was
	made on the account of excess power
	purchase cost accrued by the Nigam for the
	respective financial years.
	In continuation to above as per the
	HERC MYT Regulations, 2012, the
	distribution licensees shall recover FSA
	amount on account of increase in fuel and
	power purchase costs from the consumers
	on a quarterly basis so as to ensure that
	FSA accrued in a quarter is recovered in the
	following quarter without going through the
	regulatory process. However, since the FSA
	amount is more, the recovery spills over a
	period of 3-4 years. In the past also when
	the FSA was levied after the end of the year,
	HERC after approval had allowed the
	recovery of FSA over a span of 3-4 years;
	though the DISCOMs incurred and paid the
	entire cost of power purchase on a regular
	basis during the year itself.
	Further, Uttar Haryana Bijli Vitran
	Nigam (UHBVN) and Dakshin Haryana Bijli Vitran Nigam (DHBVN) apply Fuel
	Surcharge Adjustment as a pass-through
	cost to its consumers in accordance with
	HERC MYT Regulations, 2012 on a
	quarterly basis. Accordingly, per unit fuel
	cost pass through gets calculated based on
	the norms and guidelines laid down by
	The manual gardonnion laid down by

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Objections	Replies
	HERC. As per HERC Regulations, 2012, the
	FSA up to 10% of the approved cost of
	power purchase for the respective financial
	year is automatically passed through to the
	consumers; on a quarterly basis by the
	DISCOMs. Further, the same provision was
	revised in HERC MYT Tariff Regulations,
	2019, As per HERC Regulations, 2019, the
	FSA up to 15% of the approved cost of
	power purchase for the respective financial
	year is automatically passed through to the
	consumers; on a quarterly basis by the
	DISCOMs. The Detail Calculation of the
	same is been submitted to the Hon'ble
	commission and the same is been uploaded
	on the UHBVN & DHBVN portals on a
	regular basis.
	It is pertinent to mention here that the
	Discoms levy the FSA on account of
	variations in power purchase cost during the
	relevant financial year in according to the
	Methodology approved by the Hon'ble
	Commission and the same is being trued-up
· ·	by the Hon'ble Commission on the basis of
	the Audited accounts.
	Presently, Discoms have outstanding
	balance of approx. Rs 2000 Crore on
_	account of unrecovered FSA. Additionally, Discoms paid Rs 1806 Crore in FY 2018-19
	against prior period expenses of power
	purchase on account of Change In Law. In
	spite of Discoms having an option to recover
	such amount from its consumers under MYT
	regulations, Discoms avoided any tariff/FSA
	hike and paid such jerking amount by
	Time and paid odon joining amount by

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Objections	Replies
	availing its CC limits. Discom has
	endeavored to protect consumer interest
	and envisaged to recover the balance
	through similar tariff structure in forthcoming
	years.
Peak Load Exemption Charges	It is submitted that the issue raised
[PLEC]	by the objector are devoid of merit, as levy
PLEC on Open Access consumers	of Peak Load Exemption Charges is
was introduced vide HERC 1st	primarily due to high cost of energy available
amendment dated 3 <sup>rd</sup> December	in Energy Exchange during peak load hours.
2013 due to overloading of the	PLEC is levied keeping in view two factors
power infrastructure during peak	i.e. to compensate the licensee for
hours. However, now the power	scheduling costlier power during PLHs and
infrastructure in Haryana has been	secondly to contain the demand within
considerably upgraded and there is	available peak capacity.
no constraint on HVPNL/Discom	As Open Access Consumers
infrastructure. In the present	purchase power through energy exchange
scenario levy of PLEC on all	contributing loading on the system, even
consumers including Open Access	licensee are forced to back down the
consumer is unjustified, hence	generating stations, still the power drawn by
Commission is requested to	open access contributes in the load.
discontinue levy of PLEC on all	Therefore, PLEC charges must be
consumers including Open Access	recovered from open access consumers.
consumers.	
RPO Obligation for OA consumers	Nigam submits that the Hon'ble
The proviso for introduction	Commission is a quasi-judicial body under
of RPO obligation for short term	the Electricity Act 2003 and the RPO
OA consumers should be removed	obligation for short term OA is applicable as
due to non-availability of Solar	per regulations of the Hon'ble Commission.
Power through any exchange;	
once the system is in place it can	
be reintroduced.	
Replacement of Defective Meters	Nigam has been making earnest efforts to
Review of the Capex Plan	replace all electromechanical meters in the
reveals that electro mechanical	system including through various schemes

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## **Objections**

meters have still not been completely replaced. We request the Commission to direct the Nigam to complete this exercise in a given time frame.

## Replies

introduced like Bill Settlement being Scheme. MGJG. etc. Pendency replacement of electromechanical meters is prominent in rural areas primarily due to high resentment for replacement public electromechanical meters. Presently, work under MGJG Scheme in rural areas covering relocation of meters outside the premises and replacement of defective/electromechanical meters are being carried out in phased manner. More improvement in in replacement electromechanical meter will be observed once the work under the MGJG will get completed.

Time of Day/ToU Tariff

- The Commission in its Order of 7<sup>th</sup> March, 2019 had laid down such pre-conditions which made it impossible to opt for Time of Day/ToU during 2019-20. The Nigam has now proposed a revised procedure which includes a third ToD segment charge.
- The scheme approved initially by the Commission was aimed at flattening the demand curve. For any new scheme it takes time for the same to be accepted by the consumer. Unfortunately, the scheme was mismanaged at the field level to the extent that consumers who had utilized the scheme in October, 2018-March, 2019 have not been paid their

Nigam has been levying ToD/ToU tariff as approved by the Hon'ble Commission. Further, the claim of the intervener regarding levy of higher tariff in normal hours is devoid of merit as the tariff being levied by the discom for consumption against normal hours is the tariff approved by the commission in tariff order. Even same was followed under the earlier approval of the Hon'ble Commission in 2017.

In regard to the claim of the intervener regarding non-payment of dues during the period Oct'18 to Mar'19 to its consumers who opted for ToD/ToU tariff, Nigam is in process of adjusting the dues due to billing system automation for slab wise calculation of ToU tariff, and likely to be completed in due course of time.

In regard to the claim of the intervener regarding lack of awareness

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## **Objections**

dues till date. Secondly, there was lack of awareness of the system at the gross root, level; the scheme needs to be marketed properly and we are certain it will achieve desired results.

 We do not agree with the proposal to levy a higher rate of tariff for normal hours for consumers who opt for the scheme. We request Commission to continue the scheme on the same lines as approved in 2017 without the pre-conditions of smart meters and solar power.

## Replies

regarding the scheme, Nigam submits that such observation is vague as the scheme is available in the form of sales circular on the website of Discom.

# Collection Efficiency

We have earlier also requested the Nigam to mention circle wise collection efficiency achieved in the previous year which bring more transparency in the filling of ARR. We request the Commission to direct the Nigam to share the collection efficiency circle wise, for FY 2018-19 before hearing.

Nigam submits that discom has been providing details as and when required by the Hon'ble Commission and also available on its website.

## Revenue Gap FY 2020-21

A net revenue gap of 4030.39 Crore has been shown for both Discoms inspite of the fact that they have surplus power. This reflects very poorly on the efficient management of the Nigam.

Nigam submits that both discoms has submitted cumulative projected revenue gap of Rs 4,030.39 Crore for the FY 2020-21, breakup of the same is tabulated as under:

Revenue	Gap	for	FΥ	(473.63)
2017-18				(473.03)
Interest	on	UD	ΑY	(2,138.20)

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Objections	Replies
Although they have not projected	bonds for previous
any increase in tariff but we are of	years holding Cost (462.90)
the considered opinion that in	Decrease in AP Subsidy (636.60)
case, the Nigam was so efficient	Revenue Gap carried (3.711.33)
as any other organization should	Revenue Gap for FY (319)
be in the current scenario, there is	2020-21 (519) Cumulative Revenue (4.000)
scope of reduction particularly in	Gap FY 2020-21 (4,030)
industrial tariff.	
Energy Sales statement table 42	Category wise energy sales for MYT Period
DHBVN has projected a sales	from FY 2020-21to FY 2024-25 have been
figure of 26394.41 MU for FY	projected by considering Compound Annual
2020-21 reduced industrial output,	Growth Rate (CAGR) of previous years'
there is a need to review the Sales	sales. Keeping in view the category wise
estimate for both HT and LT	load growth, base year sales have been
industry. It is pertinent that in FY	escalated with appropriate CAGR for
2019-20, DHBVN has projected a	estimating the sales for MYT Control Period.
drop of nearly 396 MU.	
Distribution Losses	Discom has submitted the distribution loss
• DHBVN has considered	trajectory as per the MYT Regulations, 2019
distribution loss of 15% for FY	where in collection efficiency to be
2019-20 against 14.14%	considered is 99.50% for the entire control
approved by the Commission.	period. In regard to the objection of the
Similarly, they are projecting	intervener for distribution loss, Nigam
14.60% loss trajectory for FY	submits that it avoided over commitment and
2020-21.	submitted the target distribution loss level of
• Commission is requested to	15% considering the fact that there is
approve the energy balance after	saturation in loss levels which can be
considering better targets for	observed in actual distribution loss of
AT&C losses, distribution losses	15.34% in FY 2018-19 & 17.08% till H1 of
and collection efficiency. The	FY 2019-20. However, Discom has
projected loss of 14.60% for FY	endeavoured to further reduce the same
2020-21 has to be definitely less	over the second control period.
than the approved target of	
14.14% for FY 2019-20.	
Admn. & General Expenses	Nigam submits that discom has projected

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### **Objections** Replies A&G expense considering the inflation factor Commission had approved Rs 81.69 Cr while DHBVN has as per the relevant MYT regulations for FY 2019-20 and second control period FY 2020projected Rs 116.56 Cr for FY 21 to FY 2024-25. Discom has also 2019-20. DHBVN has applied submitted WPI and CPI data of relevant 4.66% escalation factor of years with the MYT petition for reference. against the Commission's approved factor of 3.64% per annum. There is no justification DHBVN inflate for to the escalation factor and thus the Commission is requested not to allow any increase in the revised projection of A&G expenses for FY 2019-20. Similarly, DHBVN has projected a figure of Rs 121.22 Cr for FY 2020-21 applying 4.6% indexation factor. Commission is requested to down size the projected figure for FY 2020-21 realistically. **Employee Expenses** Nigam has the same response as that of the Commission in its Tariff Order for objection at Sr. No.13, not repeated here for 2019-20 had approved indexation the sake of brevity. factor of 3.04% per annum of employee expense while DHBVN in para 4.11.1 of their filing have indexed at 4% for FY 2018-19 and 4.66% FY 2019-20. for Commission is requested approve employee expenses based on the escalate factor of 3.04%. Non-Tariff Income [NTI] The Nigam has not considered the delayed DHBVN has retained NTI at the payment surcharge for FY 2018-19 as part

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## **Objections**

same level as in the FY 2018-19. In our objections in the previous year, we had raised an issue that income due to late payment surcharge which is legitimate NTI should be taken into account; it is not clear whether DHBVN has done the same for 2018-19 or otherwise; if not the Commission is requested to bear this point in mind while approving NTI for 2020-21.

## **Replies**

of non-tariff income. As the delayed payment surcharge are the charges collected against the receivables which were not timely received from the consumers. Due to delay in receiving of revenue, the Nigam has to arrange additional working capital to carry out its operation work. Hence, the revenue received from delayed payment surcharges is not an income to the Discoms, rather it is an carrying cost recovered from consumers to repay the interest on the increased portion of working capital which has occurred due to delay in receiving of revenue.

Nigam also appreciates the fact that the Hon'ble Commission has considered Nigam's plea and has excluded the same from Non-Tariff Income in section 67.2 of the MYT Regulations, 2019.

### Para 3.27.1

Review of the table 33 reflects that DHBVN has overshot the approved figures of the Commission in the following sub-heads;

- A&G Expenses
- Interest & Finance Charges
- Provision for bad & doubtful debts

Commission is requested to take a serious

view of the above defaults while truing up.

In regard to the objection of overshooting of A&G expenses, Nigam has same response as that of the objection at Sr. No.13, not repeated here for the sake of brevity.

In regard to the objection of overshooting of Interest & Finance Charges, Nigam submits that discom has projected its cost on normative basis, actual interest cost of UDAY bonds incurred during H1 of FY 2019-20, digital payment charges being borne by discom and Guarantee fees paid to the State Government for raising working capital which has resulted rise in Interest & Finance charges. Actual position will be submitted to the Hon'ble Commission at the time of true-up.

In regard to the objection of Provision for

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Objections	Replies
	bad and doubtful debts, Nigam submits that
	discom has projected the cost on normative
	basis as per the MYT regulations, 2019 and
	actual position will be submitted to the
	Hon'ble Commission at the time of true-up.
Para 4.5.4	Nigam would like to submit that Cross
Contention of DHBVN that majority	Subsidy Surcharge (CSS) and Additional
of OA consumers have shifted to	Surcharge (AS) are legitimate charges being
grid power after introduction of	levied on open access consumers as
TOU tariff is not entirely correct,	determined by the Hon'ble Commission to
the shift of consumers has taken	sustain financial viability of the Discom. And
place due to the increased levy of	also, in line with the applicable regulations
CSS and Additional Surcharge	and practices followed by the other utilities.
which made the OA Power	
financially unviable.	
Para 4.21.1	Nigam has provided its response to this
Notwithstanding Regulation 64 of	objection in its response to objection at Sr.
MYT regulation 2019, we request	No. 16, not repeated here for the sake of
the Commission to disapprove	brevity.
writing off bad and doubtful debts	
otherwise it will give further rise to	
inefficiency.	

Commission's View: The Commission has perused the detailed objections filed by FIA as well as issue wise reply filed by the Nigam. The Commission observes that most of the issues raised by FIA are similar to that of JSL on which this Commission has already given its views. Additionally, FIA has raised the issue of refund of FSA, the Commission, on this, agrees with the reply of the Nigam that the same has already been re-conciled and consolidated by the Commission. Further, all expenses including losses, write – off of bad debt, collection efficiency, treatment of non-tariff income and true-up are dealt with by the Commission in accordance with the provisions of the MYT Regulations in vogue.

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# 2.3.7 Gaushalas, Anath Ashrams (Orphanages) and Vridhh Ashrams (Old Age Homes)

Regarding reduction in electricity rates for Gaushalas, Anath Ashrams (Orphanages) and Vridhh Ashrams (Old Age Homes): Director, Gauvansh Gaushala Seva Sangh Haryana and Director, Jann Seva Sansthan (Regd.) Haryana requested Commission regarding reduction in electricity rates in the above mentioned institutions.

# Reply of UHBVNL regarding reduction in electricity rates for Gaushalas, Anath Ashrams (Orphanages) and Vridhh Ashrams (old Age Homes) is reproduced below:

Please refer to your office memo no.1845-46/HERC dated 07.02.2020 vide which request of Director, Gauvansh Gaushala, Sewa Sangh, Haryana and Director, Jan Sewa Sansthan, Haryana regarding reduction in electricity rates for Gaushalas, Anath Ashrams (Orphanages) and Vridhh Ashrams (Old Age Homes) was sent to examine and sought comments of the Nigam. The comments are as under: -

Sr.No.	Description	Reply
1	To reduce the	Presently, registered Gaushals are being charged
İ	electricity rate of	electricity tariff in accordance in Sales Circular
İ	Gaushalas	No. 69/2007 subject to a maximum rebate in
İ		bill/subsidy amount which shall not exceed Rs.
İ		2000 per month.
İ		It is also relevant to mention here that Hon'ble
		CM, Haryana announced on 02.04.2018 that
		"Electricity supply to Gaushalas be charged up to
		1000 units @ Rs.2 per unit and above 1000 units
		shall be charged as residential rates."
1		In compliance to the announcement, a proposal
1		for providing subsidy of Rs. 2.67 crore per annum
1		(Subjected to True up based actual consumption
1		at the year end) under section 65 of Electricity
l		Act, 2003 stands submitted to Finance
1		Department, Haryana on 04.07.2019 which is
İ		pending with FD as on date.
İ		Further, the tariff is in the purview of HERC and
İ		no rebate can be provided at the DISCOMs level.
2	To reduce the	The tariff is in the purview of HERC and no rebate

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Sr.No.	Description	Reply		
	electricity rate Anath	can be provided at the DISCOMs Level.		
	Ashrams	Further, if the tariff rates are to be reduced. The		
	(Orphanages) and	govt. of Haryana would be required to		
	Vridhh Ashrams	compensate the State Discoms in accordance to		
		Section-65 of Electricity Act by providing advance		
		subsidy.		

Commission's View: The Commission has perused the aforementioned submissions and observes that concessional tariff(s) can only be made applicable in case the State Government commits to grant subsidy in accordance with Section 65 of the Electricity Act, 2003.

# 2.3.8 Objections from Haryana Chamber of Commerce & Industry, Panipat

This is regarding lack of continuous supply of Electricity in Industries: It is intimated by Shri Vinod Khandelwal, Chairman, that they don't have any production of electricity in Haryana. There is dependency on third party for Electricity. It is a matter of concern that there is a huge difference in the purchase cost by UHBVN and sales cost of electricity to industrial consumers in Haryana. Inspite of giving high rates for electricity, the industrial consumers lack proper supply of electricity. The main reasons are enumerated below:

- Power House maintenance is not carried out as per requirement of Industrial consumers.
- Transformers in Standby are not available.
- There is lack of technical and skilled staff for maintenance.

# 2.3.9 Additional Submission from Haryana Chamber of Commerce & Industry, Panipat.

- It has been recession time for Industries in Panipat industrialist and businessman are struggling with their businesses. Electricity rates are a matter of concern for the Industrial consumers. Therefore, request you to reduce the Electricity rates and make it cost effective for the Industrial consumers.
- 2. Panipat has been giving stiff competition to China and. Other Countries in textile market In order to revive and progress of Industries Per unit Cost of Industrial

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Electricity should be reduced to Rs.5 per unit. It will act as a catalyst in the growth of Industries in Panipat.

- 3. Independent Feeder Line loss cost should be waived off.
- 4. No TDS is being cut on the Interest given on Advanced Consumption Demand, ACD security deposit .Therefore ,TDS should be cut on the Security.
- 5. The industrial consumer having load up to 49 KW falls under LT categories. The load under LT category should be increased to 100 KW as in Punjab and Rajasthan.
- 6. While applying for New Electricity connection service charge is high as compared to security deposit. For a new connection security deposit is Rs. 1000/- whereas the service charge is Rs. 2000/-. Therefore, I request you to lower down or skip the service charge.
- 7. Industries in which Smart Meters are installed should get refund of the security deposited by them.

Commission's View: The Commission has taken note of the aforesaid submissions. As far as quantum of electricity supply to HT Industry is concerned, HCCI (Panipat) may submit details of the same for the FY 2019-20 month wise. The issue of ACD and Service connection charges are governed by a separate set of Regulations, hence, cannot be considered in the ARR / Tariff Order. As far as increasing LT load to 100 kW is concerned, the Commission is of the considered view that it would be retrograde step as at the time of bringing in comprehensive power sector reforms in Haryana the same was 100 kW which was consciously, over a period of time, brought down below 50 kW by the Commission. Further, reducing HT Tariff would mean shifting of financial burden to the more vulnerable DS and other categories of consumers who are paying a tariff below CoS. Nonetheless, the Commission will consider ToU / ToD option for the HT Industries to bring down the average cost of electricity for t

2.3.10 Comments of Mushroom growing farmers in the state- lowering electricity rates.

Request for lowering the electricity tariff @2/- per unit.

Farmers in the state are suffering and are not able to progress due to very high rate of electricity charged for mushroom cultivation activity. The farmers doing mushroom cultivation work are been charged at par to Industrial tariff rate which has made our work unviable. We

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request you to please allow us 24 hr electricity @2/- per unit. It will make competitive to other state farmers and also to create growth opportunities; generate more employment in rural areas along with increasing income of marginal and landless farmers.

Govt. push for mushroom cultivation will also sort out the stubble burning problem besides creating additional income with straw sale instead Of burning and polluting the environment.

The push to mushroom cultivation by making it viable commercial horticulture activity is in accordance with Govt. plan of doubling farmer's income by 2022 and also meeting targets of crop diversification.

We, the farmers of Haryana plea that the request be taken with an immediate action and create prosperity with self-employment opportunities & rural development.

#### Commission's View:

The Commission has taken note of the above and shall consider the relief sought while determining the consumer category wise distribution and retail supply tariff in the present Order.

# 2.3.11 Comments of Director of Industries and Commerce, Haryana - Input on Quality of Electric Supply and Tariff Structure in Industries

Assistant Director (Tech.), Director of Industries & Commerce, Haryana vide letter memo No. TS/HERC/2875-A dated 12.02.2020 wherein reference has been made to HERC office memo no. 1624-25/HERC/Technical, dated 28.01.2020 regarding Quality of Electric Supply for the Industries.

It is submitted that mostly industrial associations have submitted in their representation that Quality of Electric Supply is good and improving except for Industrial Association of Sonipat, Bhiwani, Charkhi Dadri, Panchkula and Yamuna Nagar wherein they have submitted in their representation poor and interrupted supply of electricity along with frequent tripping.

Regrading Tariff structure, industrial associations have shown concern and have submitted that total cost of electricity per unit is high in comparison to the neighbouring state like Punjab and Himachal Pradesh which increases the overall production cost and as result they are facing tough competition from their competitor in the neighbouring State. Inputs received from different industrial associations in the districts are sent along with letter.

### Commission's View:

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The Commission has considered the above submissions and directs the Discoms concerned to examine the issue and submit a report to the Commission within two months of this Order as the Commission is of the considered view that there ought not to be any reason, including local distribution system constraints, leading to unsatisfactory power supply in these urban areas.

# 2.3.12 Comments of Delhi NCR Plywood Manufacture Association and Kharkhoda Industries Welfare Foundation.

- 1. To waive off peak load charges (PLEC)as The State of Haryana is no more power deficit. And, has in fact surplus availability of power.
- 2. Fixed charges@ Rs.170/KVA being without any units of supply, continuous to be a monopolistic charge particularly on MSMEs. Predecessor of UHBVN used to charge MMC which related to minimum consumption of power BUT, the present Utility has restrictively imposed fixed charges without any relation to power consumption. Hence, Rs 170/kVA is equivalent to 25 units/KVA at the current tariff rate, but not a single unit is being provided against these fixed charges.
- 3. In the current scenario of financial hardships faced by MSMEs, deposit of ACD(Advanced Consumption Deposit) as security equivalent to TWO months' average consumption, is retardant for growth of MSMEs, for want of working capital. It needs to be reduced to one month's average consumption of industrial unit. Such encouragement would in effect, generate further demand of power that would add to the health of our UHBVN.
- 4. Another burden on industries is unheard of charges on account of Feeder Line Loss which is T&D loss due to inefficiency of Utility's own control/infrastructures. It needs to be done away with as the Buyer may not be made to suffer for Seller's own inefficiency. Overhead naked conductors need to be replaced by underground sheathed cables which would also save T&D / theft losses and back-flow of current which affects uninterrupted supply.
- 5. To promote exports and for global market competitiveness, Rs 2/unit needs to be given as tariff subsidy to export oriented MSME units like facility given to Block C & D to make these areas to be in developed one.
- 6. To safeguard any kind of damage on back flow of current and voltage fluctuation, it would be good to install circuit breakers, which would save opportunity loss on account of replacement of cables and labour.

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Discoms reply on the objections of Delhi NCR Plywood Manufacture Association and Kharkhoda Industries Welfare Foundation- Sonipat on MYT Petition of UHBVN for FY 2020-21 to FY 2024-25 is reproduced below:

#### **Intervener Objection Discoms Comment** To waive off peak load charges The peak load exemption charges are being (PLEC) as the State of Haryana is charged to HT industrial consumers as per HERC Tariff Order dated 29.05.2015. Genesis no more power deficit. And, has in fact surplus availability of power. of levying of PLEC charges is completely different for the very concept of surplus power. PLEC is being charged to contain the peak demand of the consumers within the permissible load bearing capacity of the distribution network. However, keeping in view the power surplus position within the state during off peak season, Discoms have implemented Night time Concessional Tariff for HT Consumers for incremental consumption during off peak hours. Further, considering the response received from the consumers, in public hearing, the CMD Discoms has also proposed in the 22<sup>nd</sup> SAC meeting held on 24.02.2020 that to ensure certainty in electricity pricing, concessional tariff for HT Consumers may be extend for three years. Fixed charges @ Rs. 170/kVA The fixed charges are being charged as per being without any units of supply, the Tariff approved by the Hon'ble continuous to be a monopolistic Commission. It may be noted that Discom charge particularly on MSMEs. being an obligated entity are bound to create Predecessor of UHBVN used to infrastructure necessary and charge MMC which related to generating stations under long term agreement minimum consumption of power to ensure the supply of power in most present economical and reliable manner to the but, the Utility has restrictively imposed fixed charges consumer. However, the complete capacity without any relation to power charges of generating station and network cost consumption. Hence, Rs. 170/kVA have to be borne by the Discom even if the

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#### **Intervener Objection Discoms Comment** is equivalent to 25 units/kVA at the consumer is not drawing power from the current tariff rate, but not a single Discom. It would pertinent to mention here unit is being provided against that the recovery of fixed charges from the these fixed charges. Consumers through Tariff is very less as compare to actual network and capacity charges borne by the Discoms and the balance amount of network and capacity charges is being recovered through the energy charges of retail supply Tariff. Therefore, to recover capacity charges and network cost of the Discoms, a reasonable amount of charges is being recovered from the consumers in form of fixed Charges. In the current scenario of financial ACD is being charged to the hardships faced by MSMEs, consumers as per the Regulation 5.5 of the ACD (Advance HERC Duty to Supply Regulation 2016. The deposit of ACD norms fixed by the Hon'ble Commission Consumption Deposit) as security months' to TWO are already quite reasonable, as in the event of equivalent average consumption, is retardant payment default by the consumer, Discoms for growth of MSMEs, for want of had to serve a notice of 15 days to the working capital. It needs to be consumer after arace date before reduced to one month's average disconnection. Accordingly, the Discoms are consumption of industrial unit. bearing the upfront cost of electricity supplied Such encouragement would in to the consumers. Therefore, ACD norms are effect, generate further demand of reasonable and shall be adhered as directed power that would add to the health by the hon'ble Commission. of our UHBVN. It is further submitted that determination of ACD Charges do not come under the ambit of HERC MYT Regulations, 2019 therefore issue regarding ACD may not be dealt along with the determination of ARR for Second MYT Control Period from FY 2020-21 to FY 2024-15. Another burden on industries is UHBVN has reduced AT&C losses by 12.16% unheard of charges on account of over the period of four years i.e. from Feeder line losses which is T&D FY 2014-15 to FY 2018-19. It may further be

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	Intervener Objection	Discoms Comment		
	loss due to inefficiency of Utility's	noted that the Hon'ble Commission has been		
	own control/ infrastructure. It	determining the ARR of Discoms as per the		
	needs to be done away with as	approved T&D losses therefore no inefficiency		
	the Buyer may not be made to	due to T&D losses had been passed to the		
	suffer for Seller's own inefficiency.	consumers through the tariff. Thus, the		
	Overhead naked conductors need	contention of objector is devoid of any merit.		
	to be replaced by underground	Further, the works of undergrounding the		
	sheathed cables which would also	overhead cable has already been initiated by		
	save T&D / theft losses and back-	the Discoms under the Smart City project. The		
	flow of current which affects	same will be rolled out in other cities/towns		
	after examining the outcomes of the smart city			
		projects.		
5.	To promote exports and for global	The retail supply tariff approved by the Hon'ble		
	market competitiveness, Rs. 2/unit	Commission is being charged to the various		
	needs to be given as tariff subsidy	category of consumers. Regarding the rebate		
	to export oriented MSME units like	of Rs 2/kWh to MSME industries of C&D		
	facility given to Block C&D to	blocks, it is submitted that the amount		
	make these areas to be in	balancing the rebate is being provided by the		
	developed one.	Ministry of Micro, Small and Medium industry		
		enterprises to Discoms in form of advance		
		subsidy. The matter of subsidy to any category		
		of consumer is in the preview of State		
		Government as per Section 65 of Electricity		
		Act of 2003.		
6.	To safeguard any kind of damage	UHBVN is making earnest efforts to ensure		
	on back flow of current and	quality and reliable power supply to the		
	voltage fluctuations, it would be	consumers. UHBVN has already installed the		
	good to install circuit breaker,	requisite circuit breakers at substation end to		
	which would save opportunity loss	safeguard the distribution infrastructure.		
	on account of replacement of			
	cables and labour.			

## Commission's View:

The Commission has considered the issues raised by the Intervener as well as the reply filed by the Nigam on the same. As far as Peak Load Exemption Charges

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(PLEC) is concerned the objective is to rein in peak load which may call for scheduling of expensive power as well as impose burden on the system requiring further investments which largely remains un-utilised during the off-peak hours / months of the year. The Commission has introduced ToU / ToD tariff to enable the HT consumers to available concessional tariff so that the average cost of electricity can be cushioned. The issue of ACD, as observed earlier, is not a subject matter being dealt with in the present Order. The issue of MSME subsidy, as also observed by the Nigam, is in the purview of the State Government. As far as line losses are concerned, the Commission after extensive due diligence allows the same after ensuring that over the years the same is reduced.

## 2.3.13 Comments of Model Economic Township Limited

The objector, i.e. Model Economic Township Limited (hereinafter "METL"), is establishing model economic Township (MET), as approved by Government of Haryana, under industrial colony framework after obtaining the licenses for industrial colonies from office of Director General, Town and Country Planning so far aggregated to 1,704 acres in the district of Jhajjar. The project has been envisaged as a fully integrated industrial township and will have industry clusters with support infrastructure of logistics hub, rail and road connectivity and social infrastructure including residential, commercial, recreational and institutional development. The township is likely to generate huge investment and employment opportunities and is important for accelerating the industrialization in otherwise industrially backward district of Jhajjar, Haryana.

# 2. That as per the conditions of license:

"METL to convey ultimate power load requirement of the project to the concerned power utility with a copy to Director within two months period from date of grant of license to enable provision of site in licensed colony and for transformers/switching stations/electrical sub-stations as per the norms prescribed by the power utility in the zoning plan of the project"

"METL shall arrange power connection from UHBVNL/DHBVNL for electrification of the colony and shall install the electricity distribution infrastructure as per the peak load requirement of the colony for which METL shall get the electrical (distribution) service plan/estimates approved from the agency responsible for installation of external electrical services i.e.

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UHBVNL/DHBVNL and complete the services before obtaining completion certificate for colony"

- UHBVNL approved the electrical plan for industrial colony of METL, vide later dated 24<sup>th</sup> August, 2018, for an area of 845 acres for 107.86 MVA and stipulated following conditions:
  - (i) METL shall erect and install 33/11 KV sub-stations and lines as per load along with distribution of T/F of standard quality as per Nigam's specifications;
  - (ii) METL to install/erect whole electrical infrastructure as per Nigam's design, drawing and specifications within a period if five years;
  - (iii) The interim load of 25 MVA shall only be provided to METL subject to deposit of BG for balance electrical infrastructure work.
    - In compliance of the above, METL has planned investment more than Rs. 180 crores, including BG for transmission line proposed to be constructed from Farukhnagar sub-station of HVPNL, in establishing distribution network and substation for an area of ~ 850 acres which will be eventually be handed over to Uttar Haryana Bijli Vitran Nigam Limited (hereinafter "UHBVNL").
- 4. Under section 42 of the Electricity Act, 2003 (hereinafter "the Act") it is the duty of the distribution licensee, i.e. UHBVNL, to develop and maintain an efficient, co-ordinated and economical distribution system in his area of supply and to supply electricity in accordance with the provisions of the Act. The relevant portion of section 42 is reproduced below for ease of reference:
  - "42. Duties of distribution licensee and open access –
  - (1) It shall be the duty of a distribution licensee to develop and maintain an efficient, co-ordinated and economical distribution system in his area of supply and to supply electricity in accordance with the provisions contained in this Act." (Emphasis Supplied)
- 5. The electrical infrastructure and all of the distribution network within the township is being developed by METL. Since cost of such electrical infrastructure is being incurred by METL and as such not considered in the Annual Revenue Requirement (ARR) of UHBVNL, it is submitted that the

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Hon'ble Commission may create a separate category for the consumers located within the township in light of section 62 (3) of the Act so that they do not bear the cost of these investments if same tariff is charged from them. The relevant portion of the section is reproduced below for ease of reference:

- "62(3) The Appropriate Commission shall not, while determining the tariff under this Act, show undue preference to any consumer of electricity but may differentiate according to the consumer's load factor, power factor, voltage, total consumption of electricity during any specified period or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required." (Emphasis Supplied)
- 6. Reliance is placed upon the judgement dated 28.08.2012 of the Hon'ble Appellate Tribunal in Appeal No. 39 of 2012 Rajasthan Engineering College Society *v*. Rajasthan Electricity Regulatory Commission & Anr.<sup>1</sup> (As the law is settled, multiple authorities are not being citied here.) The relevant portion of the said judgement is reproduced below for ease of reference:
  - "22. According to the Appellant, the Commission, while fixing retail tariff, can differentiate between the consumers only on the following grounds which are specified in the Section 62(3) of the Act and not on any other ground:
    - 1) 'Load factor'
    - 2) 'power factor'
    - 2) 'Voltage'
    - 3) 'Total Consumption of electricity during any specified period'.
      - 4) 'Geographical position of any area'.
      - 5) 'Nature of supply'
      - 6) 'Purpose of which supply is required.'

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...

- 24. It is true that Commission cannot differentiate on any other ground except those given in 2nd part of Section 62(3) of the Act. However, the grounds mentioned in the Section are Macro level grounds and there could be many micro level parameters within the said macro grounds. The term 'purpose for which supply is required' is of very wide amplitude and may include many other factors to fix differential tariffs for various categories of consumers as explained below." (Emphasis Supplied)
- 7. The rationale for having a different and lower tariff for consumers located within the township is that the retail tariff for consumers is based on the ARR of the distribution licensee. Since METL has made investment in complete electrical infrastructure within the colony, as stipulated in the licenses obtained by it as well as the approval of electrical plan by UHBVNL (and presumably recovered as part of price of plot from units in METL's colony) and as a consequence such cost has not gone into ARR of UHBVNL, it will be unfair for the consumers located within the area to pay the same tariff as being charged from consumers located outside METL Colony, who have not paid such cost.
- 8. Further, the components of ARR, as specified in the Haryana Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2019 (hereinafter "2019 Regulations"), contain the following components (Regulation 8.3.4) for determination of retail tariff:
  - i) Power Purchase Cost
  - ii) Transmission Charges (Inter State & Intra State)
  - iii) Interest (Term Loan and normative Working Capital Loan, Consumer Security Deposit)
  - iv) Depreciation
  - v) Operation & Maintenance Expenses

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- vi) Provision for bad and doubtful debt subject to a ceiling of 0.5% of the account receivable as per the latest available audited accounts.
- vi) Return on Equity Capital
- 9. Of the above, components pertaining to interest, depreciation, and return on equity of capital should be adjusted and reduced from the tariff payable by the consumers of METL township by reducing the component of investment done by METL. This benefit should definitely be passed on to the consumers. The same treatment should be applied for wheeling charges as that will also have an impact for open access power as METL has made investment in power transmission line from Bhadana sub-station of HVPNL to METL industrial colony. The charges for open access similarly should be reduced accordingly. Therefore, while determining wheeling charges the following components are to be adjusted and considered (Regulation 8.3) while applying the cost of investment of METL:
  - i) Interest on Term Loan
  - ii) Interest on normative Working Capital
  - iii) Interest on deposits from distribution system users
  - iv) Depreciation
  - v) Operation & Maintenance Expenses
  - vi) Return on average (opening + closing) Equity for the relevant year
  - vii) Provision for bad and doubtful debts as may be admitted by the Commissions subject to the ceiling of 0.5% of the account receivable as per the audited accounts of the relevant year.
- 10. The Hon'ble Commission may while determining the tariff (Regulation 17) for the distribution licensee, may deduct the components of interest, depreciation, and return on equity of capital on investment made by METL for the purpose of fixation of tariff for billing to units located in industrial colony of METL so that these units do not bear the cost again which they have already paid as part of plot cost thus making such units as a separate heterogenous group for the purpose of tariff determination. It is prayed accordingly.

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# Discoms reply on comments of Model Economic Township Limited on UHBVN MYT Petition for Second Control Period

As per the HERC Duty to Supply Regulation 2016, any asset created by the consumer from its own funding will be transferred to the Licensee upon completion of the assets and the same will become the property of the Licensee. The assets created out of consumer contribution are being recorded by the Discoms in the separate head in the books of accounts and the actual depreciation booked in the audited accounts is reduced by the amount of depreciation charged on assets created out of consumer contributions. Further, the depreciation, return on equity and interest cost claimed by the UHBVNL in the ARR Petition has been worked out after reducing the estimated amount of assets created from consumer contribution. Therefore, the submission of the objector does not hold any merit, as the asset created due to consumers contribution has already been deducted from the Gross Fixed Assets of the Discoms for working out of different elements of the ARR as well as the tariff of the corresponding years.

Commission's View: The Commission agrees with the reply of the Nigam that the asset created out of consumers contribution is deducted from the Gross Fixed Assets of the Discoms for working out of different elements of the ARR as well as the tariff of the corresponding years.

## 2.4 Public Hearing

The public hearing in the matter was held as scheduled. The interveners mostly reiterated the issues / objections that they had submitted in writing. The submissions made by the Interveners as well as the Commission's view on the same have already been reproduced earlier in the present Order. Hence, for the sake of brevity the same are not being repeated here.

## 2.5 State Advisory Committee (SAC)

The 19<sup>th</sup> meeting of the State Advisory Committee was held on 24.02.2020 in the Conference Hall of HERC at Panchkula to seek views of the Members on the ARR / Tariff Petitions (s) filed by the Haryana Power Utilities i.e. HPCL, HVPNL, UHBVNL and DHBVNL. The agenda was sent to the SAC Members well in advance. The proceedings related to the Discoms are reproduced here under: -

Feedback/suggestion from SAC Members on the ARR/Tariff petition of HPGCL, HVPNL, UHBVN and DHBVN

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- 1. In respect of ARR of Discoms, at the onset the Chairman read out the relevant portion of budget Speech dated 01.02.2020 of Hon'ble Financial Minister which is reproduced as under:
  - "58. Taking electricity to every household has been a major achievement. However, the distribution sector, particularly the DISCOMS are under financial stress. The Ministry intends to promote "smart" metering. I urge all the States and Union Territories to replace conventional energy meters by prepaid smart meters in the next 3 years. Also, this would give consumers the freedom to choose the supplier and rate as per their requirements. Further measure to reform DISCOMs would be taken.

I propose to provide about 22,000 crore to power and renewable energy sector in 2020-21"

2. The Chairman also read out the article published on 24.02.2020 in The Mint entitled as Central govt plans to tighten the screws on debt-ridden Discoms" whereby Power ministry calls for tougher norms and regulations, involving amendments to the Companies Act and Govt is working on reforms to instil financial discipline at state-owned power distribution firms. Further India's average aggregate technical and commercial losses are at 21.4%, among the highest in the world. Discoms have so far been the weakest link in the electricity value chain.

"The prudential norms of PFC and REC are being revised to be on a par with prudential norms of banks, so that if you are making huge losses, then you will not be a good credit risk and you will not get financing. That is why we are saying that we will not close the tap but you have to draw up a plan to reduce the losses and with timelines. We have written about this to the states," Singh said.

These measures also come against the backdrop of India's proposed distribution reform scheme, tentatively named Atal Distribution System Improvement Yojana, which aims to cut electricity losses to below 12%.

3. The Chairman also dwelt on the news related to Agriculture Subsidy issue of Maharashtra wherein news appeared that an investigation Committee formed by the State Power Regulators, Maharashtra Electricity Regulatory Commission (MERC) has said that Mahavitaran- the Power Distribution Utilities in

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Maharashtra Cheated consumers of Rs. 22,000 crore and the Government of Rs. 8250 crores by inflating consumption in the AGRICULURE Sector from 2014-2019.

- 4. Former Chairman HERC, Mr. R.N. Prashar also suggested that the Discoms should focus on reactive power management also, as this will help in reduction of line losses when system loss move toward the technical side. On this issue, CMD Discoms has submitted that reactive energy has largely been put to unity by the consumer due incentive associated with KVAh billing. Further, Discoms has installed APFC on transformers to auto corrected power factor. He further suggested that Discom should think about providing incentive to DS and AP Consumers for maintaining the power factor, as these consumers have a large share in the overall consumer base.
- 5. Further CMD apprised that the target of Mahra Gao Jagmag Gao Yojna (MGJGY) has been completed in 10 districts of Haryana covering 4500 villages by providing 24 hrs supply of electricity. Even in 83 villages of Kaithal and some villages in Gohana as on today offered 24 hrs. of supply of electricity under this scheme of MGJGY.
- 6. Further on the issue of smart meter installation CMD, Discoms apprised that installation of 10 lacs smart by EESL is under way and approximately one lacs meter has already been installed in Gurgram, Panipat, Karnal and Panchkula. CMD/Discoms also raised his concern regarding limited supply/availability of smart meter manufacturing firm in the market. He apprised that they have also initiated the process of tendering for procuring and installation of another 20 lacs smart meters based on capex and opex business model after having detailed deliberations with the smart meter manufacturing firms.

# <u>Supplementary Agenda</u>: Need for having a separate / concessioner tariff for electricity supplied by the Discoms to the Agro-industries in Haryana

The issue of separate tariff category/concessional tariff of Agro-industries in Haryana was discussed at length in the SAC meeting. At the onset the Vice-Chancellor HAU informed the SAC members regarding new technology including irrigation practices that have emerged which not only saves water but reduces electricity consumption. The representative of Agriculture and small Industries also made out a point to encourage Agro-industries like mushroom cultivation, floriculture/tissue-culture, cold storage wherein the input cost including that of

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electricity currently being charged at NDS tariff, have made Agro-industries unviable. The Chairman HERC, agreed with the suggestions given regarding the backward and forward linkage of the Agro-industries to the state/ Agrarian economy. He further said that while deciding electricity tariff for the FY 2020-21, he would give due weightage to the suggestion of the SAC Members. The CMD of the Discoms said that he has no objection as such; however, the tariff design should be revenue neutral.

The Commission, while passing the present Order has kept in mind the suggestions of the SAC Members.

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# **Chapter 3**

### ANALYSIS OF ARR FILINGS AND COMMISSION'S ORDER

The Commission, while passing this Order for True-up of the FY 2018-19, Annual (Mid-year) Performance Review of the FY 2019-20, determination of ARRs of the UHBVNL and DHBVNL for the MYT period from FY 2020-21 to FY 2024-25 and Determination of Distribution and Retail Supply Tariff for the FY 2020-21, has taken into account their respective Petitions including the supplementary submissions, additional information/data provided by them from time to time, revised ARRs, objections / suggestions of the stakeholders, replies of distribution licensees thereto, views expressed by the objectors during the public hearing(s) and the suggestions of the State Advisory Committee.

# 3.1 True-up of the ARR for the FY 2018-19

The Discoms have submitted that their petition(s) for True-up of the ARR for the FY 2018-19 are based on the audited accounts. The True-up petitions have been examined by the Commission in the light of the MYT Regulations, 2012 and amendment thereof, relevant Orders of the Commission and the audited accounts for the FY 2018-19 made available to the Commission by the Discoms.

Regarding True-up of the ARR, the MYT Regulations, 2019 provide as under: -

**"13.** As per the Regulation 11.6 of 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.

The relevant excerpt of the MYT Regulation 2019 is provided as under:

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. Upon completion of such review/truing up, either approve the proposed modification with such changes as it deems appropriate, or reject the application for the reasons to be recorded in writing. The Commission shall afford opportunity of being heard to the affected party in case it considers rejecting the application."

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The Commission had issued the Tariff Order on Distribution & Retail Supply ARR & Tariff for FY 2018-19 on 15<sup>th</sup> November 2018, in line with the provisions of the MYT Regulation 2012. As specified in the Regulation 11.6 of MYT Regulation 2019, Aggregate Revenue Requirement for FY 2018-19 is required to be 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. Accordingly, the True-up of each item of expenses is discussed in the paragraphs that follows.

# 3.1.1 Operation & Maintenance Expenses

The Operation & Maintenance Expenses of the company includes

- Employee Expenses;
- Repair & Maintenance Costs and
- Administrative and General Expenses.

Employee Expenses consist of salaries, dearness allowance, bonus, terminal benefits in the form of pension & gratuity, leave encashment and staff welfare expenses.

Repairs and Maintenance expenses include regular expenditure made for improvement of system reliability and quality of power supply. Also, these expenses are important in view of the system maintenance and loss reduction within the distribution network.

Administrative expenses mainly comprise of rents, telephone and other communication expenses, professional charges, conveyance and travelling allowances and other debits.

Comparison of actual O&M expenses incurred by UHBVNL as against the approved expenditure (after deducting the capitalization of expenses), are tabulated in the following table.

O&M Expenses of UHBVNL for FY 2018-19 (Rs. Crore)

Particulars	Approved	Actual	Difference
Employee Expenses	803.02	615.19	(187.83)
Administration & General Expenses	99.91	106.21	6.30
Repair & Maintenance Expenses	131.56	66.97	(64.59)
Terminal Liabilities	300.00	303.99	3.99
Total	1,334.49	1,092.36	(242.13)

Actual O&M Expenses are less than approved expenses of the FY 2018-19. Thus, UHBVNL has requested that the Commission may allow the actual O&M expenses for the FY 2018-19. Increase in Administrative and General Expenses is primarily due to payment of stamp duty on issuance of share capital and payment of lease line and AMC charges to HCL for

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billing software. UHBVNL has requested that the Commission may kindly approve the actual A&G Expense for FY 2018-19.

The Commission has examined the true up for the FY 2018-19 proposed by UHBVNL and observes that the total O&M expenditure as per actuals is largely within the approved amount except for the A&G expenses. Based on the explanation for the additional expenditure on this account provided by UHBVNL, the Commission approves the true up of O&M expenditure as proposed by the licensee. However, the expenses that are in the nature of onetime expenses are to be excluded while projecting future period expenses.

#### **DHBVNL**

A Comparison of actual O&M expenses against the approved expenses (after deducting the capitalization), are tabulated in the following table.

O&M Expenses of DHBVNL for FY 2018-19(Rs. Crore)

Particulars	Approved	Actual	Difference
Employee Expenses	820.03	831.26	(11.23)
Administration & General Expenses	85.18	111.37	(26.19)
Repair & Maintenance Expenses	148.99	106.88	42.11
Terminal Liabilities	343.25	360.00	(16.75)
Total	1,397.45	1,409.51	(12.06)

DHBVNL has requested the Commission to kindly allow the actual O&M expenses to DHBVN for FY 2018-19. DHBVNL has informed that the increase in Administrative and General Expenses is primarily due to payment of stamp duty on issuance of share capital on account of release of equity under UDAY, payment of lease line and AMC charges to HCL for billing software, consultancy fee, legal fee and internal audit fee and has prayed that the Commission may kindly approve the actual A&G Expense of Rs. 111.37 Crore for FY 2018-19.

The Commission has examined the true up for the FY 2018-19 proposed by DHBVNL and observes that the total O&M expenditure as per actuals is higher than that approved by the Commission for the year. Upon examining individual components of the O&M expenses, it is observed, though the employee cost is marginally higher than that approved, it is lower than the expenditure incurred on this account for the FY 2017-18. The increase in A&G expenses have been explained by the licensee as having arisen due to payment of stamp duty on issuance of share capital on account of release of equity under UDAY, payment of lease line and AMC charges to HCL for billing software, consultancy fee, legal fee and internal audit fee. Based on the explanation for the additional expenditure on this account provided by the licensee, the Commission approves the true up of O&M expenditure as

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**proposed by the licensee.** However, the expenses that are in the nature of onetime expenses are to be excluded while projecting future period expenses.

Terminal benefits are uncontrollable expenses as per the MYT Regulations, 2012. Hence, the same are allowed to be trued-up based on the audited accounts of the Discoms i.e. **Rs. 303.99 Crore for UHBVNL** and **Rs. 360.00 Crore for DHBVNL**.

The CMD of the Discoms, in the SAC meeting, has informed that the restructuring of the power utilities has been approved by the authority concerned. The Commission directs the licensees to submit a copy of the report on restructuring within 3 months of this Order along with the proposed action plan.

# 3.1.2 Depreciation

The Commission observes that actual opening Gross Fixed Assets (GFA) as on 1.4.2018 for UHBVNL is Rs. 7034.76 Crore i.e. lower than Rs. 7505.66 Crore estimated by the Commission for calculating depreciation for the FY 2018-19. While in the case of DHBVNL the actual opening GFA as on 1.4.2018 as per audited accounts for the FY 2018-19 is Rs. 7683.95 Crore i.e. lower than Rs. 8410.25 Crore estimated by the Commission for working out depreciation for the FY 2018-19 in the ARR Order dated 15.11.2018.

In view of the change in the opening balance of GFA and the composition of assets, the average rate of depreciation for FY 2018-19 works out to 4.66% as against 4.60% considered by the Commission for UHBVNL and 4.59% against 4.54% for DHBVNL in the ARR Order dated 15.11.2018.

The Gross depreciation for the FY 2018-19, as per the audited accounts, is Rs. 328.03 Crore and Rs. 353.06 Crore for UHBVNL and DHBVNL respectively. The net depreciation (net of depreciation on assets funded through consumers' contributions/grants) is Rs. 285.96 Crore and Rs. 241.14 Crore respectively for UHBVNL and DHBVNL, based on the depreciation rates considered by the Commission. Accordingly, the Commission approves the deprecation amount as per the audited accounts as above, the details are provided in the table below:-

Depreciation of UHBVNL for FY 2018-19 (Rs. Crore).

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Particulars	Approved vide Order dated 15.11.2018	Actual as per audited Accounts	HERC Revised Approval		
Opening GFA	7,505.66	7,034.76	7,034.76		
Depreciation for the FY	345.41	328.03	328.03		
Less Dep -Consumer Contribution	40.12	42.07	42.07		
Net Dep for FY 2018-19	305.29	285.96	285.96		

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Particulars	Approved vide Order dated 15.11.2018	Actual as per audited Accounts	HERC Revised Approval
Average depreciation rate	4.60%	4.66%	4.66%

## Depreciation of DHBVNL for FY 2018-19 (Rs. Crore)

Particulars	Approved vide	Actual as per	HERC Revised
	Order dated	Audited accounts	approval
	15.11.2018		
Opening Gross GFA for the year	8410.25	7683.95	7683.95
Depreciation	382.19	353.06	353.06
Rate of Depreciation	4.54%	4.59%	4.59%
Less: depreciation on consumer			
contribution	94.10	111.93	111.93
Net Depreciation	288.09	241.14	241.14

# 3.1.3 Interest on Consumers Security Deposit

The Commission, vide the ARR Order dated 15.11.2018, had approved interest on consumer security deposit at Rs. 85.24 Crore (UHBVNL) for the FY 2018-19, as proposed by the licensee.

UHBVNL has now intimated that the actual interest paid on consumers' security deposit, as per their audited accounts of the FY 2018-19, is Rs. 74.57 Crore, which is lower than the interest cost already approved by the Commission. The Commission, therefore, approves Rs. 74.57 crores as interest on consumer security deposit for the FY 2018-19 i.e. being the amount actually paid by the licensee.

Similarly, in the case of DHBVNL, the Commission had approved Rs. 76.87 Crore as interest on consumer security deposit while the actual expenses, as per the audited accounts, is Rs. 51.07 Crore. The actual expenditure of both the Discoms, being lower than that allowed by the Commission in its ARR Order for the FY 2018-19, is therefore, approved for true- up. The Commission observes that a large number of consumers complain about non-payment of interest on consumers security deposit which ought to be paid by the Discoms in time. The Commission directs that the Discoms should evaluate the consumer security deposit vis-à-vis consumers average bills periodically and align the same in accordance with the HERC Regulations and Supply Code in this regard. The Commission further directs that the licensee should put up a timeline in this regard within 3 months of this Order.

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## 3.1.4 Interest on Capex loans

#### **UHBVNL**

The Commission observes that UHBVNL has incurred an expenditure of Rs. 887.12 Crore on new capital works as against Rs. 1367.47 Crore approved by the Commission for the FY 2018-19. On this account, the actual interest cost on Capex loan incurred by the Discom is Rs. 123.36 Crore as against Rs. 129.92 Crore (net of IDC) proposed by the licensee and approved for the FY 2018-19. The Commission has examined the interest cost actually incurred by the licensee during the FY 2018-19 as against that approved by the Commission and observes that the same are within the approved limits. Further, in view of lower consumer contribution and equity, the capital works have been funded mainly through borrowings. Accordingly, the actual interest cost of Rs. 123.36 crore is approved for true up for the FY 2018-19.

#### **DHBVNL**

The Commission has allowed Rs.184.73 Crore to DHBVN towards the interest liability on long term borrowing for FY 2018-19. However, as per the audited accounts the gross interest liability towards long term borrowing is Rs. 209.29 Crore. After adjusting interest capitalisation Rs. 146.15 crores, the net interest cost of DHBVN on long-term loans works out to Rs. 63.14 Crore for FY 2018-19. As the actual interest of DHBVN on long term borrowing is less than the amount approved by the Commission in Tariff Order dated 15<sup>th</sup> November 2018 and is in line with actual capital expenditure and its funding thereto; the Commission approves the actual interest cost incurred on long term borrowing by DHBVN i.e. Rs. 63.14 crores for FY 2018-19 on true up.

#### 3.1.5 Interest on Working Capital Loan

As the total approved ARR has undergone a change on account of the true- up of expenses that has been approved by the Commission; the admissible working capital loan and interest thereto has been recalculated accordingly in line with the MYT Regulations. The Commission observed that average MCLR of State Bank of India (SBI) in FY 2018-19 was 8%. The Commission has further allowed a margin of 1.5% on the SBI base rate. Accordingly, while calculating interest on working capital of UHBVNL for the FY 2018-19, the rate of interest has been taken as 9.5%. The revised calculation of approved working capital borrowings and Interest cost thereto, for UHBVNL is as under:

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Interest on Working Capital Loan of UHBVNL (Rs. Crore)

Interest on working capital	FY 2018-19
O&M expenses for 1 month	91.03
Maintenance spares 1% of opening GFA	70.35
2 months receivables	2159.87
Uncollected revenue	129.59
Total	2450.84
Less	
ACD, as per audited accounts	1254.99
Net working capital	1195.85
Interest rate	9.50%
Interest cost	113.61

As against approved Interest on working capital borrowings amounting to Rs. 171.78 crores, DHBVNL has incurred an expenditure of Rs.117.67 crores during the FY 2018-19. The Commission has examined the same and finds the cost incurred as reasonable; accordingly approves the same for true up.

It needs to be noted that the licensees are allowed to retain certain income i.e. interest on delayed payment surcharge and discount on early payment of energy charges amounting to which Rs. 179.98 crores (UHBVNL) and Rs. 107.11 crores (DHBVNL) for the FY 2018-19. Such income is for setting off the cost of additional working capital that may have been required.

## 3.1.6 Interest on UDAY Bonds, FRP Borrowings and HVPNL Bonds

The Government of India had notified Ujwal Discom Assurance Yojana (UDAY) scheme for operational and financial turnaround of the State owned power distribution companies (DISCOMs), on 20<sup>th</sup> Nov 2015 under which State shall take over 75% of Discoms debt as on 30<sup>th</sup> September, 2015 over two years i.e. 50% of Discom debt shall be taken over in FY 2015-17 and 25% in the FY 2018-19.

The Petitioners have submitted that the Government of India, the State of Haryana and the DISCOMs of Haryana (Uttar Haryana Bijli Vitran Nigam Ltd. and Dakshin Haryana Bijli Vitran Nigam Ltd.) signed the tripartite Memorandum of Understanding (MOU) under the Scheme UDAY – "Ujwal DISCOM Assurance Yojana" on 11th March 2016 for operational and financial turnaround of the DISCOMs. The implementation of UDAY is expected to lead to changes in the projections of interest and finance charges for the Discoms and have a positive impact on the revenue requirement of the Discoms.

The turnaround is proposed to be achieved through the following measures: -

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- Improving operational efficiencies of DISCOMs (AT&C Losses to be 15% & ACS ARR gap to be eliminated by 2018-2019)
- Reduction of cost of power
- Reduction in interest cost of DISCOMs
- Enforcing financial discipline on DISCOMs through alignment with State finances
- Salient Features of UDAY are listed below:
- States shall take over 75% of DISCOM debt as on 30 September 2015 over two years - 50% of DISCOM debt shall be taken over in 2016-17 and 25% in 2017-18
- Government of India will not include the debt taken over by the States as per the above scheme in the calculation of fiscal deficit of respective States in the financial years 2016-17 and 2017-18
- States will issue non-SLR including SDL bonds in the market or directly to the respective banks / Financial Institutions (FIs) holding the DISCOM debt to the appropriate extent
- DISCOM debt not taken over by the State shall be converted by the Banks / FIs into
  loans or bonds with interest rate not more than the bank's base rate plus 0.1%.
  Alternately, this debt may be fully or partly issued by the DISCOM as State
  guaranteed DISCOM bonds at the prevailing market rates which shall be equal to or
  less than bank base rate plus 0.1%.
- Reduction of cost of power.

The schedule of takeover of loan has been given as under: -

Break up of State Govt Takeover of Loans							
Particulars	articulars FY 16 FY 17 FY 18 FY 19 FY 20						
Grant (%)	11.25%	11.25%	11.25%	11.25%	11.25%		
Grant (Cr)	3,892.5	3,892.5	3,892.5	3,892.5	3,892.5		
Equity (%)	3.75%	3.75%	3.75%	3.75%	3.75%		
Equity (Cr)	1,297.5	1,297.5	1,297.5	1,297.5	1,297.5		
Debt (%)	35.00%	45.00%	30.00%	15.00%	0.00%		
Debt (Cr)	12,109.9	15,569.9	10,379.9	5,190.0	0.0		

The Amount taken over by the Government of Haryana will be converted into grant/equity in 5 instalments in phased manner over five years up to 2019-20 and in the meantime the

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interest cost of such bonds which has not been converted into grant/equity by the GoH has to be borne by the Discoms.

During the FY 2018-19, UHBVNL has borne interest cost of Rs 327.90 Cr total Interest on UDAY bonds, Rs 75.76 has been paid towards HVPN Bonds and Rs 87.01 towards FRP bonds. Similarly, DHBVNL has borne the interest cost of Rs 287.74 Crores on UDAY bonds. Therefore, the Discoms have requested that above interest cost of UDAY and FRP and HVPNL Bonds for FY 2018-19 may be allowed to be trued up.

The Commission observes that the UDAY scheme, if implemented properly, will result in all round benefit, ultimately resulting in lower tariff to the consumers once the State Government completes the committed infusion of funds by way of equity and grant by the end of five years. However, the Commission observes that as per the terms of MoU dated 11.03.2016, the Operational Funding (OFR) has to be provided by the State Government. The interest on the UDAY bonds, HVPNL Bonds and FRP borrowings as quantified and claimed by UHBVNL & DHBVNL for the FY 2018-19 is Rs. 490.67 Crore & Rs. 287.74 Crore. The Commission has examined the contention of the licensees and observes that all these claims are part of the borrowings that are already covered under the UDAY scheme and are, accordingly, part of such OFR to be funded by the State Government.

Besides the above, the Commission has retained the working capital borrowings to the normative or actual level, whichever is lower. The interest cost on borrowings which are not part of the expenses to be allowed as per MYT Regulations are to be treated in accordance with the relevant order of the Commission i.e the order dated 15.11.2018 wherein the Commission had directed that that the interest on UDAY bonds is required to be met through the OFR available under the UDAY scheme in view of the fact that interest cost relating to the distribution and retail supply business is being met through interest on capex borrowings, working capital borrowings and interest on consumer security deposit. The review filed by the licensee on this issue has already been dismissed by the Commission. Further, the Commission observes that since the interest on HVPNL bonds and FRP borrowings did not form part of the ARR petition for the FY 2018-19, filed by the licensees, the same cannot be allowed on true up in accordance with the MYT Regulations.

In light of the above discussions, the Commission is of the considered view that interest on UDAY bonds is required to be met from the OFR support available under UDAY in accordance with the modalities of the scheme. Interest on FRP borrowings and HVPNL

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bonds cannot be allowed on true up since these did not form part of the original ARR petition filed by the petitioners. However, as discussed earlier, the petitioners, while on one hand have raised claim for interest cost in excess of that allowed as per regulations; on the other hand, they have opted not to pass on the benefit of earnings due to interest on delayed payment surcharge and discount on early payment of energy charges which amounts to 179.98 crores (UHBVNL) and Rs. 107.11 crores (DHBVNL) for the FY 2018-19. The Commission is of the considered view that instead of going beyond the scope of regulations, some portion of this additional interest cost can be met from the non-tariff income retained by the Discoms and the balance to be met in accordance with the terms of MOU; thereby decreasing the ultimate burden on the State Government.

#### 3.1.7 Cost of raising Finance and Bank Charges

The Commission had not allowed any expenditure towards cost of raising finance and bank charges to UHBVNL and only Rs. 4.01 Crores was allowed to DHBVNL as proposed by both the Discoms.

As per the audited accounts, UHBVNL has incurred a cost of Rs. 21.15 Crore while DHBVNL has incurred Rs. 22.12 Crore on this account. As it is unavoidable cost required for raising the requisite funds, the Commission allows the same to be trued up. However, in light of the improved ratings of the distribution licensees, the Commission is of the opinion that the licensees ought to move beyond government guarantee for their borrowings from specialised financial Institutions. This may allow them to raise long term loans for Capex at competitive rates and avoid the associated costs. Additionally, due to the relief package in view of the Pandemic announced by the Gol, the Discoms may also see a reduction in interest cost as well as cost of power sourced from CPSUs. The Discoms are directed to examine the same and submit a report to the Commission within a month of this Order.

#### 3.1.8 Other Debits

UHBVNL, in its ARR for FY 2018-19, as per its True-up petition has included other expenses of Rs. 359.99 Crore as per the details provided in the table below: -

Other Expenses of UHBVNL for the FY 2018-19 (Rs. Crore)

Particulars	Amount
Provision for Bad & Doubtful Debts	29.38
Bad & Doubtful debts written off	637.29
Compensation for Injury, death, damage and penalty	6.34
Infructuous Capital Exp. Written off	1.00
Loss on Obsolescence of Stores/ Scrap & Assets	0.98
Material cost variance- Capital	0.28

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Particulars	Amount
Miscellaneous losses and written off	2.63
Provision for amount recoverable from employee	0.68
Total Expenses	678.59

The Commission has examined the submission of the licensee and observes that the major components of 'other expenses' are bad and doubtful debts written off and additional provision on this account. The licensee has justified the expenditure as being on account of write off of bad & doubtful debts under the bill settlement scheme. It has been submitted that UHBVN has launched 'Bill Settlement Scheme' under which defaulting number of disconnected consumers from the date of default to 30th June 2018 was settled as per the HERC Supply Code Regulations, 2014 and its subsequent amendments.

It has been submitted that as per Regulation 17.2 of MYT Regulations, 2012 bad and doubtful book debts allowed to be written off are part of Annual Revenue Requirement of Retail Supply business. Hence, the Discoms have prayed that the Commission may kindly allow the bad debts written off as per the Audited Account of UHBVN for FY 2018-19.

The Commission, in view of the proposed write off, directed the licensee to provide requisite information in this regard as under: -

Bad and doubtful debts shall be allowed to the extent the distribution licensee has actually written off bad debts subject to a maximum of 0.5% of sales revenue. However, this shall be allowed only if the <u>distribution licensee submits all relevant data and information to the satisfaction of the Commission (emphasis added).</u> In case there is any recovery of bad debts already written off, the recovered bad debts will be treated as other income. (In accordance with Regulation 64 of MYT regulation)

The licensee has not provided any details of bad debts written off during the FY 2018-19 and claimed as part of true up cost. The licensee may provide the following information in this regard:

- Consumer category wise separate details of energy charges, fixed charges, electricity duty, municipal taxes, penalties, delayed payment surcharge included in the bad debts written off.
- Age-wise breakup of the above amounts.
- The licensee is required to confirm that all efforts including legal remedies were explored before the process of writing off these amounts was undertaken. Details of these remedies may also be provided.

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 Licensee may confirm that these consumers have been permanently disconnected and are no longer drawing energy from the licensee.

#### In response, the licensee has provided the following information: -

That Bill Settlement Scheme was implemented by UHBVN vide Sale Circular U-15/2018 dated 20.09.2018, for domestic and non-domestic consumers having sanctioned load up to 5KW. Under the Scheme, an amount of Rs. 637.29 Crores (Domestic Rs. 612.38 Crore and Non-domestic: Rs. 24.91 Crore) has been written off on account of Bad and Doubtful debts. The defaulting amount related to SOP and FSA were settled under the scheme. UHBVN had made persistent efforts for recovery of defaulting amounts from the defaulters. Moreover, all possible remedies were explored before implementation of scheme. The connection is not being given to the defaulters/defaulting premises and checking of permanently disconnected premises are being carried out regularly by special teams for recovery of defaulting amount as well as for detection of illegal energy drawl by the defaulter.

The Commission has examined the relevant provisions of the MYT regulations, 2012, in this regard and observes that the regulations provide for an upper limit of 0.5% of total sales revenue. The relevant part of the regulation is reproduced below: -

#### "64 BAD AND DOUBTFUL DEBTS

Bad and doubtful debts shall be allowed to the extent the distribution licensee has actually written off bad debts subject to a maximum of 0.5% of sales revenue. However, this shall be allowed only if the distribution licensee submits all relevant data and information to the satisfaction of the Commission. In case there is any recovery of bad debts already written off, the recovered bad debts will be treated as other income".

The Commission observes that although the licensee is unable to provide adequate information as required by the Commission, the amount written off forms part of the audited accounts and accordingly approves the expenditure on account of bad and doubtful debts written off limited to 0.5% of sales revenue from energy sales within the state i.e. 0.5% of Rs. 8800.72 crores, which amounts to Rs. 44 crores. The amount is being allowed strictly as one-time measure only. The licensee is required to ensure that non-paying consumers are disconnected within the prescribed time limit after adjusting their security deposit. Further, the licensee must ensure that the amount of security deposit from all the consumers is strictly in line with the current consumption pattern as prescribed under the regulations. The provisions for bad and doubtful debts amounting to Rs.

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## 29.38 Crore is disallowed as the same is just a 'provision' and not actually written of amount.

Apart from the provision of bad and doubtful debts, the Commission observes that items at serial no. 7 and 8 are also not eligible to be included in the ARR for true up; as the same are 'provisions' and losses. In light of the above discussion, the Commission approves Rs.52.61 Crores as true up of other expenses for UHBVNL for the FY 2018-19 as per table given below:

	Other Expenses of UHBVNL for FY 2018-19 (Rs. Crores)			
Sr.	Particulars	Actual	Approved	
	Other Debits			
1	Provision for Bad & Doubtful Debts	29.38	-	
	Bad & Debts written off (Sale of Power + FSA) Domestic & Non-Domestic			
2	consumer under Bill Settlement Scheme	637.29	44.00	
3	3 Compensation for injury, death and damage and penalties		6.34	
4	Infructuous Capital Exp. Written Off	1.00	1.00	
5	Loss on Obsolescence of Stores/Scrap & Assets	0.98	0.98	
6	Materials cost variance-Capital.	0.28	0.28	
7	Miscellaneous losses and write off.	2.63	-	
8	Provision for amount recoverable from employees/theft of property	0.68	-	
	Total	678.59	52.61	

DHBVNL has proposed a True-up of other debits of Rs. 21.99 Crore as given in table below: -

Other expenses of DHBVNL for the FY 2018-19 (Rs. crores)

	Particulars	
1	Refund of revenue/ provisions	0.01
2	Misc. losses and write off	21.98
	Total	21.99

The Commission has examined the above and observes that though refund of revenue may form part of allowable true up, no provisions or miscellaneous losses/ write off can be allowed to be passed on to the consumers. As the licensee has provided no details or justification of refund of revenue, the Commission is unable to examine the same and therefore the proposed amount of other expenses of DHBVNL are disallowed. The licensee may approach the Commission with details of the amount at the time of next ARR.

#### 3.1.9 Return on Equity (RoE)

UHBVNL and DHBVNL have proposed True-up of RoE @ 14% for the FY 2018-19 amounting to Rs. 258.39 Crore and Rs. 209.19 Crore respectively. The Commission has approved the closing equity as on 31.3.2018 as part of the ARR Order dated 07.03.2019 and the same shall form the basis of calculation of RoE for the FY 2018-19. The opening balance

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shall be increased by the equity contribution relating to the assets added during the year which is @ 8.77% for UHBVNL and 12.74% for DHBVNL; being the ratio of equity funding of additional capital expenditure during FY 2018-19 as per information provided by the licensee. The rate of return is the same as approved by the Commission as per the Order dated 15.11.2018.

Approved Return on Equity for UHBVNL for the FY 2018-19 (Rs. Crores)

Particulars	Proposed by UHBVNL	Approved by HERC
Opening balance of Equity approved to be utilised for Distribution and Retail Supply Assets	1,806.74	1,806.74
Assets put to use during the FY 2018-19		800.40
Equity portion of funding @ 8.77%		70.20
Closing Equity for assets in use	1,884.54	1,876.94
Average Equity	1,845.64	1,841.84
Rate of RoE	14%	10%
Total RoE	258.39	184.18

#### Approved Return on Equity for DHBVNL for the FY 2018-19 (Rs. Crores)

Particulars	Proposed by DHBVNL	Approved by HERC
Net Eligible Opening Equity for Return on Equity	1451.22	1451.22
Assets put to use during the FY 2018-19		540.36
Equity portion of funding @ 12.74%	86.04	68.62
Closing Equity	1537.24	1520.02
Average Equity eligible for Return on Equity	1494.22	1485.61
Rate of Return on Equity	14.00%	10.00%
Return on Equity	209.19	148.56

#### 3.1.10 Non-tariff Income

The Commission had approved Rs. 197.25 Crore as non - tariff income for the FY 2018-19 as proposed by the UHBVNL and the actual non - tariff income as per audited accounts is Rs. 401.53 Crore. However, the licensee has proposed to retain Rs. 79.43 crores (delayed payment surcharge) and Rs. 100.55 crores (discount for timely payment of bills) from the non-tariff income. UHBVNL has informed the Commission that income on account of delayed payment surcharge is to be adjusted towards the working capital which has to be borne by the Distribution Licensee due to non-payment of energy bill in timely manner by the consumer. Therefore, the same has been deducted from Non-Tariff Income of UHBVN for FY 2018-19.

It has been further submitted that rebate on timely payment of energy charges is not considered as a part of non-tariff income for FY 2018-19. It has been submitted that interest cost on working capital loan is allowed on normative basis, whereas additional short-term borrowing is to be arranged by UHBVN to avail the rebate on timely payment of energy charges. Therefore, to meet the interest liability of additional working capital requirements,

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rebate on timely payment of energy charges is being used by UHBVN to balance the cost implication on the Discoms. In light of the above explanation, the Commission approves the true up of Non-tariff Income at Rs. 221.56 crores as proposed by UHBVNL.

Similarly, in the case of DHBVNL, the Commission had approved Rs. 247.47 Crore as non-tariff income for the FY 2018-19 as proposed by them. The actual non - tariff income as per audited accounts is Rs. 414.67 Crore. The licensee has now submitted that Rs. 107.11 crores, being delayed payment surcharge from the consumers may not be considered as income of the licensee as the same is towards the cost of additional working capital required when the consumers do not pay on time for the bills raised to them. It may be noted that this issue has also been discussed in earlier paragraphs while dealing with true up of interest cost. Accordingly, the revised non- tariff income for the FY 2018-19 for DHBVNL has been approved at Rs. 307.66 Crore as proposed by the licensee.

#### 3.1.11 True-up of Power Purchase Cost

The Commission observes that the difference in power purchase cost could arise either on account of variation in actual source wise generation or rate of power vis-à-vis those allowed by the Commission on a projected basis. As per the MYT Regulations the Discoms are allowed to automatically recover FSA, without going through the regulatory process subject to a cap, in order to ensure financial viability of the licensees. However, the automatic recovery is subject to a cap and therefore the need to True-up. Also, the actual cost for the year can only be determined after the audited accounts are available.

In view of the aforesaid constraints, the actual power procurement cost is to be trued up based on the normative distribution losses approved by the Commission in the ARR / Tariff Order for the relevant year. Transmission losses are allowed as per actual since the Discoms have no control over the transmission losses.

Further, in light of the fact that AP sales in the state are unmetered and even the metered supply due to large number of dead / defective meters are not accurate, the Commission is constrained to arrive at an estimate of AP sales based on the energy recorded at the 11 kV AP segregated feeders. The Commission estimates and approved AP sales are discussed at para\*\*\* of this order and has a major impact on the distribution loss levels of the Discoms, in the FY 2018-19. Based on the approved AP sales and the distribution loss level approved by the Commission in its Order dated 15.11.2018, the excess units purchased by the Discoms is arrived at and treated in terms of the incentive and penalty mechanism of the HERC MYT Regulations, 2012.

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The details of True-up of power purchase cost of the Discoms for the FY 2018-19 is as per the table below.

**True-up of Power Purchase Cost (FY 2018-19)** 

True-up of Pow	er Fuit	ilase C	•	•	
Particulars			UHBVNL	DHBVNL	Total
Sales as per Audited accounts	MU	1	15,842.33	24,834.31	40,676.64
Less AP sales included in above	MU	2	3,546.20	6,148.62	9,694.82
Sales as per audited accounts (net of					
AP sales)	MU	3	12,296.13	18,685.69	30,981.82
Add AP sales approved by the					
Commission	MU	4	3,572.20	5,149.05	8,721.25
Approved/Audited sales adjusted for					
AP	MU	5	15,868.33	23,834.74	39,703.07
Approved Distribution losses	%	6	20.00%	14.14%	
Sales grossed up for Distribution losses	MU	7	19,835.41	27,760.00	47,595.42
Actual Interstate sales and banking	MU	8	2,099.38	3,168.90	5,268.28
Total power sold including inter-state					
sale and banking	Mu	9	21,934.79	30,928.90	52,863.70
Intrastate & Interstate transmission					
losses as per audited accounts	MU	10	828.28	1,240.48	2,068.76
	%		3.64%	3.86%	54,932.46
Approved power purchase volume					
(Sales grossed up for Intrastate &					
Interstate transmission losses)	MU	11	22,763.07	32,169.38	54,932.46
Actual Power Purchase Volume	MU	12	23,248.82	33,745.11	56,993.93
Disallowed Units	MU	13	485.75	1,575.73	2,061.47
Cost of disallowed units at actual					
variable cost submitted by the Discoms	Rs.				
i.e. @Rs. 2.61 per unit	Crore	14	127.02	412.05	539.07
	Rs.				
Two third to be borne by the Discoms	Crore	15	84.68	274.70	359.38
One third to be borne by the	Rs.		·		
consumers	Crore	16	42.34	137.35	179.69
Thus, out of total power purchase cost	incurred I	by DISCO	Ms, only 2/3rd	determined ab	ove shall be
disallowed and the remaining actual cost		-	, ,		_
Actual cost incurred by DISCOMs					
during the FY 2018-19 (incl HVPNL and	Rs.				
SLDC charges)	Crore	17	11314.36	16029.65	27344.01
Less two third cost of losses to be	Rs.				
borne by the Discom	Crore	21	84.68	274.70	359.38
Net power purchase cost admitted by	Rs.				
the Commission for the FY 2018-19	Crore	22	11229.68	15754.95	26984.63

The Commission, in light of the above calculations, approves the revised power purchase cost of UHBVNL at Rs. 11,229.68 Crores and that of DHBVNL at Rs. 15754 Crores for the FY 2018-19.

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#### 3.1.12 Revenue from Sale of Power for the FY 2018-19

As per the audited accounts for FY 2018-19, the Disoms have recovered revenue from intrastate sale of power of Rs. 20,758.25 Crore as against Rs. 18,603.79 Crore estimated by the Commission. The True-up of revenue from intrastate sale of power for the FY 2018-19 is as given in the table below.

Revenue from sale of power for the FY 2018-19 (Rs. Crore)

Revenue for the FY 2018-19	UHBVNL	DHBVNL	TOTAL
Revenue from sale of power as per audited accounts	7594.53	11874.43	19468.97
Revenue from Fixed Charges	711.81	1058.16	1769.97
FSA	494.37	703.80	1198.17
Total	8800.72	13636.39	22437.10

Besides the revenue realised from the intrastate sale of power, the Discoms have also earned Rs. 2176.25 crores from interstate sale and banking.

#### 3.1.13 Revised ARR for the FY 2018-19

In view of the above analysis, the Commission approves the revised ARR for UHBVNL and DHBVNL as per the details provided in the table(s) below:

Approved True-up of UHBVNL for the FY 2018-19 (Rs. Crore)

Sr. No	Particulars	Approved Cost	Actual Cost	HERC Revised Approval
1	Total Power Purchase Expense	10,214.91	11,314.36	11,229.68
1.1	Power Purchase Expense	8,747.21	9,737.83	
1.2	Interstate transmission Charges	641.80	753.20	
1.3	Intrastate transmission charges and SLDC charges	825.90	823.33	
2	Operations and Maintenance Expenses	1,334.49	1,092.36	1,092.36
2.1	Employee Expense	803.02	615.19	615.19
2.2	Administration & General Expense	99.91	106.21	106.21
2.3	Repair & Maintenance Expense	131.56	66.97	66.97
2.4	Terminal Liability	300.00	303.99	303.99
3	Depreciation	305.29	285.96	285.96
4	Total Interest & Finance Charges	312.46	885.85	332.69
	Interest on Capex Loans	129.92	123.37	123.37
	Interest on Working Capital Borrowings	97.30	666.77	113.61
	Interest on Consumer Security/ACD	85.24	74.57	74.57
	Other Financial Expenses	-	21.15	21.15
5	Return on Equity Capital	196.61	258.39	184.18
6	Other Expenses	-	678.59	52.61
7	Total Expenditure	12,676.22	15,401.36	13180.79
8	Less: Non Tariff Income	197.25	221.56	221.56
9	Net Aggregate Revenue Requirement	12,478.97	15,179.81	12955.92

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Approved True-up of DHBVNL for FY 2018-19 (Rs. Crore)

Sr. No	Particulars	Approved Cost	Actual Cost	HERC Revised Approval
1	Power Purchase Expenses	12,753.81	16,029.65	15,754.95
	Power Purchase Cost	11,907.61	15,065.65	
	Transmission Charges	843.74	964.00	
	SLDC Charges	2.46	304.00	
2	Operations and Maintenance Expenses	1,171.04	1,409.51	1,409.51
2.1	Employee Expense	629.03	831.26	831.26
2.2	Administration & General Expense	73.86	111.37	111.37
2.3	Repair & Maintenance Expense	132.77	106.88	106.88
2.4	Terminal Liability	335.38	360.00	360.00
3	Depreciation	267.62	241.14	241.14
4	Total Interest & Finance Charges	216.52	541.74	254
4.1	Net Interest on Capex Loans	184.73	63.14	63.14
4.2	Interest on Working Capital Loans	171.78	117.67	117.67
4.3	Interest on UDAY Loans & OFR for state govt.		287.74	
4.4	Interest on Consumer Security Deposits	76.87	51.07	51.07
	Other Interest and Finance charges including MDR/	4.01	22.12	22.12
4.5	digital payment transaction charges/ guarantee fee	4.01	22.12	22.12
5	Return on Equity Capital		209.19	148.56
6	Prior Period Expenses		-0.81	-0.81
7	Total Expenditure	12,955.96	18,972.16	17,807.35
8	Less: Non-Tariff Income	170.01	307.66	307.66
9	Net Aggregate Revenue Requirement	12,785.95	18,664.49	17,499.69

#### **3.1.14 True-up of Subsidy for the FY 2018-19**

The Commission had determined RE subsidy of Rs. 7139.72 Crore payable by the State Government to the Discoms for the FY 2018-19 based on an estimated CoS of Rs. 7.58 (CoS on LT supply) per unit for A.P. supply of 9575 MU. As the total ARR has now been revised because of the True-up of the FY 2018-19 and the quantum of power supplied to AP consumers during the FY 2018-19 has also been revised to 8721.25 MUs; the subsidy for AP supply payable by the State Government also needs to be revised to reflect the corresponding changes in the quantum and cost of the AP tube-well consumers.

In addition to the RE Subsidy, the State Government, w.e.f. 1<sup>st</sup> October, 2018, has also introduced a scheme for providing subsidised supply of power to domestic consumers who consume less than 500 units of power every month. As per audited accounts, the subsidy on this account for power supplied by UHBVNL and DHBVNL during the FY 2018-19 is Rs. 89.48 crores and Rs. 122.52 crores respectively.

Accordingly, based on the true-up of expenses for the FY 2018-19 and revised approval of AP sales for the year, the Commission observes that revised subsidy for AP supply works out to Rs. 6427.37 crores. Based on the true up of costs, the

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Discoms have ended the year with a surplus of Rs. 900.81 crores as determined below: -

Approved Revenue Gap for FY 2018-19 on true Up

	.,	A O d d - 4 - d	
		As per Order dated	
Sr. no.	Total ARR for FY2018-19	15.11.2018	Revised
1	UHBVNL	12166.52	12955.92
2	DHBVNL	15794.20	17499.69
3	Total ARR for FY 2018-19	27960.72	30458.92
4	Revenue at current Tariff	18653.12	22437.10
5	Revenue from Interstate sale	2474.27	2176.25
7	Total Revenue	21127.39	24613.35
8	Total Sales for FY 2018-19 (MU)	36549.09	39703.07
9	Average CoS (Rs/ Unit)	7.65	7.67
10	Cost of Supply for AP consumers	7.58	
11	Adjusted Cost of Supply for AP consumers		7.60
12	Revenue from AP consumers		178.63
13	AP Sales as approved by the Commission for FY 2018-19		8721.25
14	Subsidy for AP supply	7139.72	6450.66
15	Subsidy for Domestic supply		212.00
16	Revenue from sale of power		24613.35
16	Net revenue Surplus for the FY 2018-19		817.09

#### 3.2 Annual Performance Review for FY 2019-20

#### **Background**

It has been submitted that the Commission 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 Commission with subsequent amendments has extended the Control Period of MYT Regulation, 2012 till FY 2019-20. The Commission on 31st October 2019 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: -

## 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

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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 Commission on 7<sup>th</sup> March 2019.

In line with the above, the Petitioner has submitted Annual Performance Review of ARR for FY 2019-20, considering actual available data for the first half of current financial year, prorata projections and escalations as per principles defined in the MYT Regulations, 2012 to project the ARR for FY 2019-20.

UHBVNL has submitted that since implementation of UDAY, it 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.

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 Hon'ble Commission may kindly allow distribution losses of DHBVN at 15.00% for FY 2019-20.

The Commission has considered the prayer of the Discoms for the revision of ARR for the FY 2019-20 as a consequence of the APR. The Commission has examined the details of

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Capex incurred up to December 2019 by UHBVNL \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*, and observes that the expenditure incurred during the APR period does not warrant any upward revision in the ARR for the FY 2019-20. Further, the licensee has not considered the subsidy to be provided by the State Government against DS Supply. Accordingly, in view of the above regulations and also of the fact that the revision in ARR is less than the expected subsidy on account of power supplied to domestic consumers, the Commission is of the considered view that it would not be appropriate to replace one set of estimated figures with another set of estimates for a small amount. Further, in view of the fact that the year is now almost over and it would be appropriate to examine the financial impact of mid-term performance review for the FY 2019-20 only once the Audited Accounts for the year are available. Hence, at this point of time the Commission is not inclined to revise the ARR for the FY 2019-20.

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#### Chapter 4

#### Determination of ARR for the MYT Period from the FY 2020-21 to FY 2024-25

#### 4.1 ARR Determination for the MYT Period

The ARR for the MYT Period for the FY 2020-21 to FY 2024-25 filed by the Discoms have been considered. The Commission's analysis and Order on each of the expenditure items are given in the following paragraphs.

# 4.2 Agriculture Pump (AP) Sales- FY 2018-19, FY 2019-20 (revised) & FY 2020-21 (projected)

The Commission has examined the submissions of the DISCOMs (UHBVNL and DHBVNL) regarding AP sales for the period mentioned above and observes that in the present Order the Commission shall continue with the same methodology as adopted in its previous Order based on data emanating from the 11 kV segregated AP feeders with some adjustments for AP sales from other Feeders and non-AP Sales from AP Feeders for assessing AP Sales.

Accordingly, the Commission has analysed for the true up for FY 2018-19, revised estimated for FY 2019-20 and projected for FY 2020-21 in respect of AP sales of the Petitioners as under: -

#### 4.3 True up of AP Sales for FY 2018-19 (True-up of RE Subsidy)

The Petitioners, based on actual AP sales have prayed that the Commission may approve Rs. 6503.05 Crores as revised RE Subsidy for year FY 2018-19. The commission in its Tariff order dated 15.11.2018 had approved Rs. 7,139.72 Crores towards RE Subsidy for the FY 2018-19. The data submitted for AP sales for FY 2018-19 is reproduced as under: -

AP Sales as Submitted by DISCOMs (MU) for FY 2018-19

Sr. No.	AP sales	FY 2018-19
1	UHBVNL	3572.20
2	DHBVNL	5149.05
3	Total AP Sales of two DISCOMs (1+2)	8721.25

Based on the data submitted by the Petitioners, the AP consumption of the two Distribution Licensees is computed as follows:

AP Sales as Trued up by Commission for FY 2018-19 (MU)

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AP consumption	UHBVN (2018-19)	<b>DHBVN (</b> 2018-19 <b>)</b>
AP units as recorded on segregated AP feeders	4222.50	5979.70
Loss @ 16%	675.60	956.75
Net consumption from AP feeders	3546.90	5022.95

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AP consumption	UHBVN (2018-19)	<b>DHBVN (</b> 2018-19 <b>)</b>
Add AP units on other feeders	44.53	187.14
Less Consumption of other category consumers on segregated AP feeders	19.23	61.02
Total AP consumption	3572.20	5149.05
Total AP consumption of two DISCOMs (rounded off)		8721.25
Total AP consumption approved by Commission in its Tariff Order dated 15/11/2018		9575

It is observed from the above table that the actual AP consumption 8721.25MU for FY 2018-19 is lower than the AP consumption approved by the Commission in Tariff Order dated 15/11/2018 for FY 2018-19(9575 MU). Accordingly, the total AP sale in respect of both the DISCOMs is approved as 8721.25MU (UHBVNL- 3572.20MU and DHBVNL-5149.05MU) for the FY 2018-19.

Further, the Commission in its Tariff Order dated 15/11/2018 had allowed RE Subsidy of Rs. 7,139.72 Cr. against 9575 MU AP sales for FY 2018-19 UHBVN and DHBVN. Accordingly, per unit agricultural subsidy works out to be Rs. 7.46/kWh.

While trueing up for the FY 2018-19, the revised sales & subsidy for FY 2018-19 is approved as Rs. 6,503.11 Cr. against the actual AP consumption of 8721.25 MU.

The commission in its order dated 07/03/2019 had observed as under:

"The Commission, in its Tariff Order dated. 15/11/2018, had directed the Petitioners to engage a third party for authenticating the AP sales data for FY 2017-18 and supply hours vis-a-vis reasons of variance in supply hours and to submit analysis report at the time of next ARR filling. However, the said directive remained un-complied as the requisite report is still awaited. The Commission now directs the Petitioners to include the FY 2018-19 AP Sales data as part of the same scope of work and submit its report within 3 months from the date of this Order. In its absence the Commission shall be constrained to consider true-up of AP sales."

UHBVN in reply vide its letter MEMO No. Ch-10/SE/RA/N/F-173/Vol-IX dated 17.09.2019 has submitted that all the AP feeders of DISCOMs are metered with AMR facility and DISCOMs had engaged M/s EESL for carrying out study of energy consumption data on selected AP feeders and as per their study the T&D losses of AP feeders in each circle is approximately 16%, which is same as being considered by HERC for the computation of AP Sales.

The summary of energy audit report of 9 (Nine) AP Feeders with the scope:

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- Authenticity of received Units of A.P. feeders along with Load Survey
- Consumer Tagging, Network Diagram & land holding details of the consumers
- Consumption Pattern of AP & non-AP consumers and checking of connected load of 20% consumers on the feeder

That calculation of Transmission & Distribution Losses is as tabulated in the following table: -

Computed T&D Loss as per Report of EESL

Sr. No.	Name of AP feeder	Name of circle	Computed T&D Loss as per report of EESL
1.	KottarKhana	Yamunanagar	15.72%
2.	Modipur	Karnal	16.21%
3.	Atta	Panipat	15.40%
4.	Mundhera	Jhajjar	17.12%
5.	Meham	Rohtak	16.79%
6.	Samalehri	Ambala	16.42%
7.	Chhott	Kaithal	16.83%
8.	Ramnagar	Kurukshetra	15.48%
9.	Nahar	Sonipat	15.60%

The commission notes that as per the report submitted by DISCOMs, the T&D losses of AP feeders in each circle of UHBVN is approximately 16%, which is same as already being considered for the computation of AP Sales.

The Commission observes that UHBVNL in its Note No. 18.1 for Audited Accounts of FY 2018-19 and FY 2017-18 has indicated sales for Agriculture category as 3546.20 MU and 3922.18 MU respectively for UHBVN and DHBVN. However, the Agricultural Sales computed as per the Commission's methodology works out as 3572.90 MU and 3960.48 MU for FY 2018-19 and FY 2017-18 respectively.

The Commission observes that DHBVN Agriculture sales for FY 2018-19 is 6148.62 MU as per data provided vide its office Memo. No. Ch-44/SE/RA-659 dated 07/02/2020 and 5149.05 MU computed as per Commission's methodology, which reveals a significant difference of 999.57 MU in these two figures appearing to be unrealistic. Therefore, Commission feels that the matter needs to be investigated. The Commission notes with concern that despite issuance of directives to this effect in its previous orders a fact also pointed out by the Intervener, DHBVN did not engage a third party for analysing and authenticating its AP sales data for FY 2017-18.

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In view of the above, the Commission again directs DHBVN to engage a third party for analysing and authenticating its AP sales of FY 2017-18 and FY 2018-19 and submit its report within 3 months from the date of this order and also to examine the AP sales data meticulously for the FY 2019-20.

#### 4.4 AP Sales Estimation for FY 2019-20.

UHBVN has submitted that AP sales for FY2019-20 have been projected by taking into consideration actual sales of first half and nominal growth rate of 1.43% allowed by Commission in Tariff Order dated 7<sup>th</sup> March 2019 for sales of the second half of FY 2019-20. In the ensuing years, UHBVN proposed release of 30,000 new AP Tube well connections and therefore has considered nominal growth rate of 1.43 to project the AP Sales for ensuing years of the MYT Period.

DHBVN has submitted that Nigam has considered 5% growth rate on the base year FY 2018-19 for projecting Agriculture consumption for FY 2019-20 and FY 2020-21.

The DISCOMs have submitted their projected Agriculture consumption for FY 2019-20 and FY 2020-21 as mentioned below:

AP Sales Projected by DISCOMs for FY 2019-20& FY 2020-21 (MU)

Sr. No.	AP sales	FY 2019-20	FY 2020-21
1	In respect of UHBVNL	3,666	3,718.29
2	In respect of DHBVNL	5,407	5,676.85
3	Total AP Sales of two DISCOMs (1+2)	9,073	9,395.14

The Commission in its Tariff Order dated 07/03/2019 had considered annual load growth of 4 Year CAGR at the rate of 2.18% and 5.38% for projecting the future AP sales. The 2.404% growth rate was CAGR derived considering AP sales from FY 2014-15 to FY 2017-18.

The Commission had sought actual month-wise AP sales from the Petitioners. Based on the data submitted by the Petitioners, the Commission has first projected AP Sales for second half of FY20 (Oct'19-Mar'20) by computing 2 to 4-year CAGR upon actual Sales of H2 period (Oct-Mar) from FY 2014-15 to FY 2018-19.

The commission observes that the UHBVN AP sales 4-year CAGR for second half (H2) is in negative However, considering dependency of AP sales on level of ground water table, strength of monsoon and urbanisation into consideration, the second half AP sales for FY20 is considered same as it was corresponding FY19 and the AP Sales for FY 2019-20 is derived by summing the Actual Sales for H1FY20 and H2FY19 in respect of UHBVN. In case of DHBVN the AP Sales for FY 2019-20 is derived by summing up the Actual Sales for

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H1FY20 and Projected Sales for H2FY20. 4 Year CAGR at the rate of 2.81% have been considered for projecting AP Sales for H2FY20. The relevant calculation is tabulated below:

AP Sales Projection FY 2019-20 of UHBVNL (MU)

	Oct-March				CAGR % for H2 FY20			FY 2019-20				
AP Sales Projections	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	4	3	2	1	(H1) Actual	(H2) Projected	(H1 Actual + H2Proj)
AP consumption of segregated AP feeders	1,671.08	2,056.70	1,866.83	1,690.99	1,385.81	-4.57	-12.33	-7.18	-4.85	2924.80	1,385.81	4310.60
Normative AP consumption considering 16% of loss	1,403.71	1,727.63	1,568.14	1,420.43	1,164.08					2456.83	1,164.08	3620.91
AP Billing of consumers on feeder other than AP feeder	39.31	19.46	27.29	24.79	20.61					24.52	20.61	45.14
Consumption of other category consumers on AP Feeders	-	7.51	10.01	17.37	9.75					7.23	9.75	16.97
Net Normative AP Consumption	1,443.02	1,739.58	1,585.42	1,427.85	1,174.94					2474.13	1,174.94	3649.07

AP Sales Projection FY 2019-20 of DHBVNL (MU)

7.11 - 0.11-0 1 - 0.10 2 - 0.10 1 - 1.10 (1.10)												
			Oct-March			CAGR % for H2 FY20			FY 2019-20			
AP Sales Projections	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	4	3	2	1	(H1) Actual	(H2) Projected	(H1 Actual + H2 Proj)
AP consumption of segregated AP feeders	2,504.21	2,929.79	2,897.18	3,082.35	2,797.36	2.81	-1.53	-1.74	-9.25	3373.2	2,875.97	6,249.17
Normative AP consumption considering 16% of loss	2,103.54	2,461.02	2,433.63	2,589.17	2,349.78	1				2833.5	2,415.81	5,249.31
AP Billing of consumers on feeder other than AP feeder	53.15	46.66	62.2	71	110.33					113.45	113.43	226.88
Consumption of other category consumers on AP Feeders	48.13	53.29	44.76	30.14	33.57					36.707	34.51	71.22
Net Normative AP Consumption	,108.55	2,454.39	2,451.07	2,630.03	2,426.54					2910.2	2,494.73	5,404.97

#### 4.5 AP Sales Estimation for FY 2019-20

The Commission observes that 1.43% and 5% growth rate considered by the UHBVN and DHBVN respectively is on the higher side. Therefore, the Commission has computed 2 to 5-year CAGR for the period from FY 2014-15 to FY 2019-20 and has considered 5Year CAGR at the rate of 1% and 2.35 % for projecting AP Sales for FY 2020-21 for UHBVNL & DHBVNL respectively. The Commission is of the view that this method is more realistic and scientific in approach. The relevant calculation in this regard is as follows:

HERC AP Sales Projection FY 2020-21 (MU) - UHBVNL

AP Sales Projections	FY 2019-20		FY 2020-21 Projected				
	(H1 Actual + H2 Proj)	5	4	3	2	1	
AP consumption of segregated AP feeders as per CMRI (MU)	4310.6	-0.018	-0.019	-0.03	-0.04	0.021	4,353.71
Normative AP consumption considering 16% of loss	3620.91		, , , , , , , , , , , , , , , , , , , ,				
AP Billing of consumers on feeder other than AP feeder (MU)	45.14		N.4.	anual – 10	·/		45.59
Consumption of other category consumers on AP Feeders (MU)	16.97	Manual = 1%					17.14
Net Normative AP Consumption (MU's)	3649.07						3,685.56

HERC AP Sales Projection FY 2020-21 - DHBVNL (MU)

	FÝ	FY CAGR from FY 20 to FY 15						
AP Sales Projections	2019-20 (H1 Actual + H2 Proj)	5	4	3	2	1	Projected	
AP consumption of segregated AP feeders as per CMRI (MU)	6,249.17	2.35%	1.38%	1.64%	-0.69%	4.51%	6,396.03	
Normative AP consumption considering	5,249.31						5,372.67	

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16% of loss		
AP Billing of consumers on feeder other than AP feeder (MU)	226.88	232.21
Consumption of other category consumers on AP Feeders (MU)	71.22	72.89
Net Normative AP Consumption (MU's)	5,404.97	5,531.99

In view of above, the Commission has approved the AP sales for the two distribution licensees for FY 2019-20 & FY 2020-21.

AP Sales Projected by Commission for FY 2019-20 & FY 2020-21 (MU)

Sr. No.	AP sales	FY 2019-20	FY 2020-21
1	In respect of UHBVNL	3,649.07	3,685.56
2	In respect of DHBVNL	5,404.97	5,531.99
3	Total AP Sales of two DISCOMs (1+2)	9,054.04	9,217.99

#### 4.6 Sales Projections (Other Consumer Categories)

The sales for consumer categories other than AP was originally proposed by the Discoms based on CAGR of the past data. However, given the impact of COVID – 19 Pandemic and the resultant lockdown, the Discoms, vide supplementary Petition dated 05.05.2020 revised the projected consumer category wise sales based on the actual energy sales of the FY 2019-20. Further, energy sales of HT Industry, LT Industry, NDS and Railway / DMRC (Traction) were reduced for the FY 2020-21 assuming that during the first quarter, the sales would be 40% of the actual FY 2019-20 sales, 60% during Q2, 80% in Q3 and 100% in Q4. While for the remaining consumer categories sales in the FY 2020-21 have been projected by applying CAGR on actual sales of the Discoms for the FY 2019-20.

The Commission has considered the sales projection methodology adopted by the Discoms and observes that the impact of COVID – 19 including the manner in which the Economy is being opened up in a staggered manner cannot be determined with certainty. It is possible that given the pump priming of the Economy by almost 10% of the GDP announced by the GoI may speed up the recovery process in the Industrial and Commercial segments. Hence, the Commission, while agreeing with the general approach of sales projection adopted by the Discoms, is of the considered view (including the generation and sales data available for April 2020) that the impact on sales for HT Industry, LT Industry, NDS and Railway / DMRC (Traction) may be a reduction of 15% over the actual sales figures of the FY 2019-20. The Commission has also examined alternative methods of sales projection based on Gross Value Addition and Income of the Industrial and Commercial (Services) sectors to the GDP of Haryana and observes that though the statistical correlation between sales and GVA / Income is significant but the macro indicators for the FY 2019-20 as per the figures published by the Department of Economic and Statistical Analysis, GoH, 2020 provides

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quick estimates for the FY 2018-19 and advance estimates for the FY 2019-20 only. In the absence of any estimates for the FY 2020-21 including the changed circumstances due to the lockdown, establishing statistical correlation may yield spurious results. Hence, the Commission has reduced sales of HT Industry, LT Industry, Railways / DMRC and NDS categories by 15% of the actual 2019-20 sales. While for the remaining consumer categories the Commission has continued with the CAGR methodology with some adjustments in the DS Consumer categories. Resultantly, the revised sales projected by the Discoms and that approved by the Commission is presented in the table below: -

	UH	IBVNL	DH	Total Discoms	
	Proposed FY	<b>HERC Approved</b>	Proposed FY	<b>HERC Approved</b>	HERC Approved
	2020-21	FY 2020-21	2020-21	FY 2020-21	FY 2020-21
	Million Units	Million Units	Million Units	Million Units	Million Units
Domestic	4812.56	4632.00	7090.41	6449.00	11081.00
Non-Domestic	1016.73	1160.00	2293.55	2574.33	3734.33
HT Industry	3813.54	3837.00	4343.06	4464.00	8301.00
Lift Irrigation	63.66	62.16	215.00	205.00	267.16
LT Industry	689.15	738.00	694.66	753.74	1491.74
Agriculture Sales	3718.29	3685.56	5676.85	5531.99	9217.55
Bulk Supply	335.07	348.00	1135.72	1201.00	1549.00
Railway Traction					
/ DMRC	6.42	6.42	60.21	60.21	66.63
Street Lighting	89.96	88.21	92.31	94.00	182.21
MITC	4.91	4.91	0.00	0.00	4.91
PWW	506.73	534.00	747.09	747.09	1281.09
Total	15057.02	15096.26	22348.86	22080.36	37176.62

#### 4.7 Power Purchase volume

#### Projections by UHBVNL / DHBVNL

The Discoms, in its MYT Petitions(s) have submitted that Haryana Power Purchase Centre (HPPC) (the designated agency) procures power on their behalf from long-term tied up generating plants approved by the Commission i.e. Central Power Generating Plant like NTPC, NHPC, NPCIL and UMPP, shared power projects like HPGCL, BBMB, SJVNL, THDC and IPPs like Adani Power, Lanco Amarkantak, GMR and others. Availability from such sources has been projected as per their actual annual PLF of last three years. Merit Order Despatch, surrendering of expensive sources of power and likely backing down of capacity as well as banking of surplus power with other States and energy availability from new projects is also taken into consideration while projecting availability. Additionally, while projecting power purchase cost for the base year of the MYT Control Period, the energy and capacity charges has been escalated by 5%. Further, power purchase cost from sources like CGPL, GMR, Sasan and Adani is projected in accordance with their quoted price in the PPA. The component of change in law applicable in their tariff has been kept equivalent to the

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current billing rate of respective power plants. Accordingly, UHBVNL, for the FY 2020-21 has projected power availability at 26,327.81 MU at a total cost of Rs 10,6052.7 Million (Rs. 4.03 / kWh average). While DHBVNL has projected availability of 36,982 MU at a cost of Rs. 14,5969.5 Million (Rs.3.95 / kWh average). The Discoms, in their supplementary filing, has not revised source wise power availability and cost.

#### 4.8 Commission's Estimate of Power Purchase Quantum:

The Commission has taken note of the methodology for projecting availability of power for the FY 2020-21 by the Discoms based on averages and observe that the same may not provide an accurate measure of power availability. The Commission, as per past practice, is of the considered view that each year the Central Electricity Authority (CEA) publishes annual generation programme i.e. Gross Generation Program from conventional sources (Thermal, Hydro and Nuclear) stations of 25 MW and above which is also available in the public domain. The power plant wise monthly Generation Programme is prepared by CEA, based on the actual generation by the Stations during previous years, R&M of Units, annual overhaul / boiler, capital overhaul, units likely to be commissioned and other maintenance works furnished by the Generators. Despite the fact that there could be variations in the actual month wise actual generation vis-à-vis the targets due to various factors including forced shutdowns and changes in individual Station's actual maintenance schedules as well as actual commissioning of new capacities and constraints in availability of specific sources like hydro or gas etc. In the FY 2020-21 due to the impact of Pandemic including R&M especially of the power plants of Chinese origin, the margin of error in projections could be little higher. The Commission believes that the generation programme determined by the CEA is the most reliable option for estimating power availability in the present case and has also stood test of time. Hence, for estimating the power availability in Haryana for both the distribution licensees (UHBVNL and DHBVNL) in the FY 2020-21, the Commission has considered the following: -

- (a) Available CEA's generation targets net of normative auxiliary energy consumption with appropriate adjustments as per the actual availability in the FY 2019-20.
- (b) Allocated share of Haryana in the respective generating stations.
- (c) Past trend of actual generation achieved including those of the FY 2019-20 vis-a-vis CEA's generation targets.
- (d) HPGCL's generation targets as approved by the Commission for FY 2020-21.

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(e) Expected power availability from new generating stations as proposed by the Discoms.

It is presumed that the Discoms have a valid PPA duly approved by the Commission for all the proposed sources of power for which approval has been sought. Hence, in no manner the sources, as considered by the Commission, in its present Order, should be construed as approval of PPA unless the Commission, vide a specific order has accorded approval to the PPAs.

In line with the broad methodology set out above, the Commission, for the FY 2020-21, has proceeded as follows.

## i) Availability of power from HPGCL

The Commission has considered power availability at the bus bar from HPGCL sources as per its Order dated 24<sup>th</sup> April, 2020 (HERC / PRO 58 / 2019, 12 and 13 of 2020) in the matter of HPGCL's Petition on determination of HPGCL's Generation Tariff for the FY 2020-21. The the details / assumptions of the same are mentioned in the said Order. Hence, for the sake of brevity, they are not being re-produced here. The power availability (ex–bus energy in MUs) from HPGCL's Power Plants as determined by the Commission in ibid Order is presented in the table below: -

Particulars	HERC Approval (FY 2020-21) MU
HPGCL	16,728.32

## ii) Availability of Power from Faridabad (FGPP)

The Discoms Power Purchase Agreement (PPA) with 432 MW Faridabad gas-based power station of NTPC expired on 31.12.2015. On the petition filed by the HPPC the Commission passed the Order dated 5.10.2016 wherein the Commission approved the PPA with FGPP upto 31st December, 2025. The HPPC may schedule power from this source on APM gas as well as RLNG or mix of the two subject to merit order despatch. As FGPP is a generating station dedicated to Haryana, the Commission, based on generation target finalized by CEA net of Auxiliary Energy Consumption. The Discoms, for the FY 2020-21, have projected availability from this source of 861.11 MU from FGPP. The Commission, as per the methodology adopted by it and given the fact that this is an expensive source, approves availability of 393.90 MU (APM) from FGPP. The Commission's approved volume of power from FGPP is as under: -

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## Faridabad Gas Power Project (NTPC) (MU)

Particulars		HERC Approval		
	Faridabad CCGT	393.90		

## iii) Availability of power BBMB (Bhakra, Dehar & Pong)

The Discoms have share (to the extent of shares owned by HVPNL) in capacity entitlement to the extent of 33.02% in Bhakra, 32.02% in Dehar, 16.67% in Pong (all BBMB stations). The Commission has considered the CEA's generation targets for the BBMB Stations, adjusted for auxiliary energy consumption, available separately for Bhakra & Upratings, Dehar and Pong, Accordingly, the Commission, for the FY 2020-21 approves availability of 2868.04 MU from this source i.e. same as projected by the Discoms: -

## Power Availability from BBMB (MUs)

Particulars	HERC Approval	
ВВМВ	2868.04	

## iv) Availability of power from NTPC Power Stations

The Commission has considered the station wise gross generation targets fixed by the CEA and reduced the same by normative auxiliary energy consumption. Accordingly, corresponding to the allocated share of Haryana in the various power stations of NTPC, with a few adjustments for the actual drawl in the FY 2019-20, the Commission, for the FY 2020-21 approves the quantum of power as under: -

**Power Purchase Volume from NTPC** 

NTPC	HERC Approval (MU)
Singrauli STPS	1322
Rihand STPS I	423.61
Rihand STPS II	371.47
Rihand STPS III	365.28
Unchhahar TPS I	58.43
Unchhahar TPS II	122.21
Unchhahar TPS III	71.00
Unchhar TPS IV	224.41
Anta CCPP	5.25
Auraiya CCPP	10.95
Dadri CCPP	38.44
Farakka STPS	66.71
Kahalgaon I STPS	158.85
Kahalgaon II STPS	442.63
Kol Dam HPS	301.40

The total availability of power in the FY 2020-21 from NTPC sources works out to 4376.53 MU as against 5079.06 MU estimated by the Discoms. The major difference is due to lower availability estimated by the Commission from gas-based power plants.

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## v) Availability of Power from NHPC Power Plants

The Commission, for projecting power availability from NHPC sources in the FY 2020-21 has relied upon generation targets fixed by the CEA after adjusting the same for auxiliary energy consumption and home State share. The generating station wise details are as under: -

Power purchase volume from NHPC (Hydro)

NHPC	HERC Approval (MU)		
Salal I HPS	431.82		
Bairasiul HPS	159.99		
Tanakpur HPS	25.09		
Chamera I HPS	323.48		
Chamera II HPS	72.61		
Chamera-III HPS	79.93		
Dhauliganga HPS	54.72		
Dulhasti HPS	104.84		
Uri HPS	136.94		
Uri-II HPS	62.61		
Sewa II HPS	25.40		
Parbati-III HPS	56.24		

The total availability of power from NHPC as estimated by the Commission for the FY 2020-21 is 1533.66 MU as compared to 1669.05 MU estimated by the Discoms.

## vi) Availability of Power from NPCIL sources

The Commission observes that the CEA also determines generation targets for the power stations of the Nuclear Power Corporation. Hence, power availability from NPCIL (NAPP and RAPP) have been accordingly approved as under: -

**Power Purchase Volume from NPCIL** 

Particulars		HERC Approval (MU)
NAPP		195.35
RAPP		545

The total quantum of power available from NPCIL sources in the FY 2020-21 works out to 740.35 MU as compared to 753.36 MU estimated by the Discoms.

#### vii) Power Purchase from Other Sources

(a) Power Procurement from a few other sources proposed by the Discoms include CGPL, Mundra (UMPP), Sasan UMPP, APCL, DVC (Mejia B, Koderma & Raghunathpur), Adani Power Ltd., Mundra, THDC, MGSTPS (CLP), Lanco Amarkantak,etc. The Commission has considered the CEA generation targets for the wherever available. In cases where generation targets are not available the proposals of the Discoms adjusted for the past trend have been approved.

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## (b) Availability of Power from Independent Power Producers/PTC

In addition to the power available from Central Sector, State Sector and Shared Utilities, the Discoms have projected availability of power from PTC Tala, PTC J&K, PTC Karcham Wangtoo and Lanco Amarkantak etc. The Commission has estimated availability of power from these sources as per the generation targets fixed by CEA. In case the same is not available for any generating station(s) the same has been taken as per Discoms projections / adjusted for the past trend. The generating station wise details approved by the Commission is as per table that follows.

Availability of Power from PTC & Other Long-Term Sources

Particulars	HERC Approval (MU)
PTC J&K (Baglihar HEP)	263.72
PTC Lanco Amarkantak TPS (Unit – 2)	1931.12
PTC JSW Karcham Wangtoo HEP	1235.40
PTC GMR Kamalanga TPS	1963.42
Tala HPS	45.07
DVC Mejia	491.45
DVC Koderma	417
DVC Raghunathpur	689
CGPL Mundra UMPP	2509.80
Sasan UMPP	3278.25
IGSTPP (Aravali) Jhajjar	2671.98
Adani Power Ltd.	8544.86
MGSTPS (CLP) Jhajjar	5674.06
SJVNL – Nathpa Jhakri HEP	283.23
SJVNL – Rampur HEP	69
Hydro New (Sikkim, HP)	1374.11
THDC - Tehri	210.87
THDC - Koteshwar	48.35
Pragati Power CCPP	87.63
Thermal Pilot Projects	1991.04

The total power availability in the FY 2020-21 estimated by the Commission is 33,779.36 MU as compared to 31,852 MU estimated by the Discoms.

#### viii) Availability of Power from Renewable Energy Sources

The Commission is committed to encourage cogeneration and non-conventional fuel-based generation including solar generation projects. Hence, the power purchase volume from such sources has been determined keeping in view the power availability from renewable sources in the FY 2020-21 for which the Commission has approved PPAs. The Discoms should, however, meet the solar and non-solar RPO as provided in the HERC RE Regulations in vogue. The power availability from renewable energy sources approved by the Commission is per details provided below:

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## **Availability from Renewable Energy Sources**

Bhoruka HPS	29.14
P&R Gogripur HPS	9.71
Puri Oil Mill HPS	13.59
Biomass Projects	217.14
Cogeneration Plants	290.57
Solar Projects (JNNSM)	16.27
Siwana Solar	8.32
Balarch Solar	1.66
JBM Solar	33.28
HPGCL Solar	16.64
SECI Solar	667.27
Wind Power	2284.88
Waste to Energy (JBM)	22.15
Paddy Stubble	29.64

The total RE Power as per the aforesaid approval for the FY 2020-21 works out to 3640 MU i.e. at the same level as proposed by the Discoms.

#### 4.9 Total Approved Power Purchase Quantum

In view of the above source wise approvals of quantum of power expected to be available in the FY 2020-21, the Commission determines power availability both from inter-state and intra-state generators of 63666.53 MUs as compared to 63272.10 MU projected by the Discoms.

#### 4.10 Power Purchase Cost

The cost of power purchased by the Discoms is mostly a known parameter as the same is governed by the Power Purchase Agreement(s) with the IPPs/electricity traders. In the case of Central Power Sector Units (CPSU's) or generators supplying power to more than one State, the tariffs as approved by the Central Electricity Regulatory Commission (CERC) are applicable. While in the case of State Projects, i.e. HPGCL the generation tariff is determined by the HERC. Most of the elements constituting the total cost of generation i.e. capacity charges, base energy related charges, adjustment of base energy charges for cost of fuel and other factors, taxes, duties, incentive payments etc. are well defined and can be estimated with a reasonable degree of accuracy.

In view of the above, the cost of allowed power purchase for the FY 2020-21 has been determined largely keeping in view the provisions of the Haryana Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Generation, Transmission,

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Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2019.

- i. Generating Station wise fixed cost of power is based on the actual fixed cost incurred by the Discoms in the FY 2019-20.
- ii. Generating Station wise Fuel / Variable Cost is based on the average of the actual variable charges / energy charges incurred by the Discoms.
- iii. The cost of power purchase from HPGCL has been considered as per the Commission's Generation Tariff Order for the FY 2020-21.

The details of approved power purchase rates (Rs/kWh), cost (Rs. Million) and quantum (Million Units), from various sources for the FY 2020-21 are presented in the table below. It is observed that the average fixed cost as per the quantum and cost projected by the Discoms is about Rs. 1.15 / kWh and fuel cost Rs. 2.88 / kWh (Average Power Purchase Cost- APPC being Rs. 4.03 / kWh) without including transmission charges. While as per the quantum and cost projected by the Commission the same works out to Rs. 1.08 / kWh and Rs. 2.88 / kWh (APPC being Rs. 3.96 / kWh without Transmission charges. It is also seen that Fixed Charges comprise of about 28% of the total Power Purchase Cost and the balance about 72% is the fuel / energy charges.

In accordance with the source wise volume and cost of power purchase approved by the Commission as indicated in the table above, the total volume of power available in the FY 2020-21 is approved at 63666.53 million units (kWh) (rounded off) at a fixed cost of Rs. cost of Rs. 68520 million and variable cost of Rs 18,3510 million. Hence, the allowed total cost of power purchase in the FY 2020-21 is pegged at Rs. 252024 million. The average rate of power purchase (APPC), without transmission charges, for the FY 2020-21 works out to Rs. 3.96/kWh (rounded off).

The following table provides a snapshot of fuel wise quantum of sale approved by the Commission for the FY 2020-21.

Sources	MU	%
RE Power (MU)	3588	5.63%
Thermal (MU)	51504	80.90%
GaS Based Projects	536	0.84%
HEP	7299	11.47%
Nuclear	740	1.16%
Total	63666	100.00%

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It is reiterated that the Discoms should ensure that power is procured only from those sources for which the Commission has approved PPA's. Additionally, any power from Central Generating Stations, beyond the quantum for which the PPA has been signed and specifically approved by the Commission must be surrendered in case the Discoms have to back down any approved long-term source of power. It is made clear that any power procured from sources not specifically approved by the Commission and/ or excess quantum vis-à-vis the approved PPA purchased by the Discoms shall be disallowed by the Commission.

In addition to the above and keeping in view the surplus power availability scenario obtaining in Haryana, the Commission directs that the Discoms shall not procure any additional power over and above the quantum approved in the PPA that may be available to it from the unallocated share / share relinquished by any other State in the Central Generating Power Stations. The Commission thereto shall disallow all such power procurements and the cost thereto. Summary of source wise power purchase quantum and cost approved by the Commission is presented in the table below: -

Source	HERC Approved FY 2020-21 Power Purchase Quantum and Cost				
	Quantum	Fixed Charges	Energy Charges	Energy Charges	TOTAL PPC
NTPC	MU	Rs Million	Rs / kWh	Rs. Million	Rs. Million
Singrauli STPS	1322.00	996.05	1.47	1943.34	2939.39
Rihand STPS I	423.61	414.98	1.41	597.28	1012.27
Rihand II TPS	371.47	318.82	1.41	523.77	842.60
Rihand III	365.28	621.03	1.43	522.35	1143.38
Unchhahar TPS I	58.43	88.75	3.68	215.02	303.77
Unchhahar TPS II	122.21	172.66	3.72	454.63	627.29
Unchhahar TPS III	71.00	119.38	3.69	261.99	381.37
Unchhahar TPS IV	224.41	123.06	3.42	767.48	890.54
Anta CCPP	5.25	124.20	4.95	26.00	150.20
Auraiya CCPP	10.95	186.75	4.53	49.60	236.35
Dadri CCPP	38.44	177.06	3.72	142.98	320.04
Faridabad CCPP	393.90	2553.34	3.78	1488.94	4042.29
Farakka STPS	66.71	69.85	2.50	166.78	236.63
Kahalgaon I STPS	158.85	200.72	2.29	363.77	564.49
Kahalgaon II STPS	442.63	601.57	2.18	964.93	1566.50
Kol Dam HPS	301.40	1046.70	2.78	837.89	1884.60
NHPC					
Salal I HPS	431.82	843.01	0.71	306.59	1149.60
Bairasiul HPS	159.99	118.18	0.99	158.39	276.57
Tanakpur HPS	25.09	58.27	1.79	44.91	103.19
Chamera I HPS	323.48	355.19	1.22	394.64	749.83
Chamera II HPS	72.61	95.22	1.09	79.15	174.37
Chamera-III HPS	79.93	233.97	2.30	183.84	417.81
Dhauliganga HPS	54.72	85.20	1.32	72.23	157.43
Dulhasti HPS	104.84	346.87	2.97	311.38	658.24
Uri I HPS	136.94	203.55	0.90	123.24	326.79
Uri-II HPS	62.61	305.16	2.63	164.66	469.82

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Source	HERC Approve	d FY 2020-21 Pow	er Purchase Quantu	m and Cost	
	Quantum	Fixed Charges	Energy Charges	Energy Charges	TOTAL PPC
Sewa II HPS	25.40	89.90	2.38	60.44	150.34
Parbati-III HPS	56.24	135.87	1.68	94.49	230.35
SJVNL (Nathpa Jhakri)		0.00			0.00
SJVNL (Nathpa Jhakri)					
HPS	283.23	418.93	1.63	461.66	880.59
Rampur HPS	69	178.70	2.09	144.21	322.91
THDC		0.00			0.00
Tehri (THDC) HPS	210.87	617.36	2.86	603.09	1220.44
Koteshwar HPS	48.35	113.10	2.48	119.90	233.01
Nuclear Power					
Corporation		0.00			0.00
NAPP (Narora)	195.35	8.76	3.32	648.57	657.32
RAPP (3-4)	545	28.23	3.81	2076.45	2104.68
HPGCL (as per HERC					
Order)	16728.32	13175.49	3.6373	60845.44	74020.93
Shared Project		0.00			0.00
BBMB HPS	2868.04	1648.36	0	0	1648.36
DVC		0.00			0.00
Mejia TPS	491.45	926.95	2.98	1464.52	2391.48
Koderma TPS	417	1151.60	3.00	1251	2402.60
Raghunathpur TPS	689	488.84	3.00	2067	2555.84
UMPP		0.00			0.00
CGPL Mundra UMPP					
TPS	2509.8	2361.82	2.00	5019.6	7381.42
Sasan UMPP TPS	3278.25	623.98	1.3	4261.73	4885.70
Others		0.00			0.00
Tala, HPS	45.07	1.36	2.24	100.96	102.32
PTC GMR Kamalanga					
TPS	1963.42	2867.01	1.71	3357.45	6224.46
PTC Baglihar HPS J&K	263.72	13.74	3.86	1017.96	1031.70
PTC Lanco Amarkantak					
TPS	1931.12	2810.77	2.12	4093.9744	6904.75
PTC Karchamwangtoo					
HPS	1235.4	3176.57	1.96	2421.384	5597.95
IGSTPP, Jhajjar					
(Aravali) TPS	2671.98	8274.36	4.05	10821.52	19095.88
Pragati Power CCPP	87.63	982.42	4.48	392.58	1375.00
Adani Power Ltd. TPS	8544.86	9498.48	2.66	22729.33	32227.81
Teesta III HPS	0	0.00	0	0	0.00
MGSTPS, CLP, Jhajjar					
TPS	5674.06	8365.05	3.78	21447.9468	29812.99
Gati/Dans/Shiga/IA					
HPS	1374.11	76.80	4.14	5688.82	5765.61
Renewable Power		0.00			0.00
Bhoruka HPS	29.14	0.00	3.17	92.37	92.37
P&R Gogripur HPS	9.71	0.00	3.96	38.45	38.45
Puri Oil Mill HPS	13.59	0.00	3.68	50.01	50.01
Biomass Projects	217.14	0.00	8.64	1876.09	1876.09
Cogeneration Plants	290.57	0.00	5.31	1542.93	1542.93
Solar Projects (JNNSM)	16.27	0.00	5.67	92.25	92.25
Siwana Solar	8.32	0.00	6.21	51.67	51.67
Balarch Solar	1.66	0.00	5.65	9.38	9.38
JBM Solar	33.28	0.00	5.67	188.70	188.70

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Source	HERC Approve				
	Quantum	Fixed Charges	<b>Energy Charges</b>	<b>Energy Charges</b>	TOTAL PPC
HPGCL Solar	16.64	0.00	4.88	81.20	81.20
SECI (weighted average of 5.50 &					
2.51)	667.27	0.00	3.15	2101.90	2101.90
Wind Power	2284.88	0.00	2.71	6192.02	6192.02
Waste to Energy (JBM)	22.15	0.00	6.84	151.51	151.51
Paddy Stubble PP	29.64	0.00	7.65	226.75	226.75
Thermal (pilot project)	1991.04	26.00	4.25	8459.01	8478.95
TOTAL	63666.53	68520		183510	252024

#### 4.11 Intrastate Transmission Charges & SLDC Charges

The Commission, vide its Order dated 21<sup>st</sup> May, 2020 on HVPNL's Transmission Tariff and SLDC charges petition for the FY 2020-21, has approved Transmission tariff and SLDC charges to be recovered by HVPNL from UHBVNL and DHBVNL. The intrastate transmission charges approved include the unitary charge arising out of transmission project commissioned through Public Private Partnership (PPP) between HVPNL and M/s Jhajjar KT Transco Private Limited. The details including monthly recovery of the transmission and SLDC charges from various beneficiates including the Discoms are given in the ibid order. Hence, the same is not being reproduced here. The transmission and SLDC Charges, as determined by the Commission in the ibid Order, shall form part of the ARR of the Discoms for the FY 2020-21.

In addition to the above and keeping in view the surplus power availability scenario prevailing in Haryana, the Commission directs that the Discoms shall not procure any additional power over and above the quantum approved in the PPA that may be available to it from the un-allocated share / share relinquished by any other State in the Central Generating Power Stations in case it does not fall in the merit order despatch. The Commission thereto shall disallow all such power procurements and the cost thereto. Additionally, while resorting to bidding or calling for expression of interest for power procurement the Discoms must ensure that the power under PPAs already approved by the Commission materialises and also the intra-State generator i.e. HPGCL's power plants are scheduled at least upto the critical minimum threshold before considering backing down.

The DISCOMs are directed to perform cost benefit analysis including trade-off between purchase of REC and RE Power before rushing with proposal to procure RE Power.

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As per Commission estimates, the availability of energy is considerably in excess of the estimated requirement during the FY 2020-21. In view of the above observation, the Discoms must gear up their power purchase procurement planning and strengthen its trading activities for disposal of surplus power. It would be appropriate for the licensee to closely monitor, on daily basis, the surplus capacity, which could neither be backed down nor sold off even at variable cost and is therefore leading to trading losses. The Discoms must fine tune their projection models and ensure that surplus energy available is disposed of in a cost-effective manner. Based on the revised projection of sales and approved distribution losses in light of the constrained demand scenario, estimated interstate and intrastate transmission losses, the Commission estimates of power purchase cost per unit and surplus power are presented below: -

**Energy Balance for the FY 2020-21** 

·	Energy Balance for the FT 2020-21					
Sr. No.	Particulars	Units	UHBVNL	DHBVNL	Total	
1	Gross energy procured from outside the state sources	MUs	12291.13	17029.99	29321.12	
2	Interstate sale / banking	MUs	6233.45	8636.77	14870.22	
3	Energy procured from outside the state sources net of interstate sale / banking	MUs	6057.68	8393.22	14450.90	
4	Inter-state transmission losses	%	3.82%	3.82%	3.82%	
5	Inter-state transmission losses	MUs	231.40	320.62	552.02	
6	Net energy available from outside the state	MUs	5826.28	8072.60	13898.88	
7	Add energy generated within the state	MUs	14397.27	19948.14	34345.41	
			41.92%	58.08%	48244.29	
8	Net energy available for use in Haryana/ Total energy at Haryana Boundary	MUs	20223.55	28020.74	48244.29	
9	Intra-state transmission losses	%	2.15%	2.15%	2.15%	
10	Intra-state transmission losses	MUs	434.81	602.45	1037.25	
11	Energy at Discom Boundary	MUs	19788.74	27418.29	47207.03	
12	Distribution loss	%	21.23%	16.53%	18.50%	
13	Distribution loss units	MU	4201.15	4532.24	8733.39	
14	Units available for sale by DISCOMS/ Discom approved sales	MU	15587.59	22886.05	38473.64	

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Total energy purchase		26688.40	36978.13	63666.53
Power purchase cost	Rs. Mln	105645.94	146377.77	252023.72
Average rate		3.96	3.96	3.96

Total power purchase cost			
Fixed cost			66435.71
Total Variable cost of sold units of DISCOMS			142241.30
Total Cost of Power for units sold within Haryana	87475.42	121201.59	208677.01
Total Transmission and SLDC Charges	13592.58	18257.01	31849.59
Total Cost	101068.00	139458.60	240526.60
Units purchased for units sold by Discoms	20454.95	28341.36	48796.31
Average bulk supply rate	4.94	4.92	4.93

#### 4.12 ARR Determination for the MYT Period

The ARR for the MYT Period for the FY 2020-21 to FY 2024-25 filed by the Discoms have been considered and Commission's analysis and Order on each of the expenditure items are given in the paragraphs that follow:

#### 4.12.1 AP Sales- FY 2018-19, FY 2019-20 (revised) & FY 2020-21 (projected)

The Commission has examined the submissions of the DISCOMs (UHBVNL and DHBVNL) regarding AP sales for the period mentioned above and observes that in the present Order the Commission shall continue with the same methodology as adopted in its previous Order based on data emanating from AP segregated feeders for assessing AP Sales. Accordingly, the Commission has analysed for the true up for FY 2018-19, revised estimated for FY 2019-20 and projected for FY 2020-21 in respect of AP sales of the Petitioners as under: -

#### 4.12.2 True up of AP Sales for FY 2018-19 (True-up of RE Subsidy)

The Petitioners, based on actual AP sales have prayed that the Commission may approve Rs. 6503.05 Crores as revised RE Subsidy for year FY 2018-19. The Commission in its Tariff order dated 15.11.2018 had approved Rs. 7,139.72 Crores towards RE Subsidy for FY 2018-19. The data submitted for AP sales for FY 2018-19 is reproduced as under: -

AP Sales ss Submitted by DISCOMs (MU)

The Career Co Caroninated by Dicorollic (mo)					
Sr. No.	AP sales	FY 2018-19			
1	UHBVNL	3572.20			
2	DHBVNL	5149.05			
3	Total AP Sales of two DISCOMs (1+2)	8721.25			

Based on the data submitted by the Petitioners, the AP consumption of the two Distribution Licensees is computed as follows:

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AP Sales as Trued up by Commission for FY 2018-19 (MU)

AP consumption		DHBVN
	(2018-19)	(2018-19)
AP units as recorded on segregated AP feeders	4222.50	5979.70
Loss @ 16%	675.60	956.75
Net consumption from AP feeders	3546.90	5022.95
Add AP units on other feeders	44.53	187.14
Less Consumption of other category consumers on segregated AP feeders	19.23	61.02
Total AP consumption	3572.20	5149.05
Total AP consumption of two DISCOMs (rounded off)		8721.25
Total AP consumption approved by Commission in its Tariff Order dated 15/11/2018		9575

It is observed from the above table that the actual AP consumption 8721.25MU for the FY 2018-19 is lower than the AP consumption approved by the Commission in Tariff Order dated 15/11/2018 for FY 2018-19(9575 MU). Accordingly, the total AP sale in respect of both the DISCOMs is approved as 8721.25MU (UHBVNL- 3572.20MU and DHBVNL-5149.05MU) for FY 2018-19.

Further, the Commission in its Tariff Order dated 15/11/2018 had allowed subsidy of Rs. 7,139.72 Cr. against 9575MU of AP sales for FY 2018-19to UHBVN and DHBVN as per which, the agricultural subsidy on per unit works out to be Rs. 7.46/kWh.

While trueing up for FY 2018-19, the revised sales subsidy for FY 2018-19 is approved as Rs. 6,503.11 Cr. against the actual AP consumption of 8721.25 MU.

The commission in its order dated 07/03/2019 had observed,

"The Commission, in its Tariff Order dtd. 15/11/2018, had directed the Petitioners to engage a third party for authenticating the AP sales data for FY 2017-18 and supply hours vis-a-vis reasons of variance in supply hours and to submit analysis report at the time of next ARR filling. However, the said directive remained un-complied as the requisite report is still awaited. The Commission now directs the Petitioners to include the FY 2018-19 AP Sales data as part of the same scope of work and submit its report within 3 months from the date of this Order. In its absence the Commission shall be constrained to consider true-up of AP sales."

UHBVN in reply vide its letter MEMO No. Ch-10/SE/RA/N/F-173/Vol-IX dated 17.09.2019 has submitted that all the AP feeders of DISCOMs are metered with AMR facility and DISCOMs had engaged M/s EESL for carrying out study of energy consumption data on selected AP feeders and as per their study the T&D losses of AP feeders in each circle is approximately 16%, which is same as being considered by HERC for the computation of AP Sales.

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The summary of energy audit report of 9 (Nine) AP Feeders with the scope:

- Authenticity of received Units of A.P. feeders along with Load Survey
- Consumer Tagging, Network Diagram & land holding details of the consumers
- Consumption Pattern of AP & non-AP consumers and checking of connected load of 20% consumers on the feeder

Calculation of Transmission & Distribution Losses; is as tabulated in the following table:

Comput	Computed T&D Loss as per Report of EES						
me of AP feeder	Name of circle	Computed T&D Loss as per					

Sr. No.	Name of AP feeder	Name of circle	Computed T&D Loss as per report of EESL
1.	KottarKhana	Yamunanagar	15.72%
2.	Modipur	Karnal	16.21%
3.	Atta	Panipat	15.40%
4.	Mundhera	Jhajjar	17.12%
5.	Meham	Rohtak	16.79%
6.	Samalehri	Ambala	16.42%
7.	Chhott	Kaithal	16.83%
8.	Ramnagar	Kurukshetra	15.48%
9.	Nahar	Sonipat	15.60%

The commission notes that as per the report submitted by DISCOMs, the T&D losses of AP feeders in each circle of UHBVN is about 16%, which is same as already being considered for the computation of AP Sales.

The Commission observes that UHBVNL in its Note No. 18.1 for Audited Accounts of FY 2018-19 and FY 2017-18 has indicated Sales for Agriculture category as 3546.20 MU and 3922.18 MU respectively. However, the Agricultural Sales computed as per the Commission's philosophy works out as 3572.90 MU and 3960.48 MU for FY 2018-19 and FY 2017-18 respectively. The Commission recognises the fact of various underlying assumptions like loss factor of 16% etc. involved in the computation of AP Sales.

The Commission observes that the DHBVN Agriculture sales for FY 2018-19 is 6148.62 MU supplied vide its office Memo. No. Ch-44/SE/RA-659 dated 07/02/2020 and 5149.05 MU computed as per Commission's methodology, which reveals a significant difference of 999.57 MU in these two figures appearing to be unrealistic. Therefore, Commission feels that the matter needs to be investigated. The commission also notes with concern that despite issuance of directives to this effect in its previous orders, DHBVN did not engage a third party for analysing and authenticating its AP sales data for FY 2017-18.

In view of the above, the Commission again directs DHBVN to engage a third party for analysing and authenticating its AP sales of FY 2017-18 and FY 2018-19 and submit its

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report within 3 months from the date of this order and also to examine the AP sales data meticulously for the FY 2019-20.

# 4.12.3 Operation & Maintenance Expenses

The operation and maintenance expenses comprise Employee Expenses, Repair & Maintenance expenses and Administration & General expenses. O&M expenses for MYT Control Period are projected as per Regulation 57.4 of MYT Regulations 2019. The relevant extract of the Regulations is reproduced as under:

"The actual audited O & M expenses for the financial year preceding the base year, subject to prudence check, shall be escalated at the escalation factor of 4% to arrive at the Employee costs and Administrative and General Costs for the base year of the control period. The O&M expenses for the nth year of the control period shall be approved based on the formula given below".

$$O&M_n = (R&M_n + EMP_n + A&G_n)^* (1-X_n) + Terminal Liabilities$$

Where.

 $R&M_n$  – Repair and Maintenance Costs of the Distribution Licensee(s) for the nth year;

 $EMP_n$  – Employee Costs of the Distribution Licensee(s) for the nth year excluding terminal liabilities;

 $A&G_n$  – Administrative and General Costs of the Distribution Licensee(s) for the nth year;

The above components shall be computed in the following manner.

(a) 
$$R&M_n = K * GFA * INDX_n/INDX_{n-1}$$

Where,

'K' is a constant (expressed in %) governing the relationship between O&M costs and Gross Fixed Assets (GFA) for the nth year. The value of K will be 1.65% for DHBVN and UHBVN respectively for the entire control period;

'GFA' is the average value of the gross fixed asset of the nth year.

'IND $X_n$ ' means the inflation factor for the nth year as defined herein after.

(b) EMP<sub>n</sub> (excluding terminal liabilities) +  $A&G_n = (EMP_{n-1} + A&G_{n-1})^* (INDX_n/INDX_{n-1})$ 

Where,

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 $INDX_n$  – Inflation Factor to be used for indexing the Employee Cost and A&G cost. This will be a combination of the Consumer Price Index (CPI) and the Wholesale Price Index (WPI) for immediately preceding year and shall be calculated as under:

$$INDX_n = 0.55*CPI_n + 0.45*WPI_n$$

**Note 1:** For the purpose of estimation, the same INDXn value shall be used for all years of the control period. However, the Commission shall consider the actual values of the INDXn at the end of each year during the annual performance review exercise and true-up the employee cost and A&G expenses on account of this variation.

**Note 2:** Any variation in employee cost and A&G cost on account of reasons beyond variation in INDXn shall be subject to the incentive and penalty framework specified in regulation 12.

**Note 3:** As and when any material price index specific to power sector or a more relevant Index becomes available, the same shall replace the Index used for working out R&M cost.

**Note 4:** Terminal liabilities shall be approved as per actual expenditure incurred by the distribution licensee or established through actuarial valuation for the ensuing year.

**Note 5:** O&M expenses made on account of extraordinary situations (if any) shall be submitted to Commission for its approval. Such expenses shall be filed separately and will not be subjected to incentive and penalty framework. The approved amount by the Commission shall be trued up in the annual performance review.

**Note 6:** Changes in the pay scales of employees necessitated on account of pay revision by Pay Commission or by the State Government orders shall be considered by the Commission for true-up during the annual performance review.

Note 7: Source for CPI and WPI calculation as under:

Wholesale Price Index numbers as per Office of Economic Advisor of Government of India in the previous year

Consumer Price Index for Industrial Workers (all India) as per Labour Bureau, Government of India in the previous year

## (c) $X_n$ is an efficiency factor for nth year

The Value of  $X_n$  will be determined by the Commission in the MYT order for the control period.

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## 4.12.4 Computation of Inflation Factor

Operation and Maintenance expenses of base year are escalated with inflation factor to project the O&M expenses of ensuing years of MYT Control Period. Inflation factor is calculated as per Regulation 57.4 of MYT Regulation, 2019. Values of relevant Indices is tabulated as under:

## **Proposed Inflation factor for WPI & CPI**

#### **WPI Inflation**

Month/Year	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Average
FY 2019-20	121	122	122	121	121	121							121
FY 2018-19	117	118	119	120	120	121	122	122	120	119	120	120	120
FY 2017-18	113	113	113	114	115	115	116	116	116	116	116	116	115

## **CPI Inflation**

Month/Year	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Average
FY 2019-20	312	314	316	319	320	322							317
FY 2018-19	288	289	291	301	301	301	302	302	301	307	307	309	300
FY 2017-18	277	278	280	285	285	285	287	288	286	288	287	287	284

On the basis of above values for indices, inflation factor for MYT Control Period work as worked out by the licensees is 4.66%. Detailed calculation for determination of Inflation factor is tabulated as under: -

**Proposed Inflation Factor for MYT Control Period** 

Weightage	0.45	0.55	1.00
Avg. Indexation for FY 2019-20	121.37	317.17	
Avg. Indexation n-1 (Index * Wt.)	54.62	174.44	229.06
Avg. Indexation for FY 2018-19	119.79	299.92	
Avg. Indexation n (Index * Wt.)	53.91	164.95	218.86
Combined Inflation (Indxn/Indxn-1)		4.66%	

The Commission has examined the calculations and approves as the same is in line with the MYT Regulations in vogue.

## 4.12.5 Employee Expenses

The actual employee expenses of FY 2018-19 is escalated @ 4% to arrive at the base year value for the MYT Control Period. The base year employee expenses are indexed with inflation factor of 4.66% to project the employee expenses of UHBVNL and DHBVNL for ensuing years of the MYT Control Period.

It is observed that as per recruitment plan of UHBVN, approximately 2,000 new employees may join during the 1st year of MYT Control Period. Considering the average basic salary and applicable dearness allowance, employee cost is estimated for 1st Year of MYT Control Period. According to recruitment plan of DHBVN, approximately 902 new employees may

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join during the 1st year of MYT Control Period. Considering the basic salary of Rs. 25,500/-and dearness allowance of Rs. 4,335/- the employee expense for relevant years has been projected for MYT Control Period.

Terminal benefits for MYT Control Period is kept equivalent to the actual expenses of FY 2018-19. Summary of employee expenses proposed by UHBVNL is tabulated as under: -

UHBVNL Proposed Employee Expenses for MYT Control Period (In Cr.)

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Salaries	620.05	648.94	679.17	710.81	743.93
Dearness Allowance	52.19	54.63	57.17	59.83	62.62
Other Allowances	79.01	82.69	86.55	90.58	94.80
Terminal benefits	303.99	303.99	303.99	303.99	303.99
Gross Employee Expense	1,055.25	1,090.25	1,126.88	1,165.22	1,205.34
Less Expenses Capitalised	10.49	10.84	11.20	11.59	11.98
Net Employee Expenses	1,044.76	1,079.41	1,115.67	1,153.63	1,193.35

The summary of employees cost proposed by DHBVNL is given in the below table: -

DHBVNL Proposed Employee Expenses for MYT Control Period (In Cr.)

21.21.121.10p000a	Bris vite i repeccu Empleyee Expenses for milit eentre i totto (m en)									
Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25					
Salaries	528.72	553.35	579.13	606.11	634.35					
Dearness Allowance	51.96	54.38	56.92	59.57	62.34					
Expenditure on Employees Engaged on Contractual Basis	252.74	264.51	276.84	289.73	303.23					
Other Allowances	116.45	121.87	127.55	133.49	139.71					
Terminal benefits	360.00	360.00	360.00	360.00	360.00					
Gross Employee Expense	1,309.87	1,354.12	1,400.43	1,448.90	1,499.63					
Less Expenses Capitalised	10.93	11.44	11.98	12.54	13.12					
Net Employee Expenses	1,298.93	1,342.67	1,388.45	1,436.37	1,486.51					

The Commission has examined the projections of the employee cost by UHBVNL and DHBVNL for the MYT Period and observes that the escalation and indexation factors used by the licensees are in order and accordingly approves the employee cost as proposed by UHBVNL and DHBVNL for the MYT Period.

# 4.12.6 Repair & Maintenance (R&M) Expenses

R&M expenses have been projected by the Discoms for MYT Period in accordance to Regulation 57.4 of MYT Regulations, 2019. R&M expenses for each year of MYT Control Period have been determined by Indexing 1.65% of Average GFA with the applicable inflation factor.

Projection of R&M expenses of UHBVN for each year of MYT Control Period is tabulated as under:

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**UHBVNL Proposed R&M Expenses for MYT Control Period (Rs Crores)** 

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Average GFA	8,596.41	9,420.48	10,194.53	10,857.37	11,441.50
K factor	1.65%	1.65%	1.65%	1.65%	1.65%
Indexation %	4.66%	4.66%	4.66%	4.66%	4.66%
R&M Expenses	148.45	162.68	176.05	187.49	197.58

Projection of R&M expenses of DHBVN for each year of MYT Control Period is tabulated as under:

DHBVNL Proposed R&M Expenses for MYT Control Period (In Cr.)

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Average GFA	10,274.77	11,603.93	12,906.13	14,094.12	15,106.88
K factor	1.65%	1.65%	1.65%	1.65%	1.65%
Indexation %	4.66%	4.66%	4.66%	4.66%	4.66%
R&M Expenses	177.43	200.38	222.87	243.39	260.88

The Commission has examined the projections of R&M Expenses submitted by the licensees and finds the methodology used by the licensees in Order. However, as the Commission approved Capex for the FY 2020-21 is lower than that proposed by the Licensees, the GFA has undergone a change. It may be noted that the capital expenditure for the remaining years of the control period has been retained as proposed by the licensee. The resultant R&M expenses for the Control Period for FY 2020-21 to FY 2024-25, as approved by the Commission, is given in the table below:

Approved R&M Expenses of UHBVNL for MYT Control Period (Rs Crores)

Approved italii i	Approved Italii Expenses of OTIBVILE for Init I Control I ched (Its Grores)								
Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25				
Average GFA	8,508.27	9224.86	9936.03	10571.06	11141.20				
Net R&M Expenses	146.93	159.30	171.58	182.55	192.39				
K factor	1.65%	1.65%	1.65%	1.65%	1.65%				
Indexation %	4.66%	4.66%	4.66%	4.66%	4.66%				

Approved R&M Expenses of DHBVNL for MYT Control Period (Rs Crores)

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Average GFA	10,198.33	11,455.58	12,715.83	13,887.04	14,893.09
K factor	1.65%	1.65%	1.65%	1.65%	1.65%
Indexation %	4.66%	4.66%	4.66%	4.66%	4.66%
R&M Expenses	176.11	197.82	219.59	239.81	257.18

## 4.12.7 Administration & General (A&G) Expenses

A&G expenses of base year have been estimated by considered 4% escalation on actual expense for the FY 2018-19. Base year value is indexed with inflation factor for projecting A &G expenses of UHBVNL and DHBVNL for MYT Control Period. Summary of A&G Expenses for each year of Control Period is tabulated as under:

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**UHBVNL Proposed A&G Expenses for MYT Control Period (Rs Crores)** 

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Gross A&G Expenses	117.88	123.37	129.12	135.13	141.43
Indexation (%)	4.66%	4.66%	4.66%	4.66%	4.66%
Less: Expenses Capitalised	2.28	2.38	2.49	2.61	2.73
Net A&G Expenses	115.60	120.98	126.62	132.52	138.69

DHBVNL Proposed A&G Expenses for MYT Control Period (in Rs Cr.)

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Gross A&G Expenses	118.94	124.49	130.28	136.35	142.71
Indexation (%)	4.66%	4.66%	4.66%	4.66%	4.66%
A&G Expenses	124.49	130.28	136.35	142.71	149.36
Less: Expenses Capitalised	3.26	3.41	3.57	3.74	3.91
Net A& G Expenses	121.22	126.87	132.78	138.97	145.44

The Commission has examined the projections of A&G expenses by UHBVNL and DHBVNL for the MYT Period and observes that the escalation and indexation factors used by the licensees are in order and accordingly approves the A&G expenses as proposed by UHBVNL and DHBVNL for the MYT Period.

## 4.12.8 Summary of O&M Expenses of MYT Control Period

Projection of O&M expenses of UHBVN for each year of MYT Control Period is tabulated as under:

Summary of Approved O&M Expenses of UHBVNL for MYT Control Period (Rs Crores)

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Employee Expense	740.76	775.42	811.68	849.64	889.36
A & G Expenses	115.60	120.98	126.62	132.52	138.69
Repair & Maintenance Expense	146.93	159.30	171.58	182.55	192.39
Terminal Liability	303.99	303.99	303.99	303.99	303.99
Net O&M Expenses	1,307.28	1,359.47	1,413.88	1,467.70	1,524.44

Summary of Approved O&M Expenses of DHBVNL for MYT Control Period (In Rs Cr.)

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Net Employee expenses	938.93	982.67	1,028.45	1,076.37	1,126.51
A & G Expenses	121.22	126.87	132.78	138.97	145.44
R&M Expenses	176.11	197.82	219.59	239.81	257.18
Terminal Benefits	360.00	360.00	360.00	360.00	360.00
Net O&M Expenses	1,596.27	1,667.37	1,740.82	1,815.15	1,889.14

# 4.12.9 Approved Capital Expenditure and additions to GFA

The Commission, after careful examination of the proposed capital expenditure for the FY 2020-21, has approved Rs. 980 crores and Rs. 1200 crores as the capital expenditure for UHBVNL and DHBVNL respectively. The capital expenditure for the remaining years of the control period, for the limited purpose of determining the ARR, is taken as proposed by the licensee. The capitalization/ transfer to GFA is in the same ratio as proposed by the

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licensees i.e. 60:40. The retirement/ disposal of assets is also in the same ratio as proposed by the respective licensees.

The Commission has limited the consumer contribution to the amount proposed by the respective Discoms for the entire MYT period; Equity is pegged at 20% of the approved capital expenditure for each year of the MYT period as against 16% proposed by UHBVNL for the FY 2020-21 and 19% thereafter, whereas DHBVNL has assumed a constant funding of 20% of CAPEX by equity. The remaining balance of capital expenditure is assumed to be funded by long term loan. The calculation of approved capital expenditure, additions to GFA and funding thereto is given in the following tables:

Approved Capital Expenditure, GFA and Funding for the CAPEX for UHBVNL

Approved Capital Expe	Approved Capital Experiorative, GFA and Funding for the CAPEX for Ond VNL								
Capital Work in Progress (CWIP)	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25				
Opening CWIP	928.33	1,022.06	1,099.56	995.70	954.53				
Addition	980.00	974.27	757.41	765.72	762.95				
Capex Capitalized	949.00	1,030.22	980.24	915.54	884.20				
IDC during the year	108.20	117.23	109.46	99.43	94.94				
Closing CWIP	1067.53	1128.80	1015.43	965.03	938.72				
Gross Fixed Assets (GFA)	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25				
Opening GFA	8,164.75	8,851.78	9,571.45	10,231.34	10,814.97				
Add: Trf from CWIP	949.00	1,030.22	980.24	915.54	884.20				
Total GFA	9,113.75	9,882.00	10,578.18	11,189.66	11,752.21				
Less: Retirement/Disposal of									
Assets	261.98	284.06	304.07	321.65	337.82				
Closing GFA	8,851.78	9,597.94	10,274.11	10,868.01	11,414.39				
Average GFA	8,508.27	9,224.86	9,936.03	10,571.06	11,141.20				
Source of Funding for additions and IDC	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25				
Consumer Contribution	225.00	50.00	37.50	37.50	37.50				
Equity	217.64	218.30	173.37	173.03	171.58				
Debt	645.56	823.19	656.00	654.62	648.81				
Total	1088.20	1091.49	866.87	865.15	857.88				

Approved Capital Expenditure, GFA and Funding for the CAPEX for DHBVNL

Consider Manufacture Programmes (CIA/IR)	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Capital Work in Progress (CWIP)	Projected	Projected	Projected	Projected	Projected
Opening CWIP	1,367.83	1,267.13	1,357.36	1,302.74	1,094.29
Add: Additions (Capex during FY)	1,200.00	1,417.52	1,266.33	955.32	867.54
Sub-total Sub-total	2,567.83	2,684.65	2,623.69	2,258.06	1,961.83
Less: Capitalization (T/fed to GFA during					
FY)	1,300.70	1,327.29	1,320.95	1,163.77	1,003.59
Closing CWIP	1,267.13	1,357.36	1,302.74	1,094.29	958.24
Gross Fixed Assets (GFA)					
Opening GFA	9,574.73	10,821.92	12,089.24	13,342.42	14,431.66
Add: Additions during FY (net)	1,300.70	1,327.29	1,320.95	1,163.77	1,003.59
Less: Disposal of Asset from GFA	53.50	59.96	67.77	74.53	80.74
Closing GFA	10,821.92	12,089.24	13,342.42	14,431.66	5,354.51
Average GFA	10,198.33	11,455.58	12,715.83	13,887.04	14,893.09
Source of Funding for additions and IDC					

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Consumer Contribution & Grant	152.75	124.58	99.50	102.51	105.61
Normative Equity	240.00	283.50	253.27	191.06	173.51
Normative Loans	807.25	1,009.43	913.56	661.74	588.42
Total	1,200.00	1,417.52	1,266.33	955.32	867.54

## 4.12.10 Interest & Finance Charges

Interest on capex loans for MYT Control Period is projected as per Regulation 21 of MYT Regulations 2019. Interest on long-term borrowing is computed on loan-wise basis as per the applicable interest rate. The relevant excerpt of the MYT Regulations, 2019 is reproduced as under:

## Existing loans

- (i) Interest on loan capital shall be computed loan-wise for existing loans arrived in a manner specified in Regulation 19 and shall be as per the rates approved by the Commission.
- (ii) The loan outstanding as on 1st April of each financial year shall be worked out as the gross loan in accordance with Regulation 19 by deducting the cumulative repayment as admitted by the Commission up to 31st March of previous financial year from the gross normative loan;
- (iii) The rate of interest shall be the weighted average rate of interest on institutional loans calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the project. In case the weighted average rate is not available, the interest rate approved by the Commission in its earlier tariff order shall be allowed.

Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered;

Provided further that if the generating plant/project does not have actual loan, then the weighted average rate of interest of the generating company/licensee as a whole shall be considered.

(iv) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest;

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- (v) The generating company and the licensee shall from time to time review their capital structure i.e. debt and equity and make every effort to restructure the loan portfolio as long as it results in net savings on interest. The costs associated with such re-financing shall be borne by the beneficiaries and the net savings (after deducting the cost of re-financing) shall be subjected to incentive / penalty framework as mentioned in the Regulation 12 which shall be dealt with at the time of mid-year performance review/true-up.
- (vi) The changes to the loan terms and conditions shall be reflected from the date of such re-financing and benefit passed on to the beneficiaries;
- (vii) In case of any dispute relating to re-financing of loan, any of the parties may approach the Commission with proper application along with all the relevant details. During the pendency of any dispute, the beneficiaries shall not withhold any payment on account of orders issued by the Commission.
- (viii) In case any moratorium period on repayment of loan is availed of by the generating company or the licensee, depreciation provided for in the tariff during the years of moratorium shall be treated as repayment during those years and interest on loan capital shall be calculated accordingly.

Provided that the repayment for each year of the control period shall be deemed to be equal to the depreciation allowed for the corresponding year.

## Interest on Long Term Loan

The Discoms have proposed that Long term borrowings for Capital Expenditure Plan of MYT Control Period is assumed to be met from REC loans. Accordingly, the interest cost on Capex loan for MYT period is projected by considering the interest rate of 10.60% by UHBVNL and 10.40% by DHBVNL on new receipts and average interest rate on existing loans.

Normative repayment of CAPEX Loan for MYT Control Period is proposed as per tentative repayment schedule during the respective year. Capitalization of interest cost for MYT Period is projected on average capital work in progress and average interest rate on capex loans.

The Commission has carefully considered the calculations of interest on long term loans proposed by the Discos and agrees with the methodology where the additions to borrowings

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are in accordance with the funding of proposed capital expenditure and the repayment is equal to the depreciation for the year. However, since the approved capital expenditure and its funding is at variance with that proposed by the licensee, it has resulted in slight variance in the interest cost on term loans as well as return on equity. The Commission has limited the consumer contribution in proportion to the amount proposed by the respective Discoms for the entire MYT period; Equity is pegged at 20% of the approved capital expenditure for each year of the MYT period as against 16% proposed by UHBVNL for the FY 2020-21 and 19% thereafter, whereas DHBVNL has assumed a constant funding of 20% of CAPEX by equity, and the balance being funded by loan. In accordance with the MYT regulations 2019, interest on existing loans is calculated at the weighted average rate of interest on existing institutional loans as submitted by the licensees i.e. 9.25% for UHBVNL and 9.12% for DHBVNL. For new loans the interest rate used for calculating interest cost is limited to the maximum of the MCLR of SBI as on 01.04.2019 (8.05%) plus 150 basis point i.e 9.55% for UHBVNL and DHBVNL both. Capitalisation and retirement of assets is in the ratio as proposed by the licensee.

## 4.12.11 Interest on Consumer Security Deposit:

Interest on consumer security deposits for MYT Control Period is calculated in accordance to Regulation 21.4 of MYT Regulations 2019. The relevant excerpt of the regulation is reproduced as under:

"Interest shall be allowed on the amount held as security deposit held in cash from Transmission System Users, Distribution System Users and Retail consumers, at the Bank Rate as on 1st April of the financial year in which the petition is filed provided it is payable by the transmission/distribution licensee.

Receipt of consumer security deposit for MYT Control Period is projected by escalating the receipt of consumer security deposit during the previous year with the load growth considered for the respective year. Details of interest on consumer security deposit for each year of MYT Period is tabulated as under:

**UHBVNL Proposed Interest on Consumer Deposit for MYT Control Period (Rs Crores)** 

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Opening balance	1,445.52	1,579.74	1,719.67	1,865.58	2,017.74
Receipt during the year	134.21	139.93	145.91	152.16	158.68
Closing balance	1,579.74	1,719.67	1,865.58	2,017.74	2,176.42
Average security deposit	1,512.63	1,649.70	1,792.63	1,941.66	2,097.08
Interest rate	6.25%	6.25%	6.25%	6.25%	6.25%
Interest on CSD	94.54	103.11	112.04	121.35	131.07

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DHBVNL Proposed Interest on Consumer Deposit for MYT Control Period (Rs Crores)

Description	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Opening Balance	1,744.81	1,980.65	2,227.64	2,486.34	2,757.33
Receipt during the Year	235.84	246.99	258.70	270.99	283.90
Closing Balance	1,980.65	2,227.64	2,486.34	2,757.33	3,041.23
Average Security Deposit	1,862.73	2,104.14	2,356.99	2,621.83	2,899.28
Interest Rate	6.25%	6.25%	6.25%	6.25%	6.25%
Interest on CSD	102.01	116.42	131.51	147.31	163.86

The Discoms have filed revised ARR projections for the FY 2020-21 in light of the suppressed demand scenario post lockdown wherein the Interest on Consumer Security Deposit has been projected at Rs. 70.27 crores and Rs 75.89 crores by UHBVNL and DHBVNL respectively. The Commission has examined the calculations of interest on consumer security deposit for the FY 2020-21as proposed by the Discoms and approves the same. Interest on CSD for the balance control period is as proposed by the licensees.

## 4.12.12 Interest on Working Capital Loan and other finance charges:

Interest on working capital loans is projected for MYT Control Period in accordance with the estimated receipt and repayment of working capital loans. Detail of interest on working capital for each year of MYT Period is tabulated as under:

UHBVNL Proposed Interest on Working Capital for MYT Control Period (Rs Crores)

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Interest on WC loans	16.04	14.21	12.38	10.54	8.71
Interest on HVPNL Bonds	77.83	64.24	46.71	26.52	11.41
Interest on CC/OD	168.27	166.64	169.66	189.22	229.84
Total Interest	262.14	245.08	228.74	226.28	249.96

DHBVNL Proposed Interest Working Capital for MYT Control Period (Rs Crores)

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Loan from HVPNL (Bonds)	58.80	55.36	46.13	32.98	18.28
Loan from UHBVN	7.86	6.88	4.91	2.95	0.98
Cash Credit Limit	40.00	45.00	45.00	45.00	45.00
Deficit Financing	78.44	141.68	247.31	403.83	617.26
Total Interest	185.10	248.92	343.35	484.76	681.52

Guarantee fees for MYT Control Period is projected @ 2% of on the loan receipt during the respective year by UHBVNL at Rs. 10 crores for the FY 2020-21 which has been revised to Rs. 24.74 crores as part of the revised filing.

DHBVNL has proposed other interest and finance charges on account of payment of guarantee fee to the State Govt. for new loans, HVPNL bond issuance/maintenance charges, MDR/digital payment transaction charges and LC issuance charges, etc. in the

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ARR for MYT control period on the basis of expenses incurred during FY 2018-19. DHBVNL has also revised the guarantee fee charges to Rs. 40.08 crores from Rs. 26.08 crores.

**UHBVNL Proposed Interest & Finance Charges for MYT Control Period (Rs Crores)** 

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Gross Int. on Capex loans	244.91	282.49	306.81	318.69	327.29
Less: Interest Capitalized	108.20	117.23	109.46	99.43	94.94
Net Int. on Capex Loans	136.71	165.26	197.35	219.25	232.35
Interest on WC loans	262.14	245.08	228.74	226.28	249.96
Interest on Security Deposits	94.54	103.11	112.04	121.35	131.07
Guarantee Fees	10.00	ı	3.53	6.71	4.60
Net Interest & finance charges	503.39	513.45	541.66	573.60	617.97

**DHBVNL Proposed Interest & Finance Charges for MYT Control Period (Rs Crores)** 

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Interest Payment on CAPEX					
Loan	305.89	371.37	430.67	476.92	513.55
Less: Interest Capitalized	119.86	120.55	119.18	104.78	86.80
Net Interest on CAPEX Loan	186.03	250.83	311.49	372.13	426.75
Interest on Security Deposit	102.01	116.42	131.51	147.31	163.86
Other Interest & Finance					
Charges	16.08	17.18	18.39	19.72	21.19
HVPNL Bond Charges	0.08	0.08	0.08	0.08	0.08
MDR Charges	11.00	12.10	13.31	14.64	16.11
LC Charges	5.00	5.00	5.00	5.00	5.00
Guarantee Fee	10.00	10.00	10.00	10.00	10.00
Interest on Long Term Loan	304.12	384.43	461.39	539.17	611.80
Interest on Working Capital					
Loan	185.10	248.92	343.35	484.76	681.52
Interest on UDAY Bonds	-	-	-	-	-
Total Interest & Finance					
charges	499.22	643.35	814.74	1,033.93	1,303.32

The Commission has examined the interest on working capital borrowings as projected by the licensee and observes that the same are not in accordance with the MYT Regulations, 2019, which provides for a specific methodology for calculation of interest on working capital borrowings for the Distribution and retail supply business as given below:

# 22. INTEREST ON WORKING CAPITAL

## 22.1 Components of working capital:

## Distribution licensee

## I. Wheeling of electricity:

a) Normative O&M expenses for wheeling business for 1 (one) month;

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- b) Maintenance spares for 1 (one) month based on annual requirement considered at 1% of GFA (wire business) at the end of the previous year;
- c) Receivables equivalent to 1(one) month of wheeling charges.

less

Amount held as security deposits in cash from Distribution System Users :

Provided further that for the purpose of Truing-up for any year, the working capital requirement shall be re-computed on the basis of the values of components of working capital approved by the Commission in the Truing-up before sharing of gains and losses

## II. Retail supply of electricity:

- a) Normative O&M expenses for retail supply business for 1 (one) month;
- b) Maintenance spares for 1 (one) month based on annual requirement considered at 1% of the GFA at the end of the previous year;
- c) Uncollected revenue to be calculated as: Revenue billed for the relevant year \*
  (1 Normative Collection efficiency)
- d) Receivables equivalent to 1 (one) month of billing less consumers' security / advance consumption deposit.

Provided that for the purpose of Truing-up for any year, the working capital requirement shall be re-computed on the basis of the values of components of working capital approved by the Commission in the Truing-up before sharing of gains and losses;

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## 22.2 Rate of Interest

Rate of interest on working capital shall be equal to the MCLR of the relevant financial year plus a maximum of 150 basis points. However, while claiming any spread, the generator and the licensees shall submit loan sanction letter from the banks/ lending institutions, indicating the applicable rate of interest.

The Commission has calculated the amount of allowed working capital borrowings in accordance with the MYT regulations. As the Discoms have revised the interest on ACD, the ACD amount for the purpose of calculation of Working capital borrowings has also been accordingly adjusted. The rate of interest proposed by the licensee for the FY 2020-21 is @ 8.51% for UHBVNL and 9.5% for DHBVNL. Further, in view of COVID-19 pandemic, the Reserve Bank of India has reduced the repo rate on 27.03.2020. Resultantly, State Bank of India reduced its 1-year MCLR rate to 7.40%, w.e.f. 10.04.2020. Accordingly, in order to pass on the benefit of reduced rate of interest to the ultimate consumers, the maximum rate of interest on working capital borrowings has been taken @ of MCLR (7.40%) and a margin of 125 basis point i.e. 1.25% which comes to 8.65% per annum. Accordingly, the interest on working capital for UHBVNL is approved @ 8.51% i.e as proposed and for DHBVNL the allowed rate is considered @ 8.65% per annum for the purpose of calculations. The calculation of approved working capital and interest cost thereto for the MYT period is given in tables below:

Approved interest on working capital for UHBVNL for the MYT Period (Rs. Crores)

Interest on working capital	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
O&M expenses for 1 month	108.94	113.31	117.82	122.39	127.04
Maintenance spares 1% of					
opening GFA	81.65	88.52	95.98	102.74	108.68
2 months receivables	1972.24	2429.01	2565.21	2708.32	2862.81
Uncollected revenue	118.33	145.74	153.91	162.50	171.77
Total	2281.16	2776.58	2932.92	3095.95	3270.30
Less					
ACD, as per Revised ARR filing	1124.32	1649.70	1792.63	1941.66	2097.08
Net working capital	1156.84	1126.87	1140.30	1154.29	1173.22
Interest rate	8.51%	8.51%	8.51%	8.51%	8.51%
Interest cost	98.44	95.89	97.03	98.22	99.83

Approved interest on working capital for DHBVNL for the MYT Period (Rs. Crores)

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
O&M expenses for 1 month	133.02	138.95	145.07	151.26	157.43
Maintenance and Spares					
(@1% of Opening GFA)	95.75	108.22	120.89	133.42	144.32

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Receivables of Two Months	2,667.03	3,381.86	3,624.59	3,883.12	4,146.90
Uncollected revenue	160.02	202.91	217.48	232.99	248.81
Total	3,055.83	3,831.94	4,108.03	4,400.79	4,697.46
Less: Advance Consumer					
Deposit	1,214.24	2,227.64	2,486.34	2,757.33	3,041.23
Net Working Capital	1,841.59	1,604.30	1,621.69	1,643.46	1,656.22
Interest Rate (%)	8.65%	8.65%	8.65%	8.65%	8.65%
Interest cost	159.30	138.77	140.28	142.16	143.26

The Discoms have also proposed to recover certain other finance charges, guarantee fee, MDLR charges and maintenance charges for HVPNL bonds and the same are allowed as proposed, in the original petition, subject to true up. Though the Discoms have revised the guarantee fee charges in the revised filing, the Commission observes that since the capital expenditure has been revised downwards by the Discoms as part of Covid impact, this ought to have resulted in lower borrowings and consequently lower guarantee fee. The Commission further observes that the licensees have not provided any justification for the upward revision of these charges. Accordingly, the other interest cost and finance charges are approved as proposed in the original petition by the Discoms. In light of the above discussion, the approved interest cost of UHBVNL and DHBVNL for the MYT period is summarised as below:

# Summary of Approved Interest cost of UHBVNL for the MYT Period (Rs. Crores)

Cummary or reprior our microsit cost or or a restrict the mirrir or our (Nor or or or or)							
Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25		
Gross Interest on Capex Loans	244.91	282.49	306.81	318.69	327.29		
Less: Interest Capitalized	108.20	117.23	109.46	99.43	94.94		
Net Interest on Capex Loans	136.71	165.26	197.35	219.25	232.35		
Interest on WC loans	98.44	95.89	97.03	98.22	99.83		
Interest on Consumer Security	70.27	103.11	112.04	121.35	131.07		
Deposits							
Other Interest and Finance charges	10.00	ı	3.53	6.71	4.60		
Total	315.42	364.26	409.95	445.54	467.85		

#### Summary of Approved Interest cost of DHBVNL for the MYT Period (Rs. Crores)

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Gross Interest on Capex Loans	236.65	236.65	236.65	236.65	236.65
Interest on new loans (net of repayments)	61.37	114.40	167.11	197.81	207.93
Less: Interest Expenses Capitalized	116.78	113.95	111.74	95.46	75.14
Net Interest on CAPEX Loan	181.25	237.10	292.03	339.01	369.44
Interest on Security Deposit	75.89	116.42	131.51	147.31	163.86
Other Interest & Finance Charges	16.08	17.18	18.39	19.72	21.19
HVPNL Bond Charges	0.08	0.08	0.08	0.08	0.08
MDR Charges	11.00	12.10	13.31	14.64	16.11
LC Charges	5.00	5.00	5.00	5.00	5.00
Guarantee Fee	10.00	10.00	10.00	10.00	10.00
Interest on Long Term Loan	283.22	397.88	470.32	535.76	585.68

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Total Interest & Finance charges	442.51	536.65	610.59	677.92	728.94
Interest on UDAY Bonds	-	-	-	-	-
Interest on Working Capital Loan	159.30	138.77	140.28	142.16	143.26

## 4.12.13 Depreciation

Depreciation for the MYT Control Period is projected in accordance with Regulation 23 of the MYT Regulation 2019. The relevant excerpt is reproduced as under: -

"

- (a) The value base of asset shall be the historical capital cost of the asset as admitted by the Commission. The historical capital cost shall include additional capitalization including foreign exchange rate variation, if any already allowed by the Commission up to 31st March of the relevant year.
- (b) The residual value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of historical capital cost of the asset;

Provided that the salvage value for IT equipment and software shall be considered as NIL and 100% value of the assets shall be considered depreciable.

(c) Depreciation shall be calculated annually over the useful life of the asset at the rates specified in Appendix II up to 31st March of the 12th year from the date of commercial operation of the asset. From 1st April of 13th year from the commercial date of operation of the asset, the remaining depreciable value if any out of the 90% of the capital cost of the asset shall be equally spread over the balance useful life of the asset.

The deprecation rates given in Appendix-II will be applicable w.e.f. 1.04.2020 only. The depreciation, in case of existing assets, up to 31.03.2020 shall be considered as already allowed and shall not be re– visited. The deprecation rates as per Appendix-II for such assets shall be applicable w.e.f 1.04.2020 up to 12th year from the date of COD.

Provided that the rate provided in Appendix II, are the upper ceiling of the rate of depreciation to be provided up to 12th year from the date of COD

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- and the developer shall have the option of indicating, while seeking approval for tariff, lower rate of depreciation, subject to the aforesaid ceiling.
- (d) Land shall not be considered as a depreciable asset and cost shall be excluded from the capital cost while computing depreciable value of asset.
- (e) Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the financial year, then the depreciation shall be charged on pro rata basis;
- (f) Depreciation shall not be allowed on assets (or part of assets) funded by consumer contribution (i.e., any receipts from consumers that are not treated as revenue) and capital subsidies / grants. Provision for replacement of such assets shall be made in the capital investment plan."

Depreciation for each year of MYT Control Period is projected by the Discoms as per asset class wise depreciation rates on Opening GFA of respective year. Depreciation on assets created out of consumer contribution is reduced from the gross depreciation for projecting net depreciation expense for the relevant year of MYT control period.

Detail calculation of depreciation proposed by the licensees for each year of MYT Control Period is provided in the tables below:

UHBVNL Proposed Depreciation for the MYT Period (Rs Crores)

OTIDANE Troposed Depreciation for the Will Teriod (NS crores)								
Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25			
Land & Land Rights	-	-	1	-	1			
Buildings & Civil Structure	15.25	16.65	18.12	19.46	20.68			
Plant & Machinery	395.02	430.33	466.39	496.81	522.43			
Vehicles	-	-		-				
Furniture & Fixture	11.43	17.88	24.60	30.73	36.35			
Software	ı	0.05	0.05	-	1			
Less: Depreciation on assets contributed by Consumers	55.23	57.87	59.85	61.83	63.81			
and grants  Total	366.46	407.04	449.31	485.16	515.66			

**DHBVNL Proposed Depreciation for the MYT Period (Rs Crores)** 

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Land	-	1	-	1	1
Building & Civil Structures	12.54	15.24	17.95	20.58	22.87
Plant & Machinery	483.36	548.85	614.14	676.94	730.91
Vehicles	1.90	2.01	2.11	2.20	-
Furniture & Fixtures (Including Office Equipment)	1.66	1.91	2.17	2.41	2.63

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Total	499.45	568.01	636.37	702.13	756.41
Less: Dep. on assets from Consumer Contribution	114.71	116.21	117.55	118.55	119.47
Grand Total	384.74	451.81	518.83	583.58	636.94

The Commission has examined the calculations of depreciation for the MYT period submitted by the Discoms and observes that the Discoms have assumed that the additions to different class of assets in the MYT period would be in the same ratio as additions in the FY 2018-19. The Commission, however, observes that the additions to individual class of fixed assets in a particular year may not be fully representative of the total requirement of assets for the Discom and therefore it would be more appropriate to use total fixed assets as on 31.3.2018 as a composite base and accordingly has assumed that the additions to fixed assets and consequently the depreciation in the MYT period would also be in the same ratio. The depreciation calculations for the FY 2018-19 are used to arrive at a composite depreciation rate which is applied on the opening GFA of each year of the MYT period going forward to arrive at estimated depreciation for the year. Based on the approved capital expenditure for the FY 2020-21, the approved depreciation for each year of the MYT period is given in table below:

Approved Depreciation for the MYT Period - UHBVNL (Rs Crores)

7 pp: 0 : 0 ii 2 0 ii 0 ii ii ii ii ii ii ii ii ii ii ii								
	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25			
<b>Depreciation Particulars</b>								
Opening GFA	8,164.75	8,851.78	9,597.94	10,274.11	10,868.01			
Rate of Depreciation	4.66%	4.66%	4.66%	4.66%	4.66%			
Total Depreciation	380.72	412.75	447.54	479.07	506.77			
Less: Depreciation on assets contributed by Consumers and grants	55.23	57.87	59.85	61.83	63.81			
Approved Depreciation cost	325.49	354.88	387.70	417.25	442.96			

Approved Depreciation for the MYT Period - DHBVNL (Rs Crores)

	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25		
Opening GFA Particulars	9,574.73	10,821.92	12,089.24	13,342.42	14,431.66		
Depreciation	439.94	497.25	555.48	613.06	663.11		
Rate	4.59%	4.59%	4.59%	4.59%	4.59%		
Less Depreciation on consumer contribution	114.71	116.21	117.55	118.55	119.47		
Net Depreciation For the Year	325.23	381.04	437.93	494.51	543.64		

## 4.12.14 Return on Equity

Return on Equity for MYT Control Period is projected in accordance with the Regulation 20 of MYT Regulations 2019. The relevant excerpt of the MYT Regulations is reproduced as under: -

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## "20. RETURN ON EQUITY

- **20.1** The rate of return on equity shall be decided by the Commission keeping in view the incentives and penalties and on the basis of overall performance subject to a ceiling of 14% provided that the ROE shall not be less than the net amount of incentive and penalty.
- **20.2** Return on equity shall be allowed on equity employed in assets in use considering the following and subject to Regulation 20.1 above:
- i. Equity employed in accordance with Regulation 19.1 and 19.2 on assets (in use) commissioned prior to the beginning of the year; plus
- ii. 50% of equity capital portion of the allowable capital cost for the assets put to use during the year.

Provided that for the purpose of truing up, return on equity shall be allowed from the COD on pro-rata basis based on documentary evidence provided for the assets put to commercial operation during the year.

Provided further that assets funded by consumer contributions, capital subsidies/Govt. grants shall not form part of the capital base for the purpose of calculation of Return on Equity

- **20.3** Return on equity invested in work in progress shall be allowed from the actual date of commercial operation of the assets.
- **20.4** There shall be no Return on Equity for the equity component above 30%."

As per Discom filing, Return on Equity is projected at the rate of 14% on average equity during each year of MYT Control Period. Admissible opening equity for each year of MYT Control Period is projected by adjusting equity portion of opening capital works in progress and average equity capitalised during the respective years. Detailed calculations of proposed Return on Equity for MYT Control Period is tabulated as under:

**UHBVNL Proposed Return on Equity for MYT Control Period (Rs Crores)** 

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Opening Share Capital eligible for RoE	2,143.10	2,359.19	2,584.25	2,789.49	2,977.92
Less: Equity in Opening CWIP (20%)	206.25	245.20	241.08	211.95	199.39
Net Op. Share Capital	1,936.85	2,113.98	2,343.17	2,577.53	2,778.53
Add: Equity for Capex	216.09	225.06	205.24	188.43	180.67

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Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Closing Equity	2,152.93	2,339.05	2,548.41	2,765.96	2,959.20
Average Equity for RoE	2,044.89	2,226.52	2,445.79	2,671.75	2,868.86
Rate of Return on Equity	14.00%	14.00%	14.00%	14.00%	14.00%
Total Return on Equity	286.28	311.71	342.41	374.04	401.64

DHBVNL Proposed Return on Equity for MYT Control Period (Rs Crores)

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Opening Equity	2,090.62	2,367.53	2,644.98	2,913.96	3,148.63
Less: 20% of Opening CWIP fo	or 283.92	273.40	279.46	263.74	220.14
assets not put to use	203.92	273.40	279.40	203.74	220.14
Add: Equity Received for Cap	ex 276.91	277.44	268.98	234.67	201.48
Closing Equity	2,083.61	2,371.57	2,634.50	2,884.89	3,129.98
Average Equity	1,945.16	2,232.85	2,500.00	2,767.55	3,029.24
Rate of Return on Equity	14.00%	14.00%	14.00%	14.00%	14.00%
Return on Equity	272.32	312.60	350.00	387.46	424.09

The Commission has considered the submissions made by the licensee and observes that as per the MYT Regulations, 2019, ROE upto 14% can be allowed on the eligible Equity Capital in use. The Commission, taking a holistic view of the power sector in Haryana including the tariff payable by the electricity consumers had traditionally restricted the RoE to 10% in order to cushion the tariff shock to the consumers. In FY 2020-21, given the unprecedented situation emanating from the COVID-19 pandemic and the resulting restriction/lockdown ordered by Central Government/State Government, all economic activities came to a standstill. Resulting, the ability to pay of all categories of consumers has been significantly reduced. The pandemic has impacted income, earnings and employment of all categories of consumers be it domestic consumers, industrial/commercial consumers. As far as Government connections are concerned i.e. Public Water Works, Street Light, Lift Irrigation as well as general connections in Government Offices and building, it is also a fact that due to significant reduction in revenue from direct/indirect taxes and levies, their ability to pay, has also been impaired. Hence, the Commission, after due deliberations, has considered not to allow any RoE in the FY 2020-21. Consequently, RoE has not been determined.

## 4.12.15 Bad and Doubtful Debts

Discoms have submitted that Bad and Doubtful debts for MYT Control Period are projected in accordance with Regulation 64 of MYT Regulation 2019. The relevant excerpt of MYT Regulations 2019 is reproduced as under:

"64 BAD AND DOUBTFUL DEBTS

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Bad and doubtful debts shall be allowed to the extent the distribution licensee has actually written off bad debts subject to a maximum of 0.5% of sales revenue. However, this shall be allowed only if the distribution licensee submits all relevant data and information to the satisfaction of the Commission. In case there is any recovery of bad debts already written off, the recovered bad debts will be treated as other income."

Projections for Bad and doubtful debts for MYT Control Period is provided in Aggregate Revenue Requirement of respective years, as detailed in subsequent section.

## 4.12.16 Non-Tariff Income

Non-Tariff Income for MYT Control Period is kept equivalent to the non-tariff income proposed for FY 2018-19 which is Rs. 221.56 crores for UHBVNL and Rs. 307.66 crores for DHBVNL. The Commission finds the proposed amounts appropriate and approves the same.

## 4.12.17 Aggregate Revenue Requirement for MYT Control Period

Based on its estimated expenditure, the Aggregate Revenue Requirement of UHBVN proposed by the licensee for each year of MYT Control Period for FY 2020-21 to FY 2024-25 is tabulated as under:

Proposed Aggregate Revenue Requirement of UHBVNL for MYT Control Period (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

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Sr. No	Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
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

Similarly, based on its estimated expenditure, the Proposed Aggregate Revenue Requirement of DHBVN for each year of MYT Control Period for FY 2020-21 to FY 2024-25 is tabulated as under:

Proposed Aggregate Revenue Requirement of DHBVNL for MYT Control Period (Rs Crores)

	posed Aggregate Revenue Requ	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Sr. No.	Particulars	(Projected)	(Projected)	(Projected)	(Projected)	(Projected)
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 charges & 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
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 Cost 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

However, in light of the Covid pandemic, the Discoms have submitted a revised projection of sales for the FY 2020-21. Accordingly, the ARR for the FY 2020-21 has also been revised by the Discoms as under:

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

	1101100d 71111 01 011B 111 dild Bilb 11 1 2020 21 (1101 010)						
Sr.	Particulars	UH	BVN	DHBVN			
No		MYT	Revised	MYT	Revised		
		Projection	Projection	Projection	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		

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Sr.	Particulars	UH	BVN		DHBVN
No		MYT	Revised	MYT	Revised
		Projection	Projection	Projection	Projection
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
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

Based on the Commission's approved estimates of various components of the ARR as discussed in the previous paragraphs, the HERC Approved Revenue Requirement for the FY 2020-21 for the two Discoms is as given in the following tables:

HERC Approved ARR of UHBVNL for MYT Control Period (Rs Crores)

	HERC Approved ARR of UHBVN		FY 2020-21	FY 2020-21
Sr. No	Particulars	Proposed	revised ARR	Approved
1	Total Power Purchase Expense	12,083.67	11,573.32	10,106.80
1.1	Power Purchase Expense	10,605.27	9,981.04	8,747.54
1.2	Interstate transmission Charge	830.40	947.17	830.40
1.3	Intrastate transmission charges and SLDC charges	648.00	645.11	528.86
2	Operations and Maintenance Expenses	1,308.81	1,308.35	1,307.28
2.1	Employee Expense	740.76	740.76	740.76
2.2	Administration & General Expense	115.60	115.60	115.60
2.3	Repair & Maintenance Expense	148.45	147.99	146.93
2.4	Terminal Liability	303.99	303.99	303.99
3	Depreciation	366.46	368.44	325.49
4	Return on Equity Capital	286.28	285.52	-
5	Other Expenses	47.30	37.39	-
6	Interest on Loans	503.39	529.42	315.42
6.1	Interest on UDAY bonds payable to the State Government	-		-
6.2	Interest on WC loans including CC/OD limits	262.14	297.76	98.44
6.3	Interest on CAPEX loans	136.71	136.64	136.71
6.4	Interest Cost on Consumer Security Deposit	94.54	70.27	70.27
6.5	Guarantee Fees	10.00	24.74	10.00
7	Total Expenditure	14,595.91	14,102.44	12,054.99
8	Less: Non-Tariff Income	221.56	221.56	221.56
9	Net Aggregate Revenue Requirement	14,374.35	13,880.89	11,833.43

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HERC Approved ARR of DHBVNL for MYT Control Period (Rs Crores)

S. No.	Particulars	FY 2020-21	FY 2020-21	FY 2020-21
5. NO.	Particulars	Proposed	Revised ARR	Approved
1.00	Power Purchase Expenses	16,872.46	16,112.62	13,945.86
1.10	Power Purchase Cost	14,896.95	13,969.40	12,120.16
1.20	Transmission Charges (Interstate)	1,216.80	1,387.90	1,216.80
1.30	Transmission Charges (HVPN + SLDC)	758.71	755.33	608.90
2.00	Operation & Maintenance Expenses	1,597.59	1,597.06	1,596.27
2.10	Employee Expenses (net)	938.93	938.93	938.93
2.20	Administration & General Expenses (net)	121.22	121.22	121.22
2.30	Repair & Maintenance Expenses	177.43	176.91	176.11
2.40	Terminal Benefits	360.00	360.00	360.00
3.00	Depreciation	384.74	383.80	325.23
4.00	Interest & Finance Charges	477.44	549.86	442.51
4.10	Interest on Long Term Loan	186.03	179.88	181.25
4.20	Interest on Working Capital	163.32	254.01	159.30
4.30	Interest on UDAY Bonds	-		-
4.40	Interest on Consumer Security Deposit	102.01	75.89	75.89
4.50	Other Interest & Finance Charges	16.08	40.08	16.08
4.60	Guarantee Fee	10.00	ı	10.00
6.00	Return on Equity Capital	272.32	272.35	-
7.00	Prior period expenses & other expenses	-		-
8.00	Other Debts, (including wealth tax)	-		-
9.00	Provisions for bad and doubtful debt	73.57	58.83	=
10.00	Aggregate Revenue Requirement	19,678.12	18,974.53	16,309.87
11.00	Less: Non-Tariff Income	307.66	307.66	307.66
13.00	Aggregate Revenue Requirement from Retail Tariff	19,370.46	18,666.86	16,002.20

#### 4.12.18 Revenue from inter-state sales

The Discoms have proposed to garner revenue from inter-state sale of power for MYT Control Period on the basis of average variable power purchase cost and the quantum of surplus power available during the respective year.

The Commission has considered the proposal and observes that as per the demand and supply projections approved by the Commission, the available power would be in surplus by around 20% during the FY 2020-21 as against the expected demand. The Commission is of the considered view that in case the Merit Order Dispatch principle is strictly followed and the energy which is surplus is contracted to be sold at its variable cost/ ECR, the revenue generated would be higher than the average variable power purchase cost and would ultimately go towards reducing the power purchase cost. The Commission, instead of calculating revenue from interstate sale separately as a line item in the ARR, has preferred to calculate the power purchase cost only for the energy required for sale to the electricity consumers of Haryana. i.e. fixed cost for long term PPA's is considered to be pass through and the projected power purchase volume is allowed at the average variable cost.

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#### 4.12.19 FSA

The Commission has examined the true up for the FY 2018-19 and the FSA filings for the FY 2019-20 of the Discoms and observes that the FSA calculations by the Discoms are at times not in accordance with the MYT Regulations. As brought out by the Interveners the method and amount of FSA being recovered is not comprehended / appreciated by the electricity consumers. This may lead to under/ over recovery of FSA. Accordingly, the Commission directs the licensees to calculate FSA strictly in accordance with the MYT Regulations. For the purpose of illustration and to ensure uniformity in calculation and levy of FSA, the following format may be adopted by the Discoms.

1.1	Non AP Sales for Quarter of FY	MU	
1.2	Add AP sales as per HERC methodology	MU	
1.3	Total sales (1.1+1.2)	MU	
1.4	Approved distribution losses as per HERC Order	%	
1.5	Sales after grossing up with approved distribution losses (1.3/ (100%-1.4))	MU	
1.6	Actual Intra-State Transmission Losses for the year	%	
1.7	Grossed up energy available after Intra-state transmission losses (1.5/ (100% -1.6))	MU	
1.8	Intra-state Generation	MU	
1.9	Inter-state Power Purchase (Normative Basis) (1.7-1.8)	MU	
1.10	Actual Inter-State Transmission Losses	%	
1.11	Gross Inter-state Power Purchase (considering Inter-state Transmission Losses)	MU	
1.12	Total Power Purchase on Normative Basis (considering interstate transmission losses) (1.8+1.11)	MU	
1.13	Actual Power Purchase as per HPPC	MU	
1.14	Inter-state Sales as per HPPC	MU	
1.15	Power Purchase after removing inter-state sales(1.13-1.14)	MU	
1.16	Disallowance of Power Purchase units by HERC compared to HPPC purchase (1.15-1.12)	MU	
2.1	Actual Volume of Power Purchased	MU	
2.2	Total Actual Power Purchase Cost	Rs. Cr	
2.3	Variable cost per unit (2.2/2.1)	Rs. Per unit	
2.4	Variable cost of approved power purchase cost (2.4*1.12)	Rs. Cr	
2.5	Total Fixed Cost of power (inclusive of transmission charges and prior period costs)	Rs. Cr	
2.6	Total actual power purchase cost for approved units (2.5+2.6)	Rs. Cr	
2.7	Power purchase cost per unit approved as per HERC Order	Rs. Per unit	
2.8	Normative power purchase cost for approved units (2.8*1.12)	Rs. Cr	
2.9	FSA due to Variation in Power Purchase cost (2.7-2.9)	Rs. Cr	
2.10	Agricultural Sales for the Qtr. as per HERC Methodology (1.2)	MU	
2.11	Non-Agricultural Sales (1.1)	MU	
2.12	FSA recoverable from AP Consumers (2.10*1.2/1.3)	Rs. Cr	
2.13	FSA to be paid by the Non-AP Consumers (2.10-2.13)	Rs. Cr	
2.14	Add: FSA unrecovered for the Previous qtr (s) of the current FY	Rs. Cr	
2.15	FSA Recoverable in the next Qtr (2.14+2.15)	Rs. Cr	
2.16	Non-Agricultural Sales estimated in the next Qtr	MU	
2.17	FSA Per unit (2.16/2.17) (limited to 10% of 2.8)	Rs. Per unit	

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Note: revenue from interstate sale/ banking is to be set off against variable cost of disallowed units.

# 4.12.20 Agriculture Subsidy

The Commission has observed that the Discoms have projected Agriculture Subsidy for MYT Control Period equivalent to the subsidy allowed for base year in Tariff Order dated 7th March 2019 and also that there is no projections for estimated subsidy for power supplied to the domestic consumers.

Based on the ARR and sales projections approved by the Commission in the preceding portion of this order, the Commission has, based on the sample voltage vise losses submitted by the Discoms, arrived at the estimated cost of service for supply at HT and LT voltage levels as below:

Cost of Service for FY 2020-21 as per National Tariff Policy methodology

	Cost of Service for F1 2020-21 as per National Tarin Folicy methodology					
	Elements of cost of service					
1	Per Unit Weighted average cost of power per unit at State/ Discom periphery	485				
	Aggregate of transmission, distribution and wheeling charges applicable to the					
2	relevant voltage level					
	Intrastate Transmission cost at consumers end (Paise/kWh) (Transmission and SLDC					
	cost/ sales)	30				
	Distribution (net of power purchase cost) and Wheeling cost at consumers end					
	(Paise/kWh)	98				
	Aggregate of transmission, distribution and commercial losses applicable to the					
3	relevant voltage level					
	HT	14.80%				
	LT	19.87%				
4	Cost of Service					
	C/(1-L/100) +D+R					
	HT	697				
	LT	733				
	Average	723				

Based on the cost of service of LT consumers as given above and the approved estimate of sales to AP consumers, the calculation of AP subsidy is as given below:-

	Subsidy calculation for AP supply	unit	
1	Total units supplied to AP	MU	9217.55
2	Cost/ Tariff per unit	Rs/kWh	7.33
3	Estimated cost of service	Rs. Crores	6758.92
4	Revenue at subsidized tariff	Rs. Crores	108.99
5	Subsidy required to keep the tariff at current levels = 3-4	Rs. Crores	6649.93

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# 4.12.21 Revenue Gap for MYT Control Period

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

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

	Diocente i representate (Cap)/Carpitate ici mi i Control Ci i Carpitate ici mi						
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)	1	-	-	-		
Revenue Gap after AP Subsidy	(4,030.39)	(699.01)	(1,569.28)	(2,186.67)	(3,300.04)		

The above projections have been revised by the Discoms vide their filing dated 05.05.202 as under:

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

	riscomo revisea revenae (Sap)/Sarpia	<u> </u>	1110 010100
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	(3,711.33)	(3,711.33)
	forward -true up		
7	Net Regulatory Revenue (Gap)/Surplus	(4,030.39)	(6435.01)

Based on the Commission approved estimates of cost, revenue and AP subsidy, the approved estimates of Revenue Gap as calculated by the Commission is given in table below:

Revenue Gap for FY 2020-21 at Current Tariff

	Oup ioi i i	ZUZU ZI at C	different ruitin	
		DISCOM ARR	Discom	HERC Revenue
		DISCOIVI ARK	Discoili	gap at current
Total ARR for FY 2020-21		Filing	Revised Filing	tariff
UHBVNL	Rs. Crore	13377.84	13880.89	11833.43
DHBVNL	Rs. Crore	17970.90	18666.86	16002.20
Total ARR for FY 2020-21	Rs. Crore	31348.74	32547.75	27835.64

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Dovenue at surrent tariff on intractate				
Revenue at current tariff on intrastate				
sale		24173.64	19244.81	20241.20
Total Sales for FY 2020-21	MU	44326.30	37405.88	38473.64
COS at LT level				7.33
AP sales for the FY 2020-21				9217.55
Estimated Revenue from AP sales				108.99
Subsidy for AP supply at LT COS		6856.04	6856.00	6649.93
Total revenue incl Subsidy		31029.68	29824.08	26891.13
Revenue surplus/(Gap) for FY 2020-21				
at current tariff		-319.06	-2723.67	-944.51
Revenue surplus for FY 2018-19		-3711.33	-3711.33	817.09
Holding cost for 1.5 years @ 9.5%				120.72
Net Revenue Surplus/ Gap for the FY				
2020-21		-4030.39	-6435.00	- 6.69
Distribution loss		16.22%	18.73%	18.50%



# Chapter 5

# **Capital Expenditure and Technical parameters**

## 5.1 True-up of Capital Expenditure for the FY 2018-19

## **UHBVNL**

In its Petition for true-up of the FY 2018-19, APR of FY 2019-20 and ARR for the FY 2020-21 has submitted that the Commission, in the FY 2018-19, had approved a Capital Expenditure of Rs. 1262 Crores for UHBVN. As per the audited accounts of UHBVN for the FY2018-19, the Capital Expenditure for UHBVN for FY 2018-19 is Rs.887.11Cr. UHBVN, has therefore prayed that the Commission may approve the same.

The Commission observes that vide its Order on ARR for FY 2019-20 and Annual Performance Review for the FY 2018-19, on the request of the petitioner, it had approved a revised capital expenditure of Rs. 551.91 Cr. against the previously approved Capital Expenditure of Rs. 1262 Cr. for FY 2018-19. The licensee has submitted work wise details vide letter no. CH-72/RA/F-25/Vol-(25) dated 04.02.2020. A perusal of the same revealed that the audited capital expenditure incurred during FY 2018-19 is Rs. 887.11Cr. Accordingly, the details of the Capex approved for the Financial Year by the Commission is as under:

Capital Expenditure for FY 2018-19 (UHBVNL)

Sr. No	Categories	approved by HERC	Expenditure incurred up to 31.03.2019 (Rs. in Cr.)	Funding Agency	Reasons for short fall
1.	MM Wing				
а	Procurement of single-phase meters for replacement of defective meters & release of new connections.	34.15	17.75	REC	-
b	Procurement of three phase meters for replacement of defective meters & release of new connections.	23.61	7.58	REC	-
C	Procurement of Power Transformers - 30 Nos. and allied equipment such as 33 kV CTs - 90, 33 kV PTs - 30, 33 kV VCBs - 30 and 11 kV VCBs-240, 33 kV Control and Relay Panels - 30 etc.	19.00	0.00	JICA	-
d	Release of Tube well connection on turnkey basis and segregation of AP load from Rural Urban feeders.	46.00	41.63	Consumer cost/ Deposit work	-
е	Material required for release of Non-AP connections & replacement of old assets	230.00	315.18	REC	-
	Total	352.76	382.14		

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Sr. No	Categories	approved by HERC	Expenditure incurred up to 31.03.2019 (Rs. in Cr.)	Funding Agency	Reasons for short fall
2.	PD&C Wing				
a	Creation of new 33 kV sub-stations along with associated 33 kV & 11 kV lines	150.00	114.48	REC, JICA & DDU	Work allotment delayed due to less participation and high quoted rates by firms for creation of 33 kV substations. Now all the works have been awarded
b	Augmentation of existing 33 kV substations	96.00	92.29	REC, JICA & DDU	
С	Augmentation of existing 33 kV lines	7.97	7.33	REC, JICA & DDU	
d	Bifurcation of 11 kV feeders (Work of bifurcation of feeders, augmentation of ACSR).	0.00	0.00	JICA	Due to non-participation of bidders, tender could not be finalized
e	Civil Works (Head Office Building)	24.80	21.00	Nigam's Fund	
f	Shifting of HT line (33 kV), passing over authorized/un-authorized colonies under jurisdiction of UHBVN	3.70	2.25	State Fund	Works have been awarded under EOI as tenders could not be finalized due to poor response
g	Shifting of 11 kV lines passing over residential areas under UHBVN	15.03	0.00		Tenders could not be finalized due to non-participation of bidders. Work orders have been issued by respective SE (OP) Circle.
h	Release of BPL connections under DDUGJY schemes. Work under Distt. Ambala, Kaithal, Karnal, Yamunanagar, Kurukshetra &Sonipat (22206 BPL Connections)	1.66	1.66	DDU	No connection pending
i	11 kV Lines	14.36	10.36	DDU &	Due to delay in award of
j	Distribution Transformer (63,100, 200 kVA)	37.55	30.38	IPDS	the project. The work could not be completed
k	LT ABC & LT Armoured Cable Line	32.67	25.67		within stipulated time
_	Augmentation- DTR, Existing line on conductor to ABXLPE, Augmentation of 11kV lines	9.46	6.46		period. The work is in progress and likely to be completed by January
m	Energy Meters along with allied material	5.20	5.20		2020 under DDUGJY
n	Solar Project	1.71	1.71		scheme. All the works of 11 kV completed except in Karnal Circle under IPDS. The work of Karnal Circle also completed in June 2019
	Total-A	400.11	318.79		
o o	Mhara Gaon Jagmag Gaon scheme for rural area and feeder sanitization for Urban area/LRP/Replacement of iron pole.	300.00	180.42	R EC	The work has been delayed due to reallotment of work in Karnal Circle. Initially the works could not pick up the pace however the

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Sr. No	Categories	approved by HERC		Funding Agency	Reasons for short fall
					works is in progress and likely to be completed by January 2020
	Total-B	300.00	180.42		
	Total (A+B)	700.11	499.21		
3.	IT Wing				
а	Other works for system improvement - Procurement of IT Equipment & Software	5.00	-	REC	
b	Smart City Karnal (HT & LT Lines, DTs, U/G Cables, RMUs and FRTUs Etc.) and SCADA Kundli	50.00	-	REC	RFP is under preparation
С	Smart City Panchkula (HT & LT Lines, DTs, U/G Cables, RMUs and FRTUs Etc.)	35.00	-	REC	
d	Smart City Panipat (HT & LT Lines, DTs, U/G Cables, RMUs and FRTUs Etc.)	35.00	-	REC	
е	Industrial Area Kundli (HT & LT Lines, DTs, U/G Cables, RMUs and FRTUs Etc.)	10.00		SIIDS, Govt. Of Haryana	Work Awarded on 06th Sep 19. Firm has recently completed the joint foot survey and have submitted design documents / GTP for
					approval.
f	Works under EESL (Smart Meters)	55.00	-		Under OPEX
g	Setting up of a new testing lab for materials, i.e. cable, conductors, transformer oil, distribution transformers, etc. at Karnal	0.00		JICA	
h	Revamping of existing M&T (Meter Testing) labs at (Kaithal, Yamunanagar, Karnal, Dhulkote& Rohtak)	0.00		J ICA	
H_	Total	135.00	0.00		
4.	CAPEX under UDAY (Ujjwal DISCOM				
а	Assurance Yojana)  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 & LT CT operated meters.	5.91	2.85	PFC	1. Work awarded on 20.07.18. Execution time is 15 months. Work is under Progress
b	Implementation of R-APDRP (Part-A)	13.22	2.91	P FC	Financial Closure will be done on approval of supplementary DPR which is awaited from PFC
	Total	209.13	5.76		
	Grand Total	1262.00	887.11		

# Regulation 9.9 of the MYT, 2012 specifies as under: -

"In case the capital expenditure is required due to Force Majeure events for works which have not been approved in the capital investment plan or for works that may have to be taken up to implement new schemes approved by the State/Central Govt., the generating company or the licensee shall submit an application containing

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all relevant information along with reasons justifying emergency nature of the proposed work seeking approval by the Commission. In the case of works or schemes, other than those required on account of Force Majeure events, the Commission shall consider to give approval only in those cases where the works/schemes are wholly/substantially financed by the State/Central Government or, in view of the Commission, shall benefit a large mass of consumers of the State. The generating company or the licensee may take up the work prior to the approval of the Commission only in case the delay in approval will cause undue loss and such emergency nature of the scheme has been certified by the Board of the Directors and intimated to the Commission".

Further, as per Regulation 8.3 (b) of the MYT Regulations, 2012, Capital Expenditure is a controllable item. As such, the licensee should have exercised proper control over the item wise capital expenditure approved by the Commission.

Regulation 9.10 of ibid Regulations further specifies as under: -

"In case the capital expenditure incurred for approved schemes exceeds the amount as approved in the capital expenditure plan, the generating company or the transmission or the distribution licensee, as the case may be, shall file an application with the Commission at the end of control period for truing up the expenditure incurred over and above the approved amount. After prudence check, the Commission shall pass an appropriate order on case to case basis. The True-up application shall contain all the requisite information and supporting documents".

Provided that any additional capital expenditure incurred on account of time over run and / or on unapproved schemes not covered under Regulation 9.9 or unapproved changes in scope of approved schemes shall not be allowed by the Commission unless the generating company or the licensee, as the case may be, is able to give adequate justification for the same".

It has been observed that the licensee has not been able to start 8 (eight) works during the year for which an amount of Rs. 169.03 Cr. was approved by the Commission. The Commission notes with concern that nothing out of approved capital expenditure for IT works has been incurred during the year. Further, in respect of the works mentioned at Sr. No.1(e), the expenditure has been incurred more than the approved expenditure. In respect of Sr. 4(b), merely 2.91 Cr. has been spent on implementation

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# of R APDRP(Part-A) and no progress has been shown for shifting of HT lines passing over authorised/ un authorised colonies.

The licensee has incurred only 70.29 % expenditure of the approved Capex for FY 2018-19. It is a matter of concern that the licensee has not been able to utilize the capital expenditure even when the focus is primarily on system strengthening and loss reduction under UDAY scheme. Such scenario defeats the very purpose of expenditure approved and objective of providing reliable and quality power to the consumers. There seems to be lack of proper planning and execution of the Capital works on the part of the licensee. The licensee needs to exercise proper monitoring of execution of capital works and control over the item wise expenditure approved by the Commission and also explain the deviations with proper justifications.

# b) DHBVNL

DHBVNL in its ARR for the FY 2018-19 petition had projected Capital Expenditure at Rs. 1300 Cr. However, Commission had approved Rs. 1170 Cr. While in the APR for the FY 2018-19 in its ARR petition for FY 2019-20, the Licensee had projected the Capex likely to be incurred for the FY 2018-19 as Rs. 975 Cr. and same was allowed by the Commission in its order on the ARR 2019-20. The Petitioner, in its True up Petition for FY 2018-19, has submitted the actual expenditure for FY 2018-19 as Rs. 839.39 Cr. against as estimate of Rs. 975 Cr. The Commission approves the actual expenditure for FY 2018-19 as per the details provided by the Licensee in the following table:

## Capital Expenditure for FY 2018-19 (DHBVNL)

Sr. No.	Categories	Filed Before HERC at the time of ARR for FY 2018-19 (in Cr.)	Approved by HERC through T.O. dtd 15.11.2018 (in Cr.)	Approved by HERC at the time of APR T.O. dtd 07.03.2019 (in Cr.)	Audited act during FY (in C	2018-19
1	AT&C loss reduction plan					
	1 (a)	Procurement of single-phase meters for replacement of defective meters & release of new connections.	50.00	1170.00	33.35	17.03
	1 (b)	Procurement of three phase meters for replacement of defective meters & release of new connections.	30.00		15.48	10.92
	1 (c)	Power Factor Improvement (Providing automatic power factor correctors)	16.00		0.00	0.00
	1 (d)	Providing of LT Capacitors on 400 KVA and above Distribution Transformers	33.00		0.00	0.00
	·	Total	129.00		48.83	27.95

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Sr. C	Categories	Filed Before HERC at the time of ARR for FY 2018-19 (in Cr.)	Approved by HERC through T.O. dtd 15.11.2018 (in Cr.)	Approved by HERC at the time of APR T.O. dtd 07.03.2019 (in Cr.)	Audited act during FY (in C	2018-19
2	2 ! (a)	Load Growth schemes   New 33 kV Substations with	150.00	_	101.52	91.44
2	. (a)	connected lines	150.00		101.52	91.44
2	2(b)	Augmentation of 33 kV existing substations	14.00		14.05	14.60
2	!(c)	Augmentation of existing 33 kV lines	5.00		5.90	5.46
	2(d)	Bifurcation of 11 kV feeder	50.00		45.86	44.56
2	2(e)	Material required for release of Non-AP connections & replacement of old assets	171.00		164.24	165.89
2	2(f)	Release of Tube well connection on turnkey basis and segregation of AP load from Rural Urban feeders.	62.00		42.16	42.58
2	2(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.	28.00		24.24	26.20
2	(h)	Release of BPL connections under RGGVY schemes. Work already awarded for Palwal (9163 BPL Connections), Gurugram(2882 BPL Connections) and Faridabad(1494 BPL Connections) Circles on 15.11.2016, 31.01.2017 and 02.03.2017 respectively. Approximately 90% work likely to be completed in FY 2017-18 and provision has been made for taking care of remaining/residual works.	4.00		4.00	0.90
	2(i)	11 KV Lines	21.98	- -	135.00	133.78
	2(j)	Distribution Transformer (25, 63,100, 200 kVA)	15.20			
	2(k)	LT ABC Line	8.49	=		
2	2(1)	Augmentation- DTR, Existing line on conductor to ABXLPE, Augmentation of 11kV lines	11.90			
2	(m)	Metering (3 phase) , Solar Energy Meter	1.46			
	2(n)	Solar Project	0.84	_		
2	(o)	System Strengthening Works under IBRD funded projects			0.00	9.91
	2	Total	543.87	4	536.97	535.33
	3	R-APDRP Implementation of R-APDRP (Part-A)	8.80	-	88.75	0.00
		Total	8.80	1	88.75	0.00
	4	Other works		1		
4	· (a)	Maintenance free earthling using 'Ground Enhancing Material/ Conventional earthing for Distribution Transformers, Meter Pillar Boxes and H-pole etc.	3.00		6.10	2.45
4	· (b)	Installation of meters on 33 kV Incomers at sub-stations for energy auditing. Work already awarded on	2.00		0.81	0.90

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work already completed and provision has been made for taking care of remaining works.  4 (c) Civil works  4 (d) Shifting of dangerous 33 kV lines passing over residential areas under DHBVN  4 (e) Mhara Gaon Jagmag Gaon  4 (f) Other works for system improvement - Procurement of IT Equipment & Softwares  4 (g) Smart City Gurgaon (HT& LT Lines, DTS, U/G Cables, RMUs and FRTUS Etc.) including SCADA Project, IMT, Manesar  4 (h) Smart City Faridabad, Hisar & 68.00 Rewari (HT & LT Lines, DTS, U/G Cables, RMUs and FRTUS Etc.) including SCADA Project, IMT, Manesar  4 (i) Shifting of 11 lines passing over residential areas under DHBVN.  4 (ii) Shifting of 11 lines passing over residential areas under DHBVN.  5 CAPEX under UDAY (Ujiwal DISCOM Assurance Yojana)  5 (a) Scaling of IT project to Non-RAPDRP areas  1. Establishment of IT infra in SDO & Other offices and its connectivity with Data Centre.  2. AMR for HT consumer meters.  3. Engagement of an Agency for GPS based field survey activities & data digitization.  4. Engagement of an Agency for GPS based field survey activities & data digitization.  4. Engagement of SI for DM S. Procurement of Computer Furniture (Computer chair & table) for office under IPDS town and in balance non-R-APDRP areas  5 (b) Boundary meters for Villages in Rural Areas (3648 number of villages lie. 7296 meters)	Sr. Categ	ARR for FY 2018-19 (in Cr.)	f Approved by HERC through T.O. dtd 15.11.2018 (in Cr.)	Approved by HERC at the time of APR T.O. dtd 07.03.2019 (in Cr.)	Audited ac during FY (in	2018-19
A (c)   Civil works   10.00   9.00   8.		work already completed a	nd			
4 (c)   Civil works			ng			
4 (d) Shifting of dangerous 33 kV lines passing over residential areas under DHBVN  4 (e) Mhara Gaon Jagmag Gaon  4 (f) Other works for system improvement - Procurement of IT Equipment &Softwares  4 (g) Smart City Gurgaon (HT& LT Lines, DTS, U/G Cables, RMUs and FRTUs Etc.) including SCADA Project, IMT, Manesar  4 (h) Smart City Faridabad, Hisar & Rewari (HT & LT Lines, DTS, U/G Cables, RMUs and FRTUs Etc.) including SCADA Project, IMT, Manesar  4 (h) Smart City Faridabad, Hisar & 68.00 Rewari (HT & LT Lines, DTS, U/G Cables, RMUs and FRTUs Etc.)  5 (Cables, RMUs and FRTUs Etc.)  4 (i) Shifting of 11 lines passing over residential areas under DHBVN.  4 (J) Works under EESL (Smart Meters) 55.00  5 CAPEX under UDAY (Ujjwal DISCOM Assurance Yojana)  5 (a) Scaling of IT project to Non-R-APDRP areas 1. Establishment of IT infra in SDO & Other offices and its connectivity with Data Centre. 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  5 (b) Boundary meters for Villages in Rural Areas (3648 number of villages ie.e. 7296 meters)	4 (c)		10.00	-	0.00	8.38
passing over residential areas under DHBVN  4 (e) Mhara Gaon Jagmag Gaon 190.00 119.74 118  4 (f) Other works for system 8.00 9.00 2.  Equipment & Softwares 8.00 9.00 2.  Smart City Gurgaon (HT& LT Lines, DTs, U/G Cables, RMUs and FRTUs Etc.) including SCADA Project, IMT, Manesar 4 (h) Smart City Faridabad, Hisar & 68.00 Rewari (HT & LT Lines, DTs, U/G Cables, RMUs and FRTUs Etc.)  4 (i) Shifting of 11 lines passing over 20.00 residential areas under DHBVN.  4 (J) Works under EESL (Smart Meters) 55.00 0.00 0.00 0.00 0.00 0.00 0.00 0.				-		5.78
4 (f) Other works for system improvement - Procurement of IT Equipment &Softwares  4 (g) Smart City Gurgaon (HT& LT Lines, DTs, U/G Cables, RMUs and FRTUs Etc.) including SCADA Project, IMT, Manesar  4 (h) Smart City Faridabad, Hisar & Rewari (HT & LT Lines, DTs, U/G Cables, RMUs and FRTUS Etc.) and FRTUS Etc.) Shifting of 11 lines passing over residential areas under DHBVN.  4 (i) Shifting of 11 lines passing over residential areas under DHBVN.  4 (i) Works under EESL (Smart Meters) 55.00  5 CAPEX under UDAY (Ujjwal DISCOM Assurance Yojana)  5 (a) Scaling of IT project to Non-R-APDRP areas 1. Establishment of IT infra in SDO & Other offices and its connectivity with Data Centre. 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  5 (b) Boundary meters for Villages in Rural Areas (3648 number of villages i.e. 7296 meters)	+ (u)	passing over residential are			10.55	3.70
4 (f) Other works for system improvement - Procurement of IT Equipment &Softwares  4 (g) Smart City Gurgaon (HT& LT Lines, DTs, U/G Cables, RMUs and FRTUS Etc.) including SCADA Project, IMT, Manesar  4 (h) Smart City Faridabad, Hisar & Rewari (HT & LT Lines, DTs, U/G Cables, RMUs and FRTUS Etc.) and FRTUS Etc.) Shifting of 11 lines passing over residential areas under DHBVN.  4 (i) Shifting of 11 lines passing over residential areas under DHBVN.  4 (I) Works under EESL (Smart Meters) 55.00  5 CAPEX under UDAY (Ujjwal DISCOM Assurance Yojana)  5 (a) Scaling of IT project to Non-R-APDRP areas 1. Establishment of IT infra in SDO & Other offices and its connectivity with Data Centre. 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  5 (b) Boundary meters for Villages in Rural Areas (3648 number of villages i.e. 7296 meters)	4 (e)	Mhara Gaon Jagmag Gaon	190.00		119.74	118.89
improvement - Procurement of IT Equipment &Softwares  4 (g) Smart City Gurgaon (HT& LT Lines, DTs, U/G Cables, RMUs and FRTUS Etc.) including SCADA Project, IMT, Manesar  4 (h) Smart City Faridabad, Hisar & Rewari (HT & LT Lines, DTs, U/G Cables, RMUs and FRTUS Etc.)  4 (i) Shifting of 11 lines passing over residential areas under DHBVN.  4 (J) Works under EESL (Smart Meters) 55.00  5 CAPEX under UDAY (Ujjwal DISCOM Assurance Yojana)  5 (a) Scaling of IT project to Non-RAPDRP areas 1. Establishment of IT infra in SDO & Other offices and its connectivity with Data Centre. 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  5 (b) Boundary meters for Villages in Rural Areas (3648 number of villages ie, 7296 meters)		*	em 8.00		9.00	2.55
DTS, U/G Cables, RMUs and FRTUs Etc.) including SCADA Project, IMT, Manesar  4 (h) Smart City Faridabad, Hisar & 68.00 Rewari (HT & LT Lines, DTS, U/G Cables, RMUs and FRTUs Etc.)  5 (a) Shifting of 11 lines passing over residential areas under DHBVN.  5 (a) Works under EESL (Smart Meters)  5 (a) Scaling of IT project to Non-R-APDRP areas 1. Establishment of IT infra in SDO & Other offices and its connectivity with Data Centre. 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  5 (b) Boundary meters for Villages in Rural Areas (3648 number of villages i.e. 7296 meters)	, ,	improvement - Procurement of				
Rewari (HT & LT Lines, DTs, U/G Cables, RMUs and FRTUs Etc.)  4 (i) Shifting of 11 lines passing over residential areas under DHBVN.  4 (J) Works under EESL (Smart Meters) 55.00  Total 596.00  5 CAPEX under UDAY (Ujjwal DISCOM Assurance Yojana)  5 (a) Scaling of IT project to Non-R-APDRP areas 1. Establishment of IT infra in SDO & Other offices and its connectivity with Data Centre. 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 5.  5 (b) Boundary meters for Villages in Rural Areas (3648 number of villages i.e. 7296 meters)	4 (g)	DTs, U/G Cables, RMUs and FRT Etc.) including SCADA Project, IN	Us		138.00	137.08
residential areas under DHBVN.  4 (J) Works under EESL (Smart Meters) 55.00  Total 596.00  5 CAPEX under UDAY (Ujjwal DISCOM Assurance Yojana)  5 (a) Scaling of IT project to Non-R-APDRP areas 1. Establishment of IT infra in SDO & Other offices and its connectivity with Data Centre. 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  5 (b) Boundary meters for Villages in Rural Areas (3648 number of villages i.e. 7296 meters)	4 (h)	Rewari (HT & LT Lines, DTs, U			0.00	0.00
Total 596.00  CAPEX under UDAY (Ujjwal DISCOM Assurance Yojana)  5 (a) Scaling of IT project to Non-R-APDRP areas 1. Establishment of IT infra in SDO & Other offices and its connectivity with Data Centre. 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  5 (b) Boundary meters for Villages in Rural Areas (3648 number of villages i.e. 7296 meters)	4 (i)	- , ,	ver 20.00		5.00	0.00
5 CAPEX under UDAY (Ujjwal DISCOM Assurance Yojana)  5 (a) Scaling of IT project to Non-R-APDRP areas 1. Establishment of IT infra in SDO & Other offices and its connectivity with Data Centre. 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  5 (b) Boundary meters for Villages in Rural Areas (3648 number of villages i.e. 7296 meters)	4 (J)	Works under EESL (Smart Meters	55.00		0.00	0.00
DISCOM Assurance Yojana)  5 (a) Scaling of IT project to Non-R-APDRP areas  1. Establishment of IT infra in SDO & Other offices and its connectivity with Data Centre.  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  5 (b) Boundary meters for Villages in Rural Areas (3648 number of villages i.e. 7296 meters)		Total	596.00		298.04	276.03
APDRP areas  1. Establishment of IT infra in SDO & Other offices and its connectivity with Data Centre.  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  5 (b) Boundary meters for Villages in Rural Areas (3648 number of villages i.e. 7296 meters)			val			
		APDRP are  1. Establishment of IT infra in S & Other offices and its connective with Data Cent 2. AMR for HT consumer mete 3. Engagement of an Agency GPS based field survey activities data digitizative 4. Engagement of SI for I 5. Procurement of Comput Furniture (Computer chair & tab for office under IPDS town and balance non-R-APDRP areas  Boundary meters for Villages Rural Areas (3648 number)	eas DOO iity re. rs. for & DOO iity by by by by by by by by by by by by by			0.00
			22 22	_	2 41	0.00
G. Total 1300.00 1170.00 975.00 839.30	G Tota			975.00		0.00

The Commission observes that the DHBVNL could achieve the Capex progress during FY 2018-19 to the tune of 71.73% of its approved capital expenditure in the ARR for FY 2018-19. From the details of Capital expenditure incurred during FY 2018-19, it is observed that no work has been started on the some important, especially nil progress has been shown in case of implementation of R-APDRP(Part-A) for which the amount of Rs. 88.75 Cr. was approved by the commission. Only one forth progress has been indicated in execution of shifting of 11 KV lines passing over the residential area under the jurisdiction of UHBVN. The

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minuscule expenditure indicated on scaling of IT project to Non-APDRP area. The expenditure of Rs. 9.91 Cr. incurred on system strengthening works under IBRD funded projects has been incurred without the approval of the commission which needs to be explained by the Licensee. The Licensee has not specified any reason for the deviations made from the approved CAPEX.

Further, as per Regulation 8.3 (b) of the Haryana Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2012, Capital Expenditure is a controllable item. As such the licensee should have exercised proper control over the item wise Capital Expenditure approved by the Commission.

Regulation 9.10 of the Haryana Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2012 further specifies as under: -

"In case the capital expenditure incurred for approved schemes exceeds the amount as approved in the capital expenditure plan, the generating company or the transmission or the distribution licensee, as the case may be, shall file an application with the Commission at the end of control period for truing up the expenditure incurred over and above the approved amount. After prudence check, the Commission shall pass an appropriate order on case to case basis. The True-up application shall contain all the requisite information and supporting documents".

Provided that any additional capital expenditure incurred on account of time over run and / or on unapproved schemes not covered under regulation 9.9 or unapproved changes in scope of approved schemes shall not be allowed by the Commission unless the generating company or the licensee, as the case may be, is able to give adequate justification for the same".

The licensee is directed to adhere to the Regulations.

### 5.2 Review of Capital Investment Plan for FY 2019-20

Regulation 9.7 of the Haryana Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2012, specifies that in the normal course, the Commission shall not revisit the approved capital investment plan during the control period. However, during the mid-year performance review and True-up, the Commission shall monitor the year wise progress of the actual capital expenditure incurred by the generating company or the licensee vis-à-vis the approved capital expenditure and in case of significant difference between the actual expenditure vis-a-vis the approved

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expenditure, the Commission may True-up the capital expenditure, subject to prudence check, as a part of annual True-up exercise on or without an application to this effect by the generation company/licensee. The generating company and the licensee shall submit the scheme-wise actual capital expenditure incurred along with the mid-year performance review and True-up filing.

Accordingly, both the distribution licensees, through filing of their Annual Performance Review petitions for FY 2019-20and subsequent submissions, submitted revised capital investment plan for FY2019-20. After examining these, the Commission allows following revised capital investment plans.

# A) UHBVNL

Capital Investment Plan for FY 2019-20 (UHBVNL)

		t 1 1411 101 1 1		711-/	
Sr. No	Name of the Scheme	CAPEX as per approval of HERC (Rs. in Cr.)	Expenditure incurred up to 31.12.2019 (Rs. in Cr.)	Tentative projection of Expenditure for FY 2019- 20 i.e. 31.03.2020 (Rs. in Cr.)	Funding Agency
1	Creation of new 33 kV sub-stations alongwith associated 33 kV & 11 kV lines including civil works	100.00	94.86	100.00	REC/JICA
2	Augmentation of existing 33 kV substations including civil works	37.80	26.16	37.80	REC/JICA
3	Augmentation of existing 33 kV lines	6.00	8.49	8.49	REC/JICA
4	Bifurcation/Trifurcation of overloaded 11 kV feeders	15.00	-	15	JICA
5	Release of tube well connections	62.50	9.34	62.50	Consum er Cost / Deposit work
6	Construction of UHBVN Buildings	30.00	8.60	30.00	REC
7	Civil Works other than substation buildings	5.00	5.89	5.89	REC
8	Works to be carried out under DDUGJY scheme for system strengthening including SAGY	86.39	56.75	86.39	DDU
9	Works to be carried out under IPDS scheme for system strengthening including 2 Nos. GIS substations	30.00	8.35	24.00	IPDS (100% 11 kV works complet ed except GIS)
10	LRP works to be carried out under MGJG scheme and urban feeder sanitization Scheme on Turn Key Basis (Uday)	143.26	129.00	143.26	REC/ Nigam's Funding
11	Shifting of 11 kV lines passing over residential areas under UHBVN	28.45	4.80	15.00	State Fund
12	Shifting of HT line (33 kV), passing over authorized/un-authorized colonies under jurisdiction of UHBVN	11.58	5.25	8.00	State Fund

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Sr. No	Name of the Scheme	CAPEX as per approval of HERC (Rs. in Cr.)	Expenditure incurred up to 31.12.2019 (Rs. in Cr.)	Tentative projection of Expenditure for FY 2019-20 i.e. 31.03.2020 (Rs. in Cr.)	Funding Agency
13	Strengthening of 11 kV lines and augmentation of DTs				
	Zone-1	5.00	1.50	5.00	REC
	Zone-2	9.50	1.00	9.50	REC
14	Smart City Karnal (HT < Lines, DTs, U/G Cables, RMU and FRTUs etc)	72.00			
15	Smart City Panchkula (HT < Lines, DTs, U/G Cables, RMU and FRTUs etc)	46.00		100.00	Nigam's Funding
16	Smart City Panipat (HT < Lines, DTs, U/G Cables, RMU and FRTUs etc)	41.00			
	Scaling of IT project to Non R-APDRP	5.47			
	areas covering the following:-1.	2.61			
17	Establishment of IT infra in SDO & Other offices and its connectivity with Data Centre.  2. Data Migration (IPDS & Balance Areas)  3.GIS Indexing (IPDS & Balance areas)	6.86	2.24	10.00	IPDS
18	RT-DAS SAIFI/SAIDI Measurement System in Non- SCADA, R-APDRP, Non- RAPDRP and IPDS Towns of UHBVN	11.63	-	7.00	PFC
19	AMR of HT Industrial consumers	2.00	1.25	2.00	Nigam's Funding
20	Procurement of single phase meters for replacement of defective meters & release of new connections.	6.83		6.83	REC
21	Procurement of three phase meters for replacement of defective meters & release of new connections.	10.12	263.02	10.12	REC
22	Material required for release of Non-AP connections & replacement of old assets	253.00		265.00	REC
23	Procurement of Power Transformers alongwith allied equipment, APFC	0.00	-	-	REC
	Gross proposed investment	1,028.00	626.50	951.78	_

The Commission observes that no expenditure has been indicated for scheme at Sr. No. 4, 14, 15, 16 & 18 for which an amount of Rs. 185.63 Cr. was approved by the Commission. The licensee is required to give reasons along with proper justification for no program against these works during FY 2019-20.

### B) DHBVNL

The licensee in his petition to ARR of FY 2019-20 had projected its Capital Expenditure as Rs. 1355.89 Cr. However, the Commission approved Rs. 1220Cr. Capital expenditure for FY 2019-20.

DHBVNL in its instant Petition for Annual Performance Review of FY2019-20 has submitted the capital expenditure of Rs. 371.01Cr.incurred during FY 2019-20 Up to ending

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Sept, 2019 against the approved CIP of Rs. 1220Cr. and likely expenditure to be incurred in second half ending March, 2020 as 754.92Cr. the detail of which is as indicated in following table: -

Capital Investment Plan for FY 2019-20 (DHBVNL)

	Capital lilvestillelit Flail for F	1 2013-20 (		<u> </u>	
Sr. No.	Categories	CAPEX as per approval of HERC (Rs. in Cr.)	Actual CAPEX Apr'19- Sep'19 (in Cr.)	Proposed CAPEX Sep'19- Mar'20 (in Cr.)	Total Likely CAPEX in FY 2019- 20 (in Cr.)
	AT&C loss sustainable reduction plan				
	Procurement of single phase meters for replacement of defective meters & release of new connections and procurement of Smart Meters.	44.43	27.28	18.15	45.43
	Procurement of three phase meters for replacement of defective meters & release of new connections and procurement of Smart Meters.	20.25	2.00	18.25	20.25
	Power Factor Improvement (Providing automatic power factor correctors)	16.00	2.60	3.20	5.80
	Providing of LT Capacitors on 400 KVA and above Distribution Transformers	10.00	0.00	0.00	0.00
	Total	90.68	31.88	39.60	71.48
	Load Growth schemes  Creation of new 33 kV sub-stations alongwith associated 33 kV & 11 kV lines	90.00	42.00	36.00	78.00
	Augmentation of existing 33 kV sub-stations	15.00	1.50	2.40	3.90
	Augmentation of existing 33 kV lines	1.40	0.32	3.01	3.33
	Bifurcation of 11 kV feeders (Work of bifurcation of feeders, augmentation of ACSR).	37.50	54.09	30.00	84.09
	Material required for release of Non-AP connections & replacement of old assets	175.00	134.00	58.00	192.00
	Release of Tube well connection on turnkey basis and segregation of AP load from Rural Urban feeders.	75.00	0.00	50.00	50.00
	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.	28.00	5.55	22.45	28.00
	11 KV Lines Distribution Transformer (25, 63,100, 200 kVA) LT line with ABC/XLPE Armoured Cable Augmentation- DTR, Existing line on conductor to ABXLPE, Augmentation of 11kV lines	123.85	66.80	203.93	270.73
	Metering (3 phase), Solar Energy Meter  Solar Project				
		F4F 7F	269.02	405.70	710.06
	Total Other works	545.75	368.02	405.79	710.06
	Other works  Maintenance free earthling using 'Ground Enhancing Material/ Conventional earthing for Distribution Transformers, Meter Pillar Boxes and H-pole etc.	3.00	0.00	0.00	0.00
	Civil Works	10.00	9.75	8.93	18.68
	Shifting of HT line (33 kv), passing over authorized/unauthorized colonies under jurisdiction of DHBVN.	5.00	1.73	3.00	4.73
	Mahara Gaon Jagmag Gaon scheme for rural area and feeder sanitization for Urban area/LRP/Replacement of iron pole.	125.00	57.83	79.00	136.83
	Other works for system improvement - Procurement of IT Equipment &Softwares	3.00	0.00	1.67	1.67
	Smart City Gurgaon (HT& LT Lines, DTs, U/G Cables,	300.00	105.92	153.00	258.92

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Sr. No.	Categories	CAPEX as per approval of HERC (Rs. in Cr.)	Actual CAPEX Apr'19- Sep'19 (in Cr.)	Proposed CAPEX Sep'19- Mar'20 (in Cr.)	Total Likely CAPEX in FY 2019- 20 (in Cr.)
	Manesar (Rs. 24 Crores)				
	Smart City (Hisar & Rewari (HT& LT Lines, DTs, U/G Cables, RMUs and FRTUs Etc.)	25.71	0.00	0.00	0.00
	Shifting of 11 lines passing over residential areas under DHBVN.	49.60	8.12	10.59	38.71
	Total	521.31	183.35	256.19	459.54
	R-APDRP Part-A (IT) Project	34.97	0.00	24.97	34.97
	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 Centre.  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 (Coputer chair & table) for office under IPDS town and in balance non-R-APDRP areas	17.65	1.89	15.76	17.65
	Implementation of ERP application	3.38	0.00	3.38	3.38
	RT-DAS (Real Time Data Acquisition System)	1.23	0.00	1.23	1.23
	Laying of Infrastructure in Gurgaon (Sector-58 to 115 and Faridabad (Sector-75 to 89)	40.00	0.00	8.00	8.00
	Total	62.26	1.89	53.34	65.23
	Grand Total	1220.00	553.26	754.92	1308.18

The Commission observes that there is no indication of expenditure on the works mentioned in CIP at Sr. No. 1(d), 1(f), 3(a), 3(e),3(g), 6, 7 and 8 for which an amount of Rs. 161.32 Cr. was approved. The licensee is required to give the reasons for nil progress against these works during FY2019-20.

## 5.3 Capital Investment Plan for FY 2020-21

The licensees, in the Petitions for true up of FY2018-19, Annual Performance Review for the FY 2019-20 and ARR for FY 2020-21, has submitted the Capital Investment Plan for the FY 2020-21. The details are as under: -

#### **UHBVNL**

The Petitioner UHBVNL has submitted that in order to achieve the loss targets & strengthening the power system, UHBVN proposes to incur a Capital Expenditure of Rs 1154.23Cr. In the FY 2020-21. The funding of capital expenditure in FY 2019-20 and FY 2020-21 is being arranged by debt from REC, PFC, support from equity and consumer contribution. The details of Scheme wise CAPEX for the FY 2020-21has been given in the table below:

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Capital Expenditure Plan for FY 2020-21 (UHBVNL)

	Capital Expenditure Plan for FY 2020-21 (UHBVNL)					
Sr. No.	Categories	Qty.	Unit Rate (in Rs.)	Cost (In Cr.)		
	Load Growth Schemes					
	Procurement of single-phase meters for replacement of defective meters & release of new connections.	60,000	750	4.50		
	Capacitor Bank			10.00		
	Creation of new 33 kV sub-stations along with Spill Over and			10.00		
	associated 33 kV & 11 kV lines including civil works / Normal development (33 kV &11 kV)	57 Nos.	2,36,84,000	135.00		
	Augmentation of existing 33 kV sub-stations including civil works	50 Nos.	84 lakhs	42.00		
	Augmentation of existing 33 kV lines	70 km	7,14,000	5.00		
	Bifurcation/Trifurcation of overloaded 11 kV feeders	204		5.00		
	Release of tube well connections on Turn Key Basis	18000 Nos.		225.00		
	Material required for release of Non-AP connections &					
	replacement of old assets / system improvement & normal development			230.00		
	Procurement of Power Transformers (12.5 MVA - 10 Nos.) along with allied equipment such as (33 kV CTs - 30 Nos.)			5.35		
	Total			691.85		
	Other Works					
	Construction of UHBVN Head office / residential Buildings			17.00		
	Civil Works other than substation buildings			3.00		
	Works to be carried out under IPDS scheme for system		10			
	strengthening including 2 Nos. GIS substations  LRP works (Urban sanitization) and works to be carried out under	2 Nos.	10 crores	20.00		
	MGJG scheme			50.00		
	Shifting of 11 kV lines passing over residential areas under UHBVN	595.58 km	>	10.00		
	Shifting of HT line (33 kV), passing over authorized/un-authorized colonies under jurisdiction of UHBVN	84.38 km		10.00		
	AMC for 33 kV substations			3.00		
	Strengthening of 11 kV lines, 11 kV Ring main System, New DTs & normal development			50.00		
	Creation of double supply source for 33 kV substations, 33 kV Ring main / Scada	50 km	40 lakhs	20.00		
	Smart City Karnal (HT < Lines, DTs, U/G Cables, RMU and FRTUs etc)			0.00		
	Smart City Panchkula (HT < Lines, DTs, U/G Cables, RMU and FRTUs etc)			22.00		
	Smart City Panipat (HT < Lines, DTs, U/G Cables, RMU and FRTUs etc)			22.00		
	Total			227.00		
	R-APDRP Part-A (IT) Project					
	SCADA Implementation Industrial Area Kundli (HT & LT lines, DTs, U/G Cables, RMUs and FRTUs etc.)			7.40		
	Scaling of IT project to Non- R-APDRP areas covering the following: -					
	Establishment of IT infra in SDO & Other offices and its connectivity with Data Centre.			1.80		
	2. Commercial Data Migration (IPDS & Balance Areas)			0.36		
	3.GIS Indexing (IPDS & Balance areas)			3.37		
	RT-DAS SAIFI/SAIDI Measurement System in Non- SCADA, R-APDRP, Non- RAPDRP and IPDS Towns of UHBVN			9.30		
	ERP Implementation			20.00		
	Smart Metering			192.00		
	AMR of HT Industrial consumers			1.15		
				1		
	Total Count Total			235.38		
	Grand Total			1,154.23		

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## **DHBVNL**

DHBVNL has submitted that, in order to achieve the loss targets, it has proposed Capital Expenditure of Rs 1331.96 Cr. for the FY 2020-21. The funding of capital expenditure in FY 2019-20and FY 2020-21 is being arranged by debt from REC, PFC, Equity Support and consumer contribution. The scheme wise details of CAPEX for the FY 2020-21 is as under: -

Capital Expenditure Plan for FY 2020-21 (DHBVNL)

Sr. No.	Categories	Quantity (In Nos.)	Unit Rate (In Rs.)	Proposed CAPEX (in Cr)
1	Plan for maintaining AT&C loss below 15%			
a	Procurement of single-phase meters for replacement of defective meters & release of new connections and procurement of Smart Meters.	300000	684	20.52
b	Procurement of three phase meters for replacement of defective meters & release of new connections and procurement of Smart Meters.	50000	1688	8.44
С	Power Factor Improvement (Providing automatic power factor correctors)			10.00
d	Providing of LT Capacitors on 400 KVA and above Distribution Transformers			7.00
	Total			45.96
2	Load Growth schemes			
а	Creation of new 33 kV sub-stations alongwith associated 33 kV & 11 kV lines	35	55000000	192.50
b	Augmentation of existing 33 kV sub-stations	30	6000000	18.00
С	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).			70.00
е	Material required for release of Non-AP connections & replacement of old assets			190.00
f	Release of Tube well connection on turnkey basis and segregation of AP load from Rural Urban feeders.	10000	150000	150.00
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
	Total	01103		652.50
3	Other works			032.30
a	Maintenance free earthling using 'Ground Enhancing Material/ Conventional earthing for Distribution Transformers, Meter Pillar Boxes and H-pole etc.			0.00
b	Civil Works			14.85
С	Shifting of HT line (33 kv), passing over authorized/unauthorized colonies under jurisdiction of DHBVN.			10.00
d	Mhara Gaon Jagmag Gaon scheme for rural area and feeder sanitization for Urban area/LRP/Replacement of iron pole.			125.23
е	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)			349.83
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

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Sr. No.	Categories	Quantity (In Nos.)	Unit Rate (In Rs.)	Proposed CAPEX (in Cr)
i	Double Source of 33 KV Supply	50 KM	4000000	20.00
j	Muffing of existing poles of 11 KV Lines			5.71
	Total			544.41
4	R-APDRP Part-A (IT) Project			0.00
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			5.55
6	Implementation of ERP application			23.63
7	RT-DAS (Real Time Data Acquisition System)			4.92
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			10.00
9.b	SCADA for 11KV lines in Urban Areas comprising of 11 KV Urban, Urban Mix, Industrial Feeders, etc.			20.00
	Total			89.10
	Grand Total			1331.96

It is observed that the Licensee(s) have not submitted details regarding financial tie ups to carry out the proposed Capital Expenditure plan and has not given the status of NITs/ tenders and activities undertaken to implement the CIP during the FY 2020-21.

The Discoms, in view of the situation arising from COVID-19 pandemic leading to lockdown and restrictions imposed thereto, have submitted a revised proposal for Capital Expenditure as under: -

Revised Capital Expenditure of UHBVN for FY 2020-21

Sr.	Name of the Scheme	Qty.	Cost
No.			
1	Creation of new 33 kV sub-stations alongwith Spill Over and associated 33 kV	40 Nos.	95.00
	& 11 kV lines including civil works / Normal development (33 kV & 11 kV)		
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	2 Nos.	20.00
	including 2 Nos. GIS substations		
9	LRP works (Urban sanitization) and works to be carried out under MGJG		30.00
	scheme		
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	84.38 km	10.00
	under jurisdiction of UHBVN		
12	AMC for 33 kV substations		1.00
13	Capacitor Bank		30.00
14	Strengthing of 11 kV lines, 11 kV Ringmain System, New DTs & normal		20.00

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Sr.	Name of the Scheme	Qty.	Cost
No.			
	development		
15	Creation of double supply source for 33 kV substations, 33 kV Ringmain / Scada	50 km	10.00
	Total A		498.50
16	Smart City Karnal (HT < Lines, DTs, U/G Cables, RMU and FRTUs etc)		0.00
17	Smart City Panchkula (HT < Lines, DTs, U/G Cables, RMU and FRTUs etc)		22.00
18	Smart City Panipat (HT < Lines, DTs, U/G Cables, RMU and FRTUs etc)		22.00
19	SCADA ImplementationIndustrial 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
	Total B		279.38
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
	Total C		239.85
	Gross proposed Capex (A+B+C)		1,017.73

**Revised Capital Expenditure of DHBVN for FY 2020-21** 

Category	Quantit	Unit Pate	Revised
Category			
	, ,	(In Rs.)	CAPEX
	Nos.)		
Plan for maintaining AT&C loss below 15%			
Procurement of single-phase meters for replacement of	300000	684	32.00
defective meters & release of new connections and			
procurement of Smart Meters.			
Procurement of three phase meters for replacement of	50000	1688	10.00
defective meters & release of new connections and			
procurement of Smart Meters.			
Power Factor Improvement (Providing automatic power factor			10.00
correctors)			
Providing of LT Capacitors on 400 KVA and above Distribution			4.00
Transformers			
Total			56.00
Load Growth schemes			
Creation of new 33 kV sub-stations alongwith associated 33 kV	35	5500000	100.00
& 11 kV lines		0	
Augmentation of existing 33 kV sub-stations	30	6000000	18.00
Augmentation of existing 33 kV lines	50 KM	800000	4.00
Bifurcation of 11 kV feeders (Work of bifurcation of feeders,			40.00
	Procurement of single-phase meters for replacement of defective meters & release of new connections and procurement of Smart Meters.  Procurement of three phase meters for replacement of defective meters & release of new connections and procurement of Smart Meters.  Power Factor Improvement (Providing automatic power factor correctors)  Providing of LT Capacitors on 400 KVA and above Distribution Transformers  Total  Load Growth schemes  Creation of new 33 kV sub-stations alongwith associated 33 kV & 11 kV lines  Augmentation of existing 33 kV sub-stations  Augmentation of existing 33 kV lines	Plan for maintaining AT&C loss below 15%  Procurement of single-phase meters for replacement of defective meters & release of new connections and procurement of Smart Meters.  Procurement of three phase meters for replacement of defective meters & release of new connections and procurement of Smart Meters.  Power Factor Improvement (Providing automatic power factor correctors)  Providing of LT Capacitors on 400 KVA and above Distribution Transformers  Total  Load Growth schemes  Creation of new 33 kV sub-stations alongwith associated 33 kV & 11 kV lines  Augmentation of existing 33 kV sub-stations  Augmentation of existing 33 kV lines  Bifurcation of 11 kV feeders (Work of bifurcation of feeders,	Plan for maintaining AT&C loss below 15%  Procurement of single-phase meters for replacement of defective meters & release of new connections and procurement of Smart Meters.  Procurement of three phase meters for replacement of defective meters & release of new connections and procurement of Smart Meters.  Power Factor Improvement (Providing automatic power factor correctors)  Providing of LT Capacitors on 400 KVA and above Distribution Transformers  Total  Load Growth schemes  Creation of new 33 kV sub-stations alongwith associated 33 kV 35 5500000 & 11 kV lines  Augmentation of existing 33 kV sub-stations  Bifurcation of 11 kV feeders (Work of bifurcation of feeders,

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E	Material required for release of Non-AP connections &			180.00
F	replacement of old assets  Release of Tube well connection on turnkey basis and	10000	150000	100.00
G	segregation of AP load from Rural Urban feeders.  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
Н	11 KV Lines	1103		138.18
1	Distribution Transformer (25, 63,100, 200 kVA)			130.10
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			
	Total			608.18
3	Other works			
а	Maintenance free earthling using 'Ground Enhancing Material/ Conventional earthing for Distribution Transformers, Meter Pillar Boxes and H-pole etc.			0.00
В	Civil Works			14.85
C D E F	Shifting of HT line (33 kv), passing over authorized/unauthorized 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.  Mahara Gaon Jagmag Gaon scheme for rural area and feeder sanitization for Urban area/LRP/Replacement of iron pole.  Other works for system improvement - Procurement of IT Equipment & Softwares  Smart City Gurgaon ( HT & LT Lines, DTs, U/G Cables, RMUs and FRTUs Etc.) including SCADA Project, IMT, Manesar(Rs. 24 Crores)  Smart City (Hisar & Rewari ( HT & LT Lines, DTs, U/G Cables,			10.00 110.00 3.00 310.00
Н	RMUs and FRTUs Etc.)  Shifting of 11 lines passing over residential areas under DHBVN.			15.79
1	Double Source of 33 KV Supply	50 KM	4000000	20.00
J	Muffing of existing poles of 11 KV Lines			5.71
	Total			489.35
4	R-APDRP Part-A (IT) Project			24.97
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)			19.53

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	for office under IPDS town and in balance non-R-APDRP areas		
6	Implementation of ERP application		16.88
7	RT-DAS (Real Time Data Acquisition System)		6.15
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
	Total		100.53
	Grand Total		1254.0
			6

It is observed that the UHBVNL, has proposed a Capital Expenditure Plan of Rs. 1154.23Cr. in its original filing which has now been revised to Rs. 1017.73 crores. The Commission is of the considered view that the original projections were on higher side given the past performance of the Nigam in executing capital works. The revised lower projections, though more reasonable, still appears to be on the higher side.

UHBVNL has been able to incur an expenditure of Rs. 371.71 Cr., 518.86 Cr. and 887.11 Cr. during, FY 2016-17, FY 2017-18 and FY 2018-19 respectively and expects to incur an expenditure Rs. 951.78 Cr. during the FY 2019-20. The Commission is of the view that adequate Capital Expenditure is essential to meet the loss reduction targets and to strengthen / augment the Distribution System. The Commission further observes that the proposed Capital Expenditure of Rs. 192 Cr. (at Sr. No. 3(e)) for smart metering appears to be an optimistic target. Keeping in view of the above facts, the Commission approves overall Capital Expenditure Plan of Rs. 980 Cr. for UHBVNL for FY 2020-21 which includes Rs. 225 Cr. for release of AP tube well connections

The Licensee is directed to revise its Capital expenditure plan accordingly and submit the scheme wise details of the proposed expenditure to the Commission within one month of the order.

Further, in DHBVNL, the actual Capital Expenditure for FY 2016-17, FY 2017-18 and FY 2018-19 has been Rs. 640.93 Cr.,808.63 Cr. and 839.30 Cr. respectively. For the FY 2019-20, DHBVNL has proposed Capital Expenditure of Rs. 1355.89 Cr. which included Rs. 300 Cr. towards the Smart Grid project of Gurgaon and Rs. 50 Cr. towards smart city project of Faridabad Hisar and Rewari. The expenditure of Rs. 125 Cr. for MGJG scheme and sanitisation of urban feeders. The Commission approved the overall capital expenditure plan for Rs. 1220 Cr. and the Licensee has indicated in its petition that expenditure of Rs. 551.38 only has been incurred in first half of FY 2019-20 ending to Sept, 2019 and further Rs. 754.92 Cr. are likely to be spent during Oct, 2019 to Mar, 2020. In view of the licensees' past performance on Capital expenditure, Commission approves the Capital expenditure of

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Rs. 1200 Cr. for FY 2020-21 for DHBVNL and further directs the licensee to revise its capital expenditure plan accordingly and submit the scheme wise details of proposed expenditure to the Commission within one month from the data of issue of this Order.

Both the licensees are further directed that they shall regulate their capital expenditure plans for FY 2020-21 as per Regulations 9.7 to 9.12 of the Haryana Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2019.

The Petitioner, DHBVNL vide PRO-10 of 2020 has also submitted its Business Plan Petition for FY 2020-21 to FY 2024-25. The Commission is of the considered view that in light of the lock down and reduction in demand by the Industrial and commercial consumers, the business plan for the MYT period would require a relook. Accordingly, the licensee is directed to resubmit its business plan along with projected capital investment for the MYT period within 1 months of this order to enable the Commission to take a view in the matter.

#### **5.4 Review of Technical Parameters**

The Commission has reviewed the performance of the DISCOMs based on the details made available for FY 2018-19 & FY 2019-20 and examined the projections for FY 2020-21 based on the filing of True up for FY 2018-19, Revised Aggregate Revenue Requirement of 2019-20 & proposed Aggregate Revenue Requirement for FY 2020-21 including subsequent submissions thereof as per Multi Year Tariff Regulations in vogue. The observations of the Commission in this regard are as follows: -

## **5.5 Distribution Losses**

The year-wise position of Distribution Losses as per the information provided by the Petitioners is tabulated below:

Distribution Losses as submitted by the Petitioners

Financial Year	UHBVNL	DHBVNL
2014– 2015	30.58%	24.47%
2015– 2016	31.49%	24.47%
2016–2017	29.86%	22.50%
2017– 2018	24.81%	19.16%
2018– 2019	22.04%	15.34%
2019–2020 (Projected)	19.50%	15.00%
2020–2021 (Projected)	18.50%	14.60%

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The Commission observes that Distribution Loses of UHBVNL & DHBVN have decreased from FY 2015-16 onwards. The Commission observes that distribution loss reduction is an important factor for ensuring financial viability of Distribution Licensees on a sustained basis. The Commission expects the Distribution Licensees to make all efforts to achieve the Distribution Loss reduction targets by incurring adequate capital expenditure on system strengthening/up gradation, energy meters, IT interventions etc. The Commission, due to the un-precedented situation arising out of COVID – 19 Pandemic leading to change in sales mix as low loss HT, NDS and LT sales is expected to witness negative growth over the sales figure of the FY 2019-20 while comparatively higher loss DS Sales is expected to register normal growth, thereby adding to the distribution losses. Hence, limited for the FY 2020-21, the Commission has based its ARR / Tariff workings by considering distribution loss of 18.50% as against 18.73% revised proposal filed by the Discoms.

## 5.6 Feeder Looses-Urban & Rural (UHBVN & DHBVN)

The Commission observes that although DISCOMs have shown some improvement, yet, are far behind the targets set by the Commission vide Tarff Order dated 07/03/2019 despite incurring substantial Capital Expenditure on system strengthening schemes/activities and Mhara Gaon Jagmag Gaon (MGJG) scheme. The Commission, in order dated 07/03/2019, had observed as under:

"The Commission has analysed the submissions of the Petitioners and is of judicious view that DISCOMs shall achieve the target as prescribed by the Commission for FY 2019-20. Any slippage on account of the target shall lead to penalty as deemed fit and appropriate by the Commission as per various provisions of the Act and Regulations framed thereunder."

DISCOMs in its reply have submitted that for achieving the targets for Urban and Rural Feeders in the FY 2019-20, schemes like Mhara Goan Jagmag Goan (MGJG), Urban Feeder Sanitization, are vigorously being implemented due to which overall AT&C Losses have reduced significantly i.e. from 30.02% in FY 2015-16 to 17.45% in FY 2018-19. Earnest efforts are being made to achieve the AT&C loss targets given by the Hon'ble Commission.

The year-wise position of the line losses on 11kV Rural and Urban feeders of the licensees, as per the details provided by UHBVNL and DHBVNL, is as under:

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#### Status of Rural Feeder

Distribution		FY 2016-17			FY 2017-18			FY 2018-19				
Losses	UH	DH	Total	%age	UH	DH	Total	%age	UH	DH	Total	%age
Below 50%	69	326	395	22.58%	178	452	630	34.43%	321	551	872	45.51%
Above 50%	793	561	1354	77.42%	704	496	1200	65.57%	612	432	1044	54.49%
Total	862	887	1749	100%	882	948	1830	100%	933	983	1916	100%

 The above table indicates that the rural feeders with losses below 50% have increased whereas with losses above 50% have reduced.

#### Status of Urban Feeder

Distribution	FY 2016-17			FY 2017-18			FY 2018-19					
Losses	UH	DH	Total	%age	UH	DH	Total	%age	UH	DH	Total	%age
Below 25%	492	568	1060	75.07%	609	652	1261	88.37%	658	697	1355	90.03%
Above 25%	192	160	352	24.93%	74	92	166	11.63%	68	82	150	9.97%
Total	684	728	1412	100%	683	744	1427	100%	726	779	1505	100%

 The table indicates urban feeders with loses below 25% have increased whereas above 25% have reduced.

In the public hearing as well as in their written objections, consumers and other stakeholders expressed their concern over high distribution losses on Urban and Rural feeders. They pointed out that cost of service has increased significantly due to unreasonably high distribution losses and it would be extremely difficult for the licensees to remain financially viable unless immediate effective steps are taken to rein in the same.

The Commission agrees with the stakeholders that the distribution losses must be minimised to the extent possible and in no case must exceed the permissible limits. The distribution Licensees are directed to reduce AT&C losses of all urban feeders below 25% and that of Rural feeders below 50% in FY 2020-21. DISCOMs shall submit detailed action plan to achieve the target within two months of issuance of orders.

### **5.7 Loss Reduction Trajectory**

The progress of the Discoms under UDAY scheme for the period from FY 2014-15 to FY 2018-19 is as given in table below: -

Progress under UDAY by DISCOMs (AT&C Loss Level)

Particulars	FY 20	14-15	FY 20	15-16	FY 201	L6-17	FY 20	17-18	FY 20	18-19
Particulars	UH	DH	UH	DH	UH	DH	UH	DH	UH	DH
AT&C Loss trajectory as per UDAY (%)	34.04	26.12	31.61	25.22	25.94	22.48	21.64	18.76	15.01	15.00
Actual AT&C Loss (%)	34.04	26.11	33.88	26.45	30.76	21.14	25.62	17.90	21.88	14.90
Gap (%)	0.00	-0.01	2.27	1.23	4.82	-1.34	3.98	-0.86	6.87	-0.10

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In their Petitions for the Multi Year Tariff (MYT) Petition for Control Period FY 2020-21 to FY 2024-25, Tariff Determination for FY 2020-21, True Up for FY 2018-19 and Annual Performance Review (APR) Petition for FY 2019-20as per Multi Year Tariff mechanism, the two licensees submitted the following revised distribution loss trajectory: -

Distribution Loss projected by the DISCOMs in ARR filing for FY 2020-21

Distribution	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Licensee	(Actual)	(Actual)	(Actual)	(Projected)	(Projected)
UHBVNL	29.86%	24.81%	22.04%	19.50%	18.50%
DHBVNL	22.50%	19.16%	15.34%	15.00%	14.60%

Further, Regulation 57.2 of HERC (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2012 and the HERC (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2019 specify the following norms for Collection Efficiency for the Distribution Licensees.

Table: Norms for Collection Efficiency specified by the Commission

Distribution Licensee	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
UHBVNL	99%	99%	99%	99%	99%	99.5%
DHBVNL	99%	99%	99%	99%	99%	99.5%

The Commission, in its Tariff Order for FY 2019-20 dated 07/03/2019 had considered the Collection Efficiency norms as 99% for FY 2019-20. The norms for Collection Efficiency for the distribution licensee(s) shall be 99.50% for the Control Period form FY 2020-21 to FY 2024-25 as per Regulation 57.2 of the HERC (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2019. It has been specified in Regulation 12 of HERC (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2012that any over achievement or under achievement in respect of Collection Efficiency shall be subject to incentive and penalty framework. From the perusal of information on Collection Efficiency submitted by the Distribution Licensees in their True-up Petitions for FY 2018-19, the Commission observes that UHBVN and DHBVNL both have over achieved the normative level of Collection Efficiency during the FY 2018-19 i.e., 100.21% and 100.53% respectively.

The Collection Efficiency for FY 2018-19, in some of the rural and urban area in UHBVN, has been reported to be as low as 91.43% in Kaithal Circle and 98.89% in Ambala Circle respectively. In case of DHBVN in corresponding year, the Collection efficiency in Jind Circle is lowest in both Rural and Urban area i.e. 38.60% and 98.04%. Similarly, the collection

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efficiency in case of UHBVN for FY 2019-20 up to Nov. 2019 has been reported to be as low as 82.54% for rural areas of Sonepat Circle and 96.29% for urban areas of Rohtak circle. In case of DHBVN, the collection efficiency has been reported to be as low as 35.85 % for rural areas in Jind Circle and 79.69 % for urban areas in Narnaul circle. The Commission is of the considered view that constant under recovery of revenue adds to financial losses on account of addition to the interest cost on borrowings by the licensees to meet their revenue shortfall besides accumulation of account receivables which in turn may convert into bad debts.

The Commission had sought Actual AT&C Loss and Actual Collection Efficiency for the FY 2018-19 from the Petitioners. Accordingly, the Petitioners had submitted the said information as follows:

AT&C Loss Calculation for FY 2018-19

Particulars	UHBVNL	DHBVNL
Net Input Energy (In MU)	20321.16	29335.73
Net Billed energy (In MU)	15842.32	24834.31
Distribution Loss	22.04%	15.34%
Collection Efficiency	100.21%	100.53%
AT&C Losses	21.88%	14.90%

Further, the Petitioners in their Tariff Petitions have submitted the AT&C loss trajectory for the FY 2019-20& FY 2020-21 as under:

AT&C Loss Trajectory projected by DISCOMs

		<b>j</b> = 10 0 0 11		
Particulars	FY 2019-20		FY 2020-21	
	UHBVNL	DHBVNL	UHBVNL	DHBVNL
AT&C Loss as submitted by the Petitioners in Tariff Petition	20.31%	15.85%	18.91%	15.03%

The Commission observes that the AT&C loss target for the FY 2019-20 as proposed by the Petitioners is lower than the target approved by the Commission in its Tariff Order dated. 07/03/2019 for FY 2019-20. It may be noted that for FY 2019-20, DHBVNL has not indicated any reduction in AT&C loss trajectory rather increase in AT&C loss as compared to that of FY 2018-19 has been projected. UHBVNL has projected reduction rate of 1.57% in AT&C loss level for FY 2019-20 with respect to the loss level for FY 2018-19.

Based upon actual performance during for FY 2018-19 and that projected for FY 2019-20& FY 2020-21, the AT&C losses of the two licensees works out as follows:

Loss trajectory projected by the DISCOMs

Dantiaulana	FY 2018-19 (Actual) FY 2019-20 (Projected)			FY 2020-21 (Projected)						
Particulars	UHBVNL	DHBVNL	UHBVNL	DHBVNL	UHBVNL	DHBVNL				
Distribution Losses	22.04%	15.34%	19.50%	15.00%	18.50%	14.60%				
Collection efficiency	100.2%	100.53%	99.00%	99.00%	99.50%	99.50%				

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Particulars	FY 2018-1	9 (Actual)	FY 2019-20	(Projected)	FY 2020-21 (Projected)		
Particulars	UHBVNL	DHBVNL	UHBVNL	DHBVNL	UHBVNL	DHBVNL	
AT&C Losses	21.88%	14.90%	20.31%	15.85%	18.91%	15.03%	
AT&C Losses Target	15.01%	15.00%	15.00%	13.50%	Target to be fixed		
Gap	-6.87%	0.10%	-5.31%	-2.35%			

<sup>\*</sup>AT&C loss target was fixed for FY 2018-19 as per AT&C Loss trajectory of UDAY (MOU)

However, the Discoms, vide their revised ARR filing in response to the HERC letter dated 24.04.2020, have submitted that the power consumption 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 in various major consumption categories.

Revised Distribution and AT&C Losses for FY 2020-21

Particulars	UF	IBVN	DHE	BVN	Discom	(Total)
	MYT	Revised	MYT	Revised	MYT	Revised
	Projection	Projection	Projection	Projection	Projection	Projection
Distribution Losses	18.50%	21.50%	14.60%	16.75%	16.22%	18.73%
Collection	99.50%	99.00%	99.50%	99.00%	99.50%	99.00%
Efficiency						
AT&C Losses	18.91%	22.29%	15.03%	17.58%	16.64%	19.54%

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 concerned year.

From perusal of data, following can be inferred: -

## a) <u>FY 2018-19</u>

From the above data it is evident that UHBVNL has failed to achieve the AT&C Loss Target fixed under UDAY scheme in spite of considerable reduction. DHBVNL has marginally overachieved AT&C Loss level of 0.10%

# b) <u>FY 2019-20</u>

From the data of FY 2019-20 it is evident that UHBVNL had projected to achieve15% AT&C loss in its Petition filed for ARR of FY 2019-20 and same was allowed by the Commission in

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its Tariff Order dated. 07/03/2019. However, in present petition, UHBVNL has projected AT&C Loss Level (20.31%) for FY 2019-20 which higher than that (15%) in ARR for FY 2019-20.

UHBVNL is directed to explain, within three months, from the date of this order, the reasons of under achievement and submit an action plan to achieve the target for the FY 2019-20 and FY 2020-21.

## c) FY 2020-21

The Commission has considered the submissions of UHBVN and DHBVN in their petitions filed for True up for FY 2018-19, Revised Aggregate Revenue Requirement of 2019-20 & proposed Aggregate Revenue Requirement for FY 2020-21 and after analysing them observes that the AT&C loss target of 18.91% and 15.03% for FY 2020-21 proposed by UHBVN and DHBVN respectively is on lower side. Under UDAY scheme Haryana DISCOMs were required to reduce AT&C losses to 15.00% up to FY 2018-19 to utilise the grant of GOI but only DHBVN could achieve the target.

In the public hearing on dated 12.02.2020, DHBVN was asked to explain the reason of higher AT&C level for FY 2019-20 (15.85%) than that reported for the FY 2018-19 (14.90%). The Discoms explained that the same has only been derived from distribution losses and normative collection efficiency, however, they will endeavour to achieve the target fixed for the AT&C losses by the Commission by increasing collection efficiency.

### 5.8 Distribution Transformers (DTs) failure rate

The Commission, vide its *Regulation (Standards of Performance for Distribution Licensee) Regulations 2004,* has specified the failure rate of distribution transformers as maximum 5% for urban area DTs and maximum 10% for rural area DTs.

In case the maximum permissible failure rate of distribution transformers exceeds the limits specified above, the Return on Equity (RoE) shall be reduced as specified under Regulation 65.1 (ii) of the MYT Regulations in vogue.

The year-wise status of damage rate of distribution transformers, as per information provided by UHBVNL and DHBVNL is given in the table below: -

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**Distribution Transformers Failure Rate %** 

No.   Pear   Failure   Rate   Each   Failure   Rate   Each   Rate   Each   Failure   Rate   Each   Failure   Rate   Each   Eac		Distribution Transformers Failure Rate %										
Part	Sr.	Year		UHBVNL		DHBVNL						
Part	No.											
Company				excluding	including	excluding	_					
Warranty period   Warranty p												
1   2009-10   Urban   6.56   8.95   4.58   5.79					_	_	_					
Rural   10.78   15.84   9.36   12.52			1	• • • • • • • • • • • • • • • • • • • •	• •							
Overall         10.30         15.06         8.81         11.74           2         2010-11         Urban         9.14         13.38         6.09         7.21           Rural         6.75         10.01         9.46         12.36           Overall         6.95         10.29         9.09         11.81           3         Urban         7.76         10.83         5.54         7.21           2011-12         Rural         6.38         10.01         7.31         9.98           Overall         6.49         10.08         7.14         9.71           4         2012-13         Urban         7.76         10.83         5.17         6.66           Rural         6.38         10.01         7.36         10.30         00           Overall         6.49         10.08         7.14         9.91           4         2012-13         Urban         7.81         10.93         6.50         8.53           5         Urban         7.81         10.93         6.50         8.53           6         2013-14         Rural         6.25         9.49         7.14         10.61           Overall         5.63         9	1	2009-10										
2         2010-11         Urban         9.14         13.38         6.09         7.21           Rural         6.75         10.01         9.46         12.36           Overall         6.95         10.29         9.09         11.81           3         Urban         7.76         10.83         5.54         7.21           4         2011-12         Rural         6.38         10.01         7.31         9.98           Overall         6.49         10.08         7.14         9.71           4         2012-13         Urban         7.76         10.83         5.17         6.66           Rural         6.38         10.01         7.36         10.30           Overall         6.49         10.08         7.14         9.94           5         Urban         7.81         10.93         6.50         8.53           8         Urban         7.81         10.93         6.50         8.53           9         Urban         6.37         9.60         7.08         10.42           10         Urban         6.31         9.87         5.22         7.15           8         Urban         4.46         7.18 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>												
Rural   6.75   10.01   9.46   12.36     Overall   6.95   10.29   9.09   11.81     2011-12   Rural   6.38   10.01   7.31   9.98     Overall   6.49   10.08   7.14   9.71     4   2012-13   Urban   7.76   10.83   5.17   6.66     Rural   6.38   10.01   7.36   10.30     Overall   6.49   10.08   7.14   9.94     Overall   6.49   10.08   7.14   9.94     Overall   6.49   10.08   7.14   9.94     Urban   7.81   10.93   6.50   8.53     Rural   6.25   9.49   7.14   10.61     Overall   6.37   9.60   7.08   10.42     Urban   6.31   9.87   5.22   7.15     Rural   5.63   9.59   6.65   10.53     Overall   5.68   9.62   6.52   10.22     Urban   4.46   7.18   3.98   5.63     Overall   5.38   9.3   6.14   9.70     Overall   5.38   9.13   5.94   9.32     2016-17   Urban   1.69   4.62   3.26   4.96     Rural   3.67   7.53   6.67   10.53     Overall   5.28   7.06   3.35   4.65     Rural   6.65   9.84   5.90   9.41     Overall   6.52   9.59   5.58   8.82     10   2018-19   Urban   3.96   5.64   3.90%   5.66%     Rural   6.68   10.19   6.00%   9.80%     Overall   2.82   4.01   2.47%   3.44%     11   2019-   Urban   2.82   4.01   2.47%   3.44%     Rural   6.64   6.95   3.56%   5.45%				10.30								
Overall         6.95         10.29         9.09         11.81           3         Urban         7.76         10.83         5.54         7.21           Rural         6.38         10.01         7.31         9.98           Overall         6.49         10.08         7.14         9.71           4         2012-13         Urban         7.76         10.83         5.17         6.66           Rural         6.38         10.01         7.36         10.30         10.30           Overall         6.49         10.08         7.14         9.94           Urban         7.81         10.93         6.50         8.53           2013-14         Rural         6.25         9.49         7.14         10.61           Overall         6.37         9.60         7.08         10.42           Urban         6.31         9.87         5.22         7.15           6         2014-15         Rural         5.63         9.59         6.65         10.53           Overall         5.68         9.62         6.52         10.22           Urban         4.46         7.18         3.98         5.63           7         2015-	2	2010-11										
3												
2011-12   Rural   6.38   10.01   7.31   9.98			Overall									
Overall         6.49         10.08         7.14         9.71           4         2012-13         Urban         7.76         10.83         5.17         6.66           Rural         6.38         10.01         7.36         10.30           Overall         6.49         10.08         7.14         9.94           5         2013-14         Rural         6.25         9.49         7.14         10.61           Overall         6.37         9.60         7.08         10.42           Urban         6.31         9.87         5.22         7.15           Rural         5.63         9.59         6.65         10.53           Overall         5.68         9.62         6.52         10.22           Urban         4.46         7.18         3.98         5.63           7         2015-16         Rural         5.38         9.3         6.14         9.70           8         Qurban         4.62         3.26         4.96           8         Rural         3.67         7.53         6.67         10.53           9         2016-17         Urban         5.28         7.06         3.35         4.65	3		Urban									
4       2012-13       Urban       7.76       10.83       5.17       6.66         Rural       6.38       10.01       7.36       10.30         Overall       6.49       10.08       7.14       9.94         5       Urban       7.81       10.93       6.50       8.53         2013-14       Rural       6.25       9.49       7.14       10.61         Overall       6.37       9.60       7.08       10.42         Urban       6.31       9.87       5.22       7.15         Rural       5.63       9.59       6.65       10.53         Overall       5.68       9.62       6.52       10.22         Urban       4.46       7.18       3.98       5.63         7       2015-16       Rural       5.38       9.3       6.14       9.70         9       2016-17       Urban       1.69       4.62       3.26       4.96         8       Rural       3.67       7.53       6.67       10.53         Overall       3.50       7.27       6.31       9.95         9       2017-18       Urban       5.28       7.06       3.35       4.65		2011-12	Rural	6.38	10.01	7.31	9.98					
Rural   6.38   10.01   7.36   10.30     Overall   6.49   10.08   7.14   9.94     5			Overall	6.49	10.08	7.14	9.71					
Overall         6.49         10.08         7.14         9.94           5         Urban         7.81         10.93         6.50         8.53           2013-14         Rural         6.25         9.49         7.14         10.61           Overall         6.37         9.60         7.08         10.42           Urban         6.31         9.87         5.22         7.15           Rural         5.63         9.59         6.65         10.53           Overall         5.68         9.62         6.52         10.22           Urban         4.46         7.18         3.98         5.63           Poverall         5.38         9.13         5.94         9.32           Urban         1.69         4.62         3.26         4.96           Rural         3.67         7.53         6.67         10.53           Overall         3.50         7.27         6.31         9.95           9         2017-18         Urban         5.28         7.06         3.35         4.65           Rural         6.65         9.84         5.90         9.41           Overall         6.52         9.59         5.58         8.82 </td <td>4</td> <td>2012-13</td> <td>Urban</td> <td>7.76</td> <td>10.83</td> <td>5.17</td> <td>6.66</td>	4	2012-13	Urban	7.76	10.83	5.17	6.66					
5     2013-14     Urban     7.81     10.93     6.50     8.53       2013-14     Rural     6.25     9.49     7.14     10.61       Overall     6.37     9.60     7.08     10.42       Urban     6.31     9.87     5.22     7.15       Rural     5.63     9.59     6.65     10.53       Overall     5.68     9.62     6.52     10.22       Urban     4.46     7.18     3.98     5.63       Rural     5.38     9.13     5.94     9.32       Overall     5.38     9.13     5.94     9.32       2016-17     Urban     1.69     4.62     3.26     4.96       Rural     3.67     7.53     6.67     10.53       Overall     3.50     7.27     6.31     9.95       9     2017-18     Urban     5.28     7.06     3.35     4.65       Rural     6.65     9.84     5.90     9.41       Overall     6.52     9.59     5.58     8.82       10     2018-19     Urban     3.96     5.64     3.90%     5.66%       Rural     6.68     10.19     6.00%     9.80%       Overall     6.43     9.77 <t< td=""><td></td><td></td><td>Rural</td><td>6.38</td><td>10.01</td><td>7.36</td><td>10.30</td></t<>			Rural	6.38	10.01	7.36	10.30					
2013-14   Rural   6.25   9.49   7.14   10.61     Overall   6.37   9.60   7.08   10.42     Urban   6.31   9.87   5.22   7.15     Rural   5.63   9.59   6.65   10.53     Overall   5.68   9.62   6.52   10.22     Urban   4.46   7.18   3.98   5.63     Overall   5.38   9.3   6.14   9.70     Overall   5.38   9.13   5.94   9.32     2016-17   Urban   1.69   4.62   3.26   4.96     Rural   3.67   7.53   6.67   10.53     Overall   3.50   7.27   6.31   9.95     9   2017-18   Urban   5.28   7.06   3.35   4.65     Rural   6.65   9.84   5.90   9.41     Overall   6.52   9.59   5.58   8.82     10   2018-19   Urban   3.96   5.64   3.90%   5.66%     Rural   6.68   10.19   6.00%   9.80%     Overall   6.43   9.77   5.74%   9.28%     11   2019-   20*   Rural   4.64   6.95   3.56%   5.45%			Overall	6.49	10.08	7.14	9.94					
Overall         6.37         9.60         7.08         10.42           B         2014-15         Urban         6.31         9.87         5.22         7.15           Rural         5.63         9.59         6.65         10.53           Overall         5.68         9.62         6.52         10.22           Urban         4.46         7.18         3.98         5.63           Rural         5.38         9.3         6.14         9.70           Overall         5.38         9.13         5.94         9.32           2016-17         Urban         1.69         4.62         3.26         4.96           Rural         3.67         7.53         6.67         10.53           Overall         3.50         7.27         6.31         9.95           9         2017-18         Urban         5.28         7.06         3.35         4.65           Rural         6.65         9.84         5.90         9.41           Overall         6.52         9.59         5.58         8.82           10         2018-19         Urban         3.96         5.64         3.90%         5.66%           Rural         6.68 <td>5</td> <td></td> <td>Urban</td> <td>7.81</td> <td>10.93</td> <td>6.50</td> <td>8.53</td>	5		Urban	7.81	10.93	6.50	8.53					
6     2014-15     Urban     6.31     9.87     5.22     7.15       Rural     5.63     9.59     6.65     10.53       Overall     5.68     9.62     6.52     10.22       Urban     4.46     7.18     3.98     5.63       Rural     5.38     9.3     6.14     9.70       Overall     5.38     9.13     5.94     9.32       2016-17     Urban     1.69     4.62     3.26     4.96       Rural     3.67     7.53     6.67     10.53       Overall     3.50     7.27     6.31     9.95       9     2017-18     Urban     5.28     7.06     3.35     4.65       Rural     6.65     9.84     5.90     9.41       Overall     6.52     9.59     5.58     8.82       10     2018-19     Urban     3.96     5.64     3.90%     5.66%       Rural     6.68     10.19     6.00%     9.80%       Overall     6.43     9.77     5.74%     9.28%       11     2019- 20*     Urban     2.82     4.01     2.47%     3.44%       12     2019- 20*     Rural     4.64     6.95     3.56%     5.45%		2013-14	Rural	6.25	9.49	7.14	10.61					
6     2014-15     Rural     5.63     9.59     6.65     10.53       7     2015-16     Urban     4.46     7.18     3.98     5.63       7     2015-16     Rural     5.38     9.3     6.14     9.70       Overall     5.38     9.13     5.94     9.32       2016-17     Urban     1.69     4.62     3.26     4.96       Rural     3.67     7.53     6.67     10.53       Overall     3.50     7.27     6.31     9.95       9     2017-18     Urban     5.28     7.06     3.35     4.65       Rural     6.65     9.84     5.90     9.41       Overall     6.52     9.59     5.58     8.82       10     2018-19     Urban     3.96     5.64     3.90%     5.66%       Rural     6.68     10.19     6.00%     9.80%       Overall     6.43     9.77     5.74%     9.28%       11     2019- 20*     Urban     2.82     4.01     2.47%     3.44%       20*     Rural     4.64     6.95     3.56%     5.45%			Overall	6.37	9.60	7.08	10.42					
Overall         5.68         9.62         6.52         10.22           Vurban         4.46         7.18         3.98         5.63           Rural         5.38         9.3         6.14         9.70           Overall         5.38         9.13         5.94         9.32           2016-17         Urban         1.69         4.62         3.26         4.96           Rural         3.67         7.53         6.67         10.53           Overall         3.50         7.27         6.31         9.95           9         2017-18         Urban         5.28         7.06         3.35         4.65           Rural         6.65         9.84         5.90         9.41           Overall         6.52         9.59         5.58         8.82           10         2018-19         Urban         3.96         5.64         3.90%         5.66%           Rural         6.68         10.19         6.00%         9.80%           Overall         6.43         9.77         5.74%         9.28%           11         2019-         Urban         2.82         4.01         2.47%         3.44%           20*         Rura			Urban	6.31	9.87	5.22	7.15					
7     2015-16     Rural     5.38     9.3     6.14     9.70       Overall     5.38     9.13     5.94     9.32       2016-17     Urban     1.69     4.62     3.26     4.96       Rural     3.67     7.53     6.67     10.53       Overall     3.50     7.27     6.31     9.95       9     2017-18     Urban     5.28     7.06     3.35     4.65       Rural     6.65     9.84     5.90     9.41       Overall     6.52     9.59     5.58     8.82       10     2018-19     Urban     3.96     5.64     3.90%     5.66%       Rural     6.68     10.19     6.00%     9.80%       Overall     6.43     9.77     5.74%     9.28%       11     2019-     Urban     2.82     4.01     2.47%     3.44%       20*     Rural     4.64     6.95     3.56%     5.45%	6	2014-15	Rural	5.63	9.59	6.65	10.53					
7     2015-16     Rural Overall     5.38     9.3     6.14     9.70       Overall     5.38     9.13     5.94     9.32       2016-17     Urban     1.69     4.62     3.26     4.96       Rural     3.67     7.53     6.67     10.53       Overall     3.50     7.27     6.31     9.95       9     2017-18     Urban     5.28     7.06     3.35     4.65       Rural     6.65     9.84     5.90     9.41       Overall     6.52     9.59     5.58     8.82       10     2018-19     Urban     3.96     5.64     3.90%     5.66%       Rural     6.68     10.19     6.00%     9.80%       Overall     6.43     9.77     5.74%     9.28%       11     2019-     Urban     2.82     4.01     2.47%     3.44%       20*     Rural     4.64     6.95     3.56%     5.45%			Overall	5.68	9.62	6.52	10.22					
Overall         5.38         9.13         5.94         9.32           8         2016-17         Urban         1.69         4.62         3.26         4.96           Rural         3.67         7.53         6.67         10.53           Overall         3.50         7.27         6.31         9.95           9         2017-18         Urban         5.28         7.06         3.35         4.65           Rural         6.65         9.84         5.90         9.41           Overall         6.52         9.59         5.58         8.82           10         2018-19         Urban         3.96         5.64         3.90%         5.66%           Rural         6.68         10.19         6.00%         9.80%           Overall         6.43         9.77         5.74%         9.28%           11         2019- 20*         Urban         2.82         4.01         2.47%         3.44%           20*         Rural         4.64         6.95         3.56%         5.45%			Urban	4.46	7.18	3.98	5.63					
8     2016-17     Urban Rural 3.67     7.53     6.67     10.53       9     2017-18 Urban 5.28 7.06 3.35 4.65       Rural 6.65 9.84 5.90 9.41 Overall 6.52 9.59 5.58 8.82       10     2018-19 Urban 3.96 Rural 6.68 10.19 6.00% 9.80% Overall 6.43 9.77 5.74% 9.28%       11     2019- 20* Rural 4.64 6.95 3.56% 5.45%	7	2015-16	Rural	5.38	9.3	6.14	9.70					
8     Rural     3.67     7.53     6.67     10.53       9     2017-18     Urban     5.28     7.06     3.35     4.65       Rural     6.65     9.84     5.90     9.41       Overall     6.52     9.59     5.58     8.82       10     2018-19     Urban     3.96     5.64     3.90%     5.66%       Rural     6.68     10.19     6.00%     9.80%       Overall     6.43     9.77     5.74%     9.28%       11     2019- 20*     Urban     2.82     4.01     2.47%     3.44%       Rural     4.64     6.95     3.56%     5.45%			Overall	5.38	9.13	5.94	9.32					
Overall         3.50         7.27         6.31         9.95           9         2017-18         Urban         5.28         7.06         3.35         4.65           Rural         6.65         9.84         5.90         9.41           Overall         6.52         9.59         5.58         8.82           10         2018-19         Urban         3.96         5.64         3.90%         5.66%           Rural         6.68         10.19         6.00%         9.80%           Overall         6.43         9.77         5.74%         9.28%           11         2019- 20*         Urban         2.82         4.01         2.47%         3.44%           Rural         4.64         6.95         3.56%         5.45%		2016-17	Urban	1.69	4.62	3.26	4.96					
9 2017-18 Urban 5.28 7.06 3.35 4.65 Rural 6.65 9.84 5.90 9.41 Overall 6.52 9.59 5.58 8.82  10 2018-19 Urban 3.96 5.64 3.90% 5.66% Rural 6.68 10.19 6.00% 9.80% Overall 6.43 9.77 5.74% 9.28%  11 2019- Urban 2.82 4.01 2.47% 3.44% Rural 4.64 6.95 3.56% 5.45%	8		Rural	3.67	7.53	6.67	10.53					
Rural     6.65     9.84     5.90     9.41       Overall     6.52     9.59     5.58     8.82       10     2018-19     Urban     3.96     5.64     3.90%     5.66%       Rural     6.68     10.19     6.00%     9.80%       Overall     6.43     9.77     5.74%     9.28%       11     2019- 20*     Urban     2.82     4.01     2.47%     3.44%       Rural     4.64     6.95     3.56%     5.45%			Overall	3.50	7.27	6.31	9.95					
Overall         6.52         9.59         5.58         8.82           10         2018-19         Urban         3.96         5.64         3.90%         5.66%           Rural         6.68         10.19         6.00%         9.80%           Overall         6.43         9.77         5.74%         9.28%           11         2019- 20*         Urban         2.82         4.01         2.47%         3.44%           Rural         4.64         6.95         3.56%         5.45%	9	2017-18	Urban	5.28	7.06	3.35	4.65					
10     2018-19     Urban     3.96     5.64     3.90%     5.66%       Rural     6.68     10.19     6.00%     9.80%       Overall     6.43     9.77     5.74%     9.28%       11     2019- 20*     Urban     2.82     4.01     2.47%     3.44%       Rural     4.64     6.95     3.56%     5.45%			Rural	6.65	9.84	5.90	9.41					
Rural     6.68     10.19     6.00%     9.80%       Overall     6.43     9.77     5.74%     9.28%       11     2019- 20*     Urban Rural     2.82     4.01     2.47%     3.44%       5.45%     5.45%			Overall	6.52	9.59	5.58	8.82					
Overall     6.43     9.77     5.74%     9.28%       11     2019- 20*     Urban     2.82     4.01     2.47%     3.44%       Rural     4.64     6.95     3.56%     5.45%	10	2018-19	Urban	3.96	5.64	3.90%	5.66%					
11 2019- 20* Rural 4.64 6.95 3.56% 3.44%			Rural	6.68	10.19	6.00%	9.80%					
20* Rural 4.64 6.95 3.56% 5.45%			Overall	6.43	9.77	5.74%	9.28%					
	11	2019-	Urban	2.82	4.01	2.47%	3.44%					
Overall 4.47 6.67 3.42% 5.20%		20*	Rural	4.64	6.95	3.56%	5.45%					
			Overall	4.47	6.67	3.42%	5.20%					

<sup>\*</sup> till Sep'19

The DT damage rate is to be analysed on the basis of total number of DTs damaged irrespective of the fact whether the transformer damaged was within warranty period or not, as all these DTs were part of the system. The Commission considered it appropriate to consider the total damaged DT irrespective of damaged within warranty or not. The high level of transformer damage rate not only affect the continuity of supply adversely but also reflects upon poor monitoring and maintenance of distribution system which in turn also impacts the finances of the distribution licensees,

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From analysis of the data, it is observed that failure rate of DTs in urban and rural area of UHBVNL during FY 2018-19 is **5.64% and 10.19%** respectively which is above the maximum limit prescribed by the Commission and the Failure Rate of DTs in urban area of DHBVNL during FY 2018-19 is 5.66%which is also above the maximum limit prescribed by the Commission. The failure rate in rural area of DHBVN is within the norms prescribed by the Commission.

The Commission has analysed the submissions of the Petitioners and observes that despite issuance of regular directives to the DISCOMs to ensure the reduction of DTs failure rate, there is hardly any improvement. In the FY 2018-19, DTs failure rate in both Urban and Rural area of UHBVN and Urban area of DHBVN is higher than the norms, also, overall DTs failure rate of both Licensees in FY 2018-19 is increased in comparison to that of FY 2017-18. The commission again directs the licensees to bring down the distribution transformer damage rate below the prescribed limits by FY 2020-21. Any slippage on account of the timeline shall lead to penalty as deemed fit and appropriate by the Commission as per various provisions of the Act and Regulations framed thereunder.

As per MYT Regulations the distribution licensee shall maintain a proper record of failure of the distribution transformers and submit the same in the quarterly report to the Commission. The DISCOMs are again directed to ensure that quarterly reports be submitted regularly without fail and to host the circle wise information on its website regularly.

## 5.9 Non-replacement of defective energy meters by the distribution licensees

The two Distribution Licensees, in their Petitions for True up for FY 2018-19and revised ARR for FY 2019-20, have subsequently submitted the following details with regard to defective energy meters.

#### **Status of Defective Meters**

Meter category	No. of defecti 2019)	ive meters (e	nding March,	No. of defective meters (ending Sept. '19)			
	Rural	Urban	Total	Rural	Urban	Total	
In respect to UHBVNL	In respect to UHBVNL						
Single Phase Meters	67,765	6,585	74,350	62,351	5,419	67,770	
Three Phase Meters	1,286	542	1,828	1,816	434	2,250	
Total	69,051	7,127	76,178	64,167	5,853	70,020	
In respect to DHBVNL							
Single Phase Meters	92,425	7,524	99,949	77,125	9,677	86,802	
Three Phase Meters	55,874	2,527	58,401	49,406	2,412	51,818	
Total	1,48,299	10,051	1,58,350	1,26,531	12,089	1,38,620	
Grand Total	2,17,350	17,178	2,34,528	1,90,698	17,942	2,08,640	

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The Commission observes that the total number of defective meters of both licensees have decreased to 2,0,8,640 (ending Sept,2019) from the previous year figures of 2,34,528 (ending March, 2019). In the case of DHBVN, number of defective meters is very high, evidently no concrete efforts seem to have been made by DHBVN to clear the backlog of defective meters. This is a matter of great concern and reflects badly on the operations and functioning of the Licensees. It is needless to mention that accurate metering is an important aspect of distribution business as electricity supplied to the consumers needs to be accurately measured and accordingly billed and the billed revenue needs to be promptly collected. It is reiterated that supply of electricity through inaccurate / defective/dead stop meter for a long time will not only results in harassment to the consumer but also lead to leakage of revenue for the licensees as well as against the statute enshrined in the Act.

The Commission in Order dated. 07/03/2019 had directed the Petitioners, "The dead / defective meters shall be replaced within a month. In case the DISCOMs fails to do so the Consumer concerned shall do so. However, in case the consumer fails to replace the dead / defective meter after expiry of one month, the consumer shall be liable to pay twice the normal tariff of the category that the consumer falls in."

DISCOMs in their reply have submitted, "It may be noted that meter replacement is a continuous process and meters keep on getting defective necessitating replacement. Therefore, at any point of time some percentage of defective meters is inevitable.

Further, as per CEA Installation and Operation of Meters Regulations, 2006, the obligation to maintain a correct meter at consumer premises is that of the Licensee. The consumer however may elect to purchase his own meter and, in that case, "the meter purchased by the consumer shall be tested, installed and sealed by the Licensee". In case the meter gets defective, the responsibility to replace the same is again of the Licensee. The consumer cannot be allowed to replace his own defective meter. He can only purchase a new meter as per Licensees' specification, get it tested and installed from the licensee as stated above. So, the directive given by the Commission is in not in accordance with the CEA Installation and Operation of Meters Regulations.

The relevant extract from the Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006 is reproduced as under: -

"15. Meter failure or discrepancies...

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## (2) Consumer meters

In case the consumer reports to the licensee about consumer meter readings not commensurate with his consumption of electricity, stoppage of meter, damage to the seal, burning or damage of the meter, the licensee shall take necessary steps as per the procedures given in the Electricity Supply Code of the Appropriate Commission read with the notified conditions of supply of electricity."

In view of the facts mentioned above, the Commission may kindly withdraw the directive."

The Commission has considered the reply of DISCOMs and acknowledges the fact that the defective meters are to be replaced as per relevant Regulations in vogue. Further, the Commission is of considered view that that despite issuance of directives almost in each tariff order distribution licensees have not been able to get the meters replacement of defective energy meters as per the norms fixed by the commission. The licensees should ensure availability of energy meters at Nigam's stores, empower its officials and plan its activities suitably in order to achieve the envisaged targets. The Discoms ought not to lose site of Section 55 (1) of the Electricity Act, 2003 i.e. "No licensee shall supply electricity, after the expiry of two years from the appointed date, (emphasis added) except through installation of a correct meter in accordance with the regulations to be made in this behalf by the Authority.

### 5.10 Non-replacement of Electro-mechanical Meters

Besides the defective energy meters, following Electro-mechanical meters are yet to be replaced by the two Distribution Licensees.

Details of Electro-mechanical meters vet to be replaced

					<b>,</b>			
Meter Category	Electro-mechanion of UHBVNL (endi		•	Electro-mechanical in respect of DHBVNL (ending June, 2019)			Total Electro- mechanical meters	
	Rural	Urban	Total	Rural	Urban	Total	Grand Total	
Single Phase Meters	1,55,718	150	1,55,868	91,003	5,648	96,651	2,73,480	
Three Phase Meters	1	1	ı	26,759	155	26,914	5,953	
Total	1,55,718	150	1,55,868	1,17,762	5,803	1,23,565	2,72,433	

The Commission in tariff order dated 07/03/2019 had directed, "the petitioners are again directed to replace the 100% electromechanical meters before filing of next year's Tariff Petition i.e., True up of FY 2018-19 & ARR of FY 2020-21."

DISCOMs in their reply has submitted, "DISCOMs are making earnest efforts for

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replacement of electromechanical meters, which is evident from the data provided as under:

## **Details of Electromechanical Meters Pending for Replacement**

Particulars	N	Number of Electromechanical meters pending for replacement					
		Single Phase			Three Phase		
	Rural	Urban	Total	Rural	Urban	Total	
UHBVN							
Ending Mar-16	4,37,462	24,927	4,62,389	1,077	1,009	2,086	
Ending May-19	2,08,515	4,656	2,13,171	-	-	-	
DHBVN							
Ending Mar-16	1,89,973	65,134	2,55,107	63,324	43,422	1,06,746	
Ending May-19	82,391	5,648	88,039	23,140	155	23,295	
Haryana							
Ending Mar-16	6,27,435	90,061	7,17,496	64,401	44,431	1,08,832	
Ending May-19	2,90,906	10,304	3,01,210	23,140	155	23,295	

The Discoms have submitted that pendency in replacement of single-phase electromechanical meters is prominent in rural areas primarily due to public resentment for replacement of electromechanical meters. Presently, DISCOMs have taken MGJG Scheme for loss reduction in rural areas under which works like relocation of meters outside the premises and replacement of defective meters are being carried out in phase manner. So, far works on 916 feeders covering 4100 Villages in 9 Districts have been completed, however the works in remaining areas is under progress. Further, more improvement in pendency in replacement of single-phase electromechanical meter will be observed once the work under the MGJG will get completed in balance areas"

The Commission has considered the submissions of the Petitioners and observes that the progress made for replacement of defective meters is considerable lagging in order to achieve the target specified related to replacement of electromechanical meters. **Therefore, the Petitioners are again directed to replace all the electro-mechanical meters at least in urban area before filing of next year's ARR / Tariff Petition.** 

## 5.11 Procurement of single phase and three phase LT meters

The Commission in its Tariff order dated 07/03/2019 had issued various directives for implementation of smart metering system. The DISCOMs have submitted their reply/response as under:

Details of Directives viz-a-viz Reply/response of DISCOMs.

		iz Kopiyi ooponoo oi Biooomoi			
Sr.	Directives	Response/Reply by DISCOMs			
No.					
	Smart Meters:				
15.	DISCOMs are directed to finalize the	The specifications of the Smart Meters			
	specifications of smart meters in line	have been finalized and approved by the			

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# Response/Reply by DISCOMs

No.

with functional requirement formulated by CEA and the same along with the list of approved vendors be provided on its website to facilitate consumers to purchase the meter if required. The necessary infrastructure for providing the smart meters in certain category of consumers such as telecom towers, street lighting, bulk supply and temporary connection be also created to plug the revenue leakages due to reading billing disputes.

The Commission is of the view that purchase of static meters be stopped henceforth. Any Order, if already given, be cancelled. The healthy static meters dismantled thereof by installing the smart meters can be utilized in the other rural areas/tubewell connections in order to avoid new purchases of static meters. (Page 314)

**DISCOMs** in line with functional CEA. requirement formulated by DISCOMs have initiated the installation of smart meters, procured through EESL, in Karnal & Gurugram towns. These meters are to be installed in all consumer categories. Further, procurement of 2 million Smart Meters under CAPEX plus OPEX model in under process.

It is important to note here that various meetings had been conducted with the available Smart Meters manufacturers and it has been figured out that as on date the capacity of meter manufacturer to supply smart meter at competitive rates is very limited. Most of their capacity has already been utilized by EESL. It is worth to mention that even EESL is facing challenge in increasing the pace of meter installation on account of limited supply of meters and meter manufacturers. As such, as of now there is not enough quantity of smart meters available to do away the procurement of static meters. However, future requirements of static meters shall be reviewed viz-a-viz the availability of smart meters in due course of time.

Regarding re-utilization of healthy electronic meters fetched after installation of Smart Meters, it is submitted that recently DISCOMs had enhanced the testing capacity of meter testing labs.

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Sr.	Directives	Response/Reply by DISCOMs
No.		
		Further, keeping in view the requirement
		of meters the necessary action will be
		taken accordingly.
16.	Smart Meters:	
	The Commission has analyzed the	So far more than 35,000 Smart Meters
	submissions of the Petitioners and is	have been installed in Karnal and
	not satisfied with the progress related	Gurugram. All backend system integration
	to installation of Smart Meters in the	work has also been completed. DISCOMs
	State. The petitioners are directed to	are targeting to install 5 Lac meters by
	expedite the installation of all the smart	end of 31st June 2021. Further, DISCOMs
	meters along with backend integration	are in process to purchase the additional
	work by FY 2019-20. The Commission	20 Lakh Smart Meters, which are also
	advise that DISCOMs should not	expected to get installed by 31st
	outsource this type of work and do the	December 2021. In regard to outsourcing
	necessary work at the department	of smart metering works, it is submitted
	level. Further, the help may be taken	that new technology being the integral part
	from the Electronics/Electrical students	of the project, DISCOMs has carried out
	of technical institutions of Haryana,	the smart metering on turnkey basis
	which would impart training to the	through Corporate System Integrators.
	students also. A roadmap for the	The works like replacement of existing
	installation of smart meter may be	meters and installation on smart meters
	prepared by the concerned S.E/Xen	are within the scope of system integrator,
	after holding discussion with the head	as they have taken such component into
	of the concerned institutions. Such	their cost while participating into the bid.
	step shall lead to minimization of the	Therefore, keeping the above in view
	financial impact, provide relief to the	training/internships to institutes/collages
	consumers and message will convey	will be planned by the DISCOMs in
	to the public consumers that	accordance to the implementation of
	DISCOMs/Govt. is working in their	smart metering projects.
	interest. (page 315).	
	DISCOMs shall submit a complete	
	action plan with target dates for	
	introduction of new metering	
	technologies such as smart pre-paid	

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Sr.	Directives	Response/Reply by DISCOMs
No.		
	meters/smart meters for different	
	classes of consumers by 31stAugust	
	2019. Such meters shall be installed	
	mainly in the Rural areas/high theft	
	prone areas. (page 348)	

The Commission has considered the submissions of the Petitioners and observes that the DISCOMs could not achieve the targets of installation of Smart Meter envisaged in National Tariff Policy 2016 due to constraints explained above. In the public hearing on 12.02.2020, the Licensees submitted that UHBVN and DHBVN have collaborated with EESL for roll out of 10 Lac Smart Meters and M/S L&T has been engaged as System Integrator for execution of project. Approximately 50,000 smart meters have been installed in Karnal and Panchkula. Besides, 50,000 smart meters have been installed in Gurgaon. In addition, purchase process of 20 Lac smart meters on CAPEX Model is in progress.

It is observed that the Hon'ble Minister of Finance, Government of India, while presenting the Budget on February 1, 2020 for the year 2020-2021 in the Parliament, has mentioned at para number 58 of her speech that:

"58. Taking electricity to every household has been a major achievement. However, the distribution sector, particularly the DISCOMs are under financial stress. The Ministry intends to promote "smart" metering. I urge all the States and Union Territories to replace conventional energy meters by prepaid smart meters in the next 3 years. Also, this would give consumers the freedom to choose the supplier and rate as per their requirements.

Further measure to reform DISCOMs would be taken.

I propose to provide about Rs. 22,000 Crores to power and renewable energy sector in 2020-21"

In view of above, Government of India has planned to replace conventional energy meters by prepaid smart meters in the next 3 years and to provide electricity consumers the freedom to choose the supplier and rate as per their wisdom. Accordingly, **DISCOMs are** directed to expedite the Installation of Smart Meter with associated features and submit year-wise detailed plan of three years to replace conventional energy meters by prepaid smart meters .

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## 5.12 Pending electricity connection/load

The DISCOMs, in their petitions for true up of FY 2018-19, Annual Performance Review for FY2019-20 and Annual Revenue Requirement for FY2020-21, have subsequently submitted information pertaining to connection/load pending for release.

From the data provided by the DISCOMs, the Commission observes that as on 01.02.2020 the number of pending applications were 42,694 with applied load of 4,94,666 kW in UHBVN and 63,577 with applied load of 8,36,345 kW in DHBVN. Thus, in both the DISCOMs, the total load pending for release works out to 13,31,011 kW. DISCOMs have further reported that the pending connections in Industrial category and General category (HT NDS &BDS) are due to work going on self-execution basis, pending due to submissions of BGs by developers and some system constraints of DISCOMs& HVPNL and only few applications are pending on part of department.

The Commission in Tariff Order dated 07/03/2019 had directed the Petitioners as follows:

"DISCOMs are directed to grant connection to all the applicants whose applications are pending up to 31stMarch, 2019 within one month from the date of this Order. The officer /official who fails to comply with the time-lines shall be liable to pay a fine of Rs 6000 (Rupees six thousand) per day per person for each day of delay subject to Rs 1,00,000 (Rupees one Lakh) maximum, in each case and such fine shall be payable by officers in equal proportion out of their own pockets. The concerned Drawing & Disbursing Officer (DDO) of the Licensee to ensure that fine is deducted from the salary of officer/official and deposited with the DDO of the Commission. The defaults shall be recorded in the ACR of the responsible officer/official with remarks as "honesty doubtful".

In the case of Tatkal scheme, the DISCOMs are directed to refund the amount deposited by the consumer within three months from the date of receipt of this Order at interest rate of Bank Rate prevailing as on 1st April of the relevant financial year.

Accordingly, the Commission in the interest of justice directs the distribution licensees to award compensation as per HERC Regulations wherever the delay in releasing the AP connections under Tatkal Scheme is beyond thirty days. It is directed that pending connections be released within one month, otherwise interest at State Bank of India MCLR rate with one-year tenor applicable on 01.04.2018 shall be payable from the date of deposit of tatkal premium amount.

In view of the above, the Commission again directs the distribution licensees to expedite the release of pending applications for new connections as well as load enhancement. The present backlog should be removed within two months from the date

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of this Order and the distribution licensees shall submit a report on the same thereafter. In case backlog is not cleared within two months, it shall be deemed to be a notice under section 142 against the erring Officer/Official and the penalty so levied shall be paid to the sufferers. Compensation paid to the applicants, as specified by the Commission in its Regulations, for delay in expediting new connection or release of extended load shall also informed within two months from the date of this Order. The details of pending connections be uploaded on the website of the DISCOMs on monthly basis along with action plan to release the same.

The Commission directs the Distribution Licensees to pass Speaking Order in case they are not able to provide AP connection due to reasons attributable to Natural Calamities including flood, cyclone, ground water level etc.

Further, in case, DISCOMs do not provide load enhancement to the consumers due to technical constraints or force majeure events then DISCOMs shall refund the amount deposited by the consumers at Bank Rate of RBI as on 1st April of the relevant financial year for consumers having existing load above 20 kW."

#### DISCOMs have submitted as under:

New connections are being released in timely manner as per the guidelines specified in HERC Electricity Supply Code 2014. The pendency in release of connections is being monitored regularly through online monitoring system and due emphasis is given to release the connection well within timelines. As per Electricity Act, 2003, and HERC regulations, the service of new connection is to be delivered within 30 days where infrastructure exists. DISCOMs are making earnest efforts to release the connections within timelines and substantial improvement has been made in releasing the general connections within time lines as per details given below: -

Details of Services Delivered Pertaining to New Connection EOL, ROL and Change of Name

Period	Number of services delivered pertaining to new connection EOL, ROL and change of		Number delivered within 30 days		% delivered within 30 days				
	name								
	UHBVN	DHBVN	HARYANA	UHBVN	DHBVN	HARYANA	UHBVN	DHBVN	HARYANA
Apr'19 to Jul'19	72,636	1,28,600	2,01,236	63,141	1,12,097	1,75,238	86.92 %	87.17%	87.08%
Oct'18toMar'19	1,02,476	1,93,170	2,95,646	75,780	1,64,529	2,40,309	73.95%	85.17%	81.28%
Apr'18toSep' 18	1,06,275	1,28,781	2,35,056	62,668	38,096	1,00,764	58.98%	29.58%	42.87%

As on date 31,335 number of (UH- 11,620 and DH- 19,735) applications are pending, out of which only 5,752 applications (UH- 835 & DH- 4,917) are outside 30 days. These are the cases where there are system constraints, pending compliance from applicants or other issues.

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**Details of Industrial Applications** 

Period	Number of services delivered pertaining to new connection EOL,		Number de	Number delivered within 30 days		% delivered within 30 days			
	ROL and change of name								
	UHBVN	DHBVN	HARYANA	UHBVN	DHBVN	HARYANA	UHBVN	DHBVN	HARYANA
Apr'19 to Jul'19	1833	2600	4,433	979	1959	2,938	53.41%	75.35%	66.28%
Oct'18 to Mar'19	3055	3825	6,880	1468	2980	4,448	48.05%	77.91%	64.65%
Apr'18 toSept'18	2085	2327	4,412	363	499	862	17.41 %	21.44%	19.54%

The petitioners have submitted that as per HERC regulations, 3 months period is given for HT category to comply with the demand notice and 2 Months for LT Industry to comply with the demand notice. Therefore, the connections which are released beyond 30 days are due to issues of non-compliance of demand notice by applicant, time taken for creation of new lines /augmentation of system for which time lines have already been prescribed in supply code i.e. 71 days for 11 KV connections and likewise. These are the cases where there are system constraints, pending compliance from applicants or other issues. As on date, 1,540 applications (UH-1,205 & DH-335) are pending, out of which 1,002 applications (UH-730 & DH-272) are pending more than 30 days. The pendency of 402 applications (UH-306 & DH-96) is due noncompliance of demand notice, 24 applications (UH- 22 & DH- 2) due undertaking of work in self-execution and 405 applications (UH- 312 & DH- 93) due to creation of line and system augmentation work at departmental end.

The Discoms have further informed that there has been significant reduction in time taken for online citizen services provided by the Haryana DISCOMs. The detail of the same is tabulated as under:

**Details of Online Citizen Services Provided by the DISCOMs** 

Dotatio of Chillio Citizon Controco i Totilada by tilo Diccomo						
UHBVN						
Sr. No.	Services Average time of delivery (Days) (January - June)					
		2018	2019			
1	New Connection (General)	57	16			
2	New Connection (Industrial)	87	31			
3	Extension of Load (General)	60	13			
4	Extension of Load (Industrial)	113	39			
5	Reduction of Load (General)	56	11			
6	Reduction of Load (Industrial)	69	11			
7	Change of Name (General)	52	9			
8	Change of Name (Industrial)	64	9			

DHBVN				
Sr. No.	Services Average time of delivery (Days) (January- June			
		2018	2019	
1	New Connection (General)	101	16	
2	New Connection (Industrial)	103	27	
3	Extension of Load (General)	100	13	
4	Extension of Load (Industrial)	126	33	
5	Reduction of Load (General)	96	9	
6	Reduction of Load (Industrial)	108	15	

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7	Change of Name (General)	101	9	
8	Change of Name (Industrial)	82	8	

The status of tube well connections released under the Tatkal scheme in the state is given as under:

	luci.	T =				
Sr.		Total	Total Number	Applications	Balance	Remarks
No.	Name of Circle	Applications	of connections	Cancelled	Applications	
		received	released			
UHBV	N					
1	Ambala	605	605	0	0	
2	Yamunanagar	838	838	0	0	
3	Kurukshetra	288	288	0	0	
4	Kaithal	932	932	0	0	
5	Karnal	846	846	0	0	
6	Panipat	440	440	0	0	
7	Sonepat	1,382	1,382	0	0	
8	Rohtak	289	289	0	0	
9	Jhajjar	403	403	0	0	
	Total	6,023	6,023	0	0	
						DHBVN
1	Faridabad	243	236	7	0	
2	Palwal	741	712	29	0	
3	Gurugram-1	197	177	20	0	
4	Curuaram 2	150	155	2	1	Pending due to stay
4	Gurugram-2	158	155	2	1	order from Court
5	Nrnaul	1,400	1,395	0	5	Disputed / Court case
6	Rewari	669	664	4	1	Disputed / Court case
7	Bhiwani	1,785	1,785	0	0	
8	Hisar	786	785	1	0	
9	Fatehabad	1,740	1,736	4	0	
10	Sirsa	2,581	2,581	0	0	
11	Jind	1,540	1,540	0	0	
	Total	11,840	11,766	67	7	
_	Total (DH+UH)	17,863	17,789	67	7	

## **Progress of Tatkal Scheme ending July-2019**

It has been submitted that at present, no application for release of Tube well Connection applied under Tatkal Scheme is pending with the DISCOMs. There are seven application where pendency is either due to litigation filed in the Court or stay order issued by the court.

The Commission has considered the submissions made by DISCOMs and observes that DISCOMs have managed to substantially reduce average time of delivery in citizen services. During April, 2019 to July, 2019, the service pertaining to release of General connections, Extension of Load and change of name has been delivered in 30 days i.e. 87.08% cases as compared to 42.87% in the previous year. Further, 66.28% Industrial connections (New connections, Extension of Load and change of name) are released within 30 days during April, 2019 to July, 2019 whereas 19.54% connections were released in Apr, 2018 to Sept, 2018. Out of total 31,335 number of (UHBVN- 11,620 and DHBVN- 19,735) pending applications, only 5752 applications (UHBVN- 835 and DHBVN- 4817) are outside 30 days

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due to system constraints, pending compliance from applicants etc. The DISCOMs have reported that no application for release of Tube well Connection applied under Tatkal Scheme is pending with the DISCOMs except seven applications where the pendency is either due to the Court cases or stay order issued by the Court.



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#### **CHAPTER 6**

# Wheeling Charges for the FY 2020-21

# 6.1 Wheeling Charges for the FY 2020-21

At the onset the Commission observes that segregated accounts including voltage wise assets and losses for the distribution and retail supply business are a pre –requisite for determination of wheeling charges and cross-subsidy surcharge. The petitioners have submitted segregated costs for the MYT period. The Commission observes that the network establishment and operation cost as distinct from retail supply business including the power purchase cost is about 8.05% of the net ARR of the Discoms based on the allocation parameters proposed by the Discoms. Accordingly, the same has been considered by the Commission for working out the wheeling tariff for the FY 2020-21 as under: -

COST ALLOCATION BETWEEN DISTRIBUTION (WIRES) & RETAIL SUPPLY (CONTENT) BUSINESS

Summary of ARR of UHBVN		Allocation proposed by the Discoms		ARR approved by the Commission		Allocated Cost		
	Particulars	Wheeling	Retail	UHBVNL	DHBVNL	Total	Wheeling	Retail
	Total Power Purchase			10,106.80	13,945.86	24,052.66	0.00	24052.66
1.1	Power Purchase Expense	0%	100%	8,747.54	12,120.16	20,867.70	0.00	20867.70
1.2	Interstate transmission Charge	0%	100%	830.40	1,216.80	2,047.20	0.00	2047.20
1.3	Intrastate transmission & SLDC charges	0%	100%	528.86	608.90	1,137.76	0.00	1137.76
2	Operations and Maintenance Expenses			1,307.28	1,596.27	2,903.55	1450.56	1452.99
2.1	Employee Expense	48%	52%	740.76	938.93	1,679.70	806.25	873.44
2.2	Administration & General Expense	42%	58%	115.60	121.22	236.82	99.47	137.36
2.3	Repair & Maintenance Exp.	70%	30%	146.93	176.11	323.04	226.13	96.91
2.4	Terminal Liability	48%	52%	303.99	360.00	663.99	318.72	345.28
3	Depreciation	82%	18%	325.49	325.23	650.72	533.59	117.13
4	Return on Equity capital	90%	10%	0.00	0.00	0.00	0.00	0.00
5	Other Expenses	29%	71%	0.00	0.00	0.00	0.00	0.00
6	Interest and finance charges			315.42	442.51	757.93	315.54	442.39
6.2	Interest on Working capital	10%	90%	98.44	159.30	257.74	25.77	231.96
6.3	Interest on CAPEX loans	90%	10%	136.71	181.25	317.96	286.16	31.80
6.4	Interest on Consumer Security Deposit	0%	100%	70.27	75.89	146.16	0.00	146.16
6.5	Guarantee Fees	10%	90%	10.00	26.08	36.08	3.61	32.47
7	Total Expenditure			12,054.99	16,309.87	28,364.86	2,299.70	26,065.16
8	Less: Non-Tariff Income	11%	89%	221.56	307.66	529.22	58.21	471.01
9	Net Aggregate Revenue Requirement			11,833.43	16,002.20	27,835.64	2,241.48	25,594.16
10	Allocated cost %						8.05%	91.95%

Based on the above allocation of Approved ARR between the retail supply business and the Distribution business, the wheeling charges are worked out as under:

HERC appoved Wheeling Charges for the FY 2020-21

riziko apporta rinosinig enalgos ioi ano i i zozo zi					
1 Network Expenses (per kWh)					
a.	a. Network establishment and operation cost [8.051% of the net ARR (Rs. 278356.4 Million)] of the distribution licensees for the FY 2020-21(Rs. Million)				
b.	Allowed gross volume of power purchase by the Discoms at State Periphery (MUs) excluding inter-state sales.	47207.03			

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C.	Expenses (Rs / kWh) (a/b)	0.47			
2. <b>C</b> c	2. Cost of losses in the system				
а	Approved Energy available for sale to Discoms (MU)	47207.03			
b	Distribution system losses (technical) %	10.61%			
С	Losses (MU) (2a X 2b))	5009.58			
d	Bulk supply power purchase rate for the Discoms (Rs. / kWh)	4.93			
е	Total cost of losses (2dx2c) Rs. million	24693			
f	Cost per unit of losses (Rs. /unit) (2e/1b)	0.52			
3. <b>W</b>	3. Wheeling Charges (Rs. / kWh) (1c+2f) rounded off 1.00				

The Commission observes that the embedded open access consumers of the Discom's drawing power at 66kV or above imposes cost which is being borne by the Discoms. Hence besides the intra state transmission loss as determined by the Commission for FY 2020-21 in the ARR/Tariff order of HVPNL, such open access consumers shall also be liable to pay the distribution system network cost as determined above i.e. Rs. 0.47 per Unit.

# 6.2 Cross-Subsidy Surcharge (CSS)

The MYT Regulations, 2012 (regulation 63) provides that the cross-subsidy surcharge shall be payable by all intra-State open access consumers except those persons who have established captive generating station and are availing open access for carrying the electricity to a destination for their own use. Cross-subsidy surcharge shall also be payable by such Open Access consumer who receives supply of electricity from a person other than the distribution licensee in whose area of supply he is located, irrespective of whether he avails such supply through transmission/distribution network of the licensee or not. The consumers located in the area of supply of a distribution licensee but availing Open Access exclusively on inter-State transmission system shall also pay the cross-subsidy surcharge as determined by the Commission.

Section 42 of the Electricity Act, 2003 provides that the surcharge and the cross-subsidies shall be progressively reduced. The Commission has worked out CSS in line with the formula provided in the National Tariff Policy, 2016. The National Tariff Policy dated 28.01.2016 provides as under: -

"SERCs may calculate the cost of supply of electricity by the distribution licensee to consumers of the applicable class as aggregate of (a) per unit weighted average cost of power purchase including meeting the Renewable Purchase Obligation; (b) transmission and distribution losses applicable to the relevant voltage level and commercial losses allowed by the SERC; (c) transmission, distribution and wheeling charges up to the relevant voltage level; and (d) per unit cost of carrying regulatory assets, if applicable".

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The above is subject to the proviso that the surcharge shall not exceed 20% of the tariff applicable to the category of the consumers seeking open access.

The Commission has considered the methodology prescribed by the National Tariff Policy dated 28.01.2016, while working out cross-subsidy surcharge in the present Order. The relevant provision of the NTP is reproduced below: -

"Surcharge formula:

$$S = T - [C/(1-L/100) + D+ R]$$

Where

S is the surcharge

T is the tariff payable by the relevant category of consumers, including reflecting the Renewable Purchase Obligation.

C is the per unit weighted average cost of power purchase by the Licensee, including meeting the Renewable Purchase Obligation.

D is the aggregate of transmission, distribution and wheeling charge applicable to the relevant voltage level.

L is the aggregate of transmission, distribution and commercial losses, expressed as a percentage applicable to the relevant voltage level.

R is the per unit cost of carrying regulatory assets (emphasis added).

Above formula may not work for all distribution licensees, particularly for those having power deficit (emphasis added), the State Regulatory Commissions, while keeping the overall objectives of the Electricity Act in view, may review and vary the same taking into consideration the different circumstances prevailing in the area of distribution licensee.

Provided that the <u>surcharge shall not exceed 20%</u> (emphasis added) of the tariff applicable to the category of the consumers seeking open access.

Provided further that the Appropriate Commission, in consultation with the Appropriate Government, shall **exempt levy of cross subsidy charge on the Railways**, as defined in Indian Railways Act, 1989 being a deemed licensee, on electricity purchased for its own consumption.

8.5.2 No surcharge would be required to be paid in terms of sub-section (2) of Section 42 of the Act on the electricity being sold by the generating companies with consent of the competent government under Section 43(A)(1)(c) of the Electricity Act, 1948 (now repealed) and on the electricity being supplied by the distribution licensee on the authorisation by the

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State Government under Section 27 of the Indian Electricity Act, 1910 (now repealed), till the current validity of such consent or authorisation.

8.5.3 The surcharge may be collected either by the distribution licensee, the transmission licensee, the STU or the CTU, depending on whose facilities are used by the consumer for availing electricity supplies. In all cases the amounts collected from a particular consumer should be given to the distribution licensee in whose area the consumer is located. In case of two licensees supplying in the same area, the licensee from whom the consumer was availing supply shall be paid the amounts collected".

The Commission has carefully examined the formula for working out cross-subsidy surcharge and observes as under: -

The voltage wise technical losses filed by the Discoms and that estimated by the Commission for working out voltage wise CoS is as under: -

Voltage level losses submitted by the Discoms

Totage level lesses submitted by the Discomis			
Voltage Levels	UHBVNL (%)	DHBVNL (%)	
33 kV line losses	0.42	0.42	
33 kV Transformation Losses	0.27	0.19	
11 kV line losses	5.35	6.04	
11 kV Transformation Losses	0.98	0.97	
LT Line Losses	5.23	4.93	
Total Losses upto LT Level	11.80	12.41	

The Commission, for the purpose of estimating voltage wise CoS has considered the voltage wise losses as estimated by the Discoms.

Based on the voltage-wise loss calculations based on the data submitted by the Discoms, it is possible to work out the total losses up to 11 kV level and overall losses at LT levels. However, working out losses at different HT voltage levels i.e. 66 kV, 132 kV, 220 kV etc. is not possible till such time similar data is made available at these voltages by the Utilities. Hence, for calculating voltage wise losses, the Commission has broadly considered only two categories i.e. HT (11 kV level and above) and LT voltage levels. In line with the National Tariff Policy, the Commission has calculated the voltage wise CoS and Cross Subsidy Surcharge. The difference between technical losses so determined and actual total distribution system losses are considered to be on account of reasons other than technical losses and are therefore taken as commercial losses. The commercial losses so determined have been apportioned between HT and LT voltage levels in proportion to annual gross energy sales at these voltage levels. The annual gross energy sales at the given voltage levels has been taken as the sum of energy consumption of all consumer categories

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connected at that voltage plus the technical distribution losses corresponding to that voltage level as worked out in the voltage wise loss calculations as per the details provided in the table below: -

Calculation of Voltage wise losses for the FY 2020-21

HT sales		Calculation of Voltage Wise 103363 10	20		
15			UHBVNL	DHBVNL	Total
1       Total Sales       15587.59       22886.05       38473.64         2       Losses %       6.04       6.65	1a	HT sales	4682.29	6175.49	10857.78
2       Losses %       6.04       6.65         2b       LT       11.80       12.41         3       Loss units       300.99       439.93       740.92         3b       LT       1458.99       2367.60       3826.59         4       Sales grossed up by Technical losses (1+3)       4983.28       6615.42       11598.70         4b       LT       4983.28       6615.42       11598.70         5b       LT       12364.29       19078.16       31442.45         5       Combined Technical losses       5       10678.16       3142.45         5b       LT       12.17%       6.39%         5b       LT       12.17%       10.61%       6         6       Total Distribution Losses       4201.15       4532.24       8733.39         7       Total Commercial losses (6-3)       2441.17       1724.72       4165.89         8       Commercial losses allocated to HT and LT based on grossed up units (4)       701.25       444.07       1145.32         8b       LT       1739.92       1280.65       3020.57         9       Total Voltage level distribution losses (3+8)       701.25       444.07       1145.32         10       Comb	1b	LT sales	10905.30	16710.56	27615.86
2a       HT       6.04       6.65         2b       LT       11.80       12.41         3       Loss units       300.99       439.93       740.92         3b       LT       1458.99       2367.60       3826.59         4       Sales grossed up by Technical losses (1+3)       4983.28       6615.42       11598.70         4b       LT       12364.29       19078.16       31442.45         5       Combined Technical losses       5       5       6.39%         5b       LT       12.17%       12.17%         5       Total       10.61%       10.61%         6       Total Distribution Losses       4201.15       4532.24       8733.39         7       Total Commercial losses (6-3)       2441.17       1724.72       4165.89         8       Commercial losses allocated to HT and LT based on grossed up units (4)       1739.92       1280.65       3020.57         9       Total Voltage level distribution losses (3+8)       9       1280.65       3020.57         9       Total Voltage level distribution losses at Distribution level       1002.24       883.99       1886.24         10       Combined Technical and Commercial losses at Distribution level       10.80%       10	1	Total Sales	15587.59	22886.05	38473.64
2b	2	Losses %			
3	2a	HT	6.04	6.65	
3a         HT         300.99         439.93         740.92           3b         LT         1458.99         2367.60         3826.59           4         Sales grossed up by Technical losses (1+3)	2b	LT	11.80	12.41	
3b         LT         1458.99         2367.60         3826.59           4         Sales grossed up by Technical losses (1+3)         4983.28         6615.42         11598.70           4b         LT         12364.29         19078.16         31442.45           5         Combined Technical losses         6.39%           5a         HT         6.39%           5b         LT         12.17%           5         Total         10.61%           6         Total Distribution Losses         4201.15         4532.24         8733.39           7         Total Commercial losses (6-3)         2441.17         1724.72         4165.89           8         Commercial losses allocated to HT and LT based on grossed up units (4)         701.25         444.07         1145.32           8a         HT         701.25         444.07         1145.32           8b         LT         1739.92         1280.65         3020.57           9         Total Voltage level distribution losses (3+8)         705.24         883.99         1886.24           9b         LT         3198.91         3648.25         6847.15           10         Combined Technical and Commercial losses at Distribution level         19.87%	3	Loss units			
4       Sales grossed up by Technical losses (1+3)       4983.28       6615.42       11598.70         4b       LT       12364.29       19078.16       31442.45         5       Combined Technical losses	3a	HT	300.99	439.93	740.92
4a       HT       4983.28       6615.42       11598.70         4b       LT       12364.29       19078.16       31442.45         5       Combined Technical losses       6.39%         5b       LT       6.39%         5       Total       12.17%         6       Total Distribution Losses       4201.15       4532.24       8733.39         7       Total Commercial losses (6-3)       2441.17       1724.72       4165.89         8       Commercial losses allocated to HT and LT based on grossed up units (4)       701.25       444.07       1145.32         8b       LT       1739.92       1280.65       3020.57         9       Total Voltage level distribution losses (3+8)       1002.24       883.99       1886.24         9b       LT       3198.91       3648.25       6847.15         10       Combined Technical and Commercial losses at Distribution level       11         10a       HT       14.80%         10       Total       19.87%         10       Total       19.87%         10       Total       19.87%         10       Total       19.87%         11       Units sent out after accounting for Technical and Commercial Lo	3b	LT	1458.99	2367.60	3826.59
4b       LT       12364.29       19078.16       31442.45         5       Combined Technical losses       6.39%         5a       HT       6.39%         5b       LT       12.17%         5       Total       10.61%         6       Total Distribution Losses       4201.15       4532.24       8733.39         7       Total Commercial losses (6-3)       2441.17       1724.72       4165.89         8       Commercial losses allocated to HT and LT based on grossed up units (4)       701.25       444.07       1145.32         8a       HT       701.25       444.07       1145.32         8b       LT       1739.92       1280.65       3020.57         9       Total Voltage level distribution losses (3+8)       7002.24       883.99       1886.24         9b       LT       3198.91       3648.25       6847.15         10       Combined Technical and Commercial losses at Distribution level       10       14.80%         10b       LT       19.87%         10       Total       18.50%         11       Units sent out after accounting for Technical and Commercial Losses       5684.53       7059.48       12744.02         11b       LT <t< td=""><td>4</td><td>Sales grossed up by Technical losses (1+3)</td><td></td><td></td><td></td></t<>	4	Sales grossed up by Technical losses (1+3)			
5       Combined Technical losses       6.39%         5a       HT       6.39%         5b       LT       12.17%         5       Total       10.61%         6       Total Distribution Losses       4201.15       4532.24       8733.39         7       Total Commercial losses (6-3)       2441.17       1724.72       4165.89         8       Commercial losses allocated to HT and LT based on grossed up units (4)       701.25       444.07       1145.32         8b       LT       1739.92       1280.65       3020.57         9       Total Voltage level distribution losses (3+8)       9       1886.24         9b       LT       1002.24       883.99       1886.24         9b       LT       3198.91       3648.25       6847.15         10       Combined Technical and Commercial losses at Distribution level       10       14.80%         10b       LT       19.87%         10       Total       18.50%         11       Units sent out after accounting for Technical and Commercial Losses       12744.02         11b       LT       14104.21       20358.81       34463.01	4a	HT	4983.28	6615.42	11598.70
5a       HT       6.39%         5b       LT       12.17%         5       Total       10.61%         6       Total Distribution Losses       4201.15       4532.24       8733.39         7       Total Commercial losses (6-3)       2441.17       1724.72       4165.89         8       Commercial losses allocated to HT and LT based on grossed up units (4)       701.25       444.07       1145.32         8a       HT       701.25       444.07       1145.32         8b       LT       1739.92       1280.65       3020.57         9       Total Voltage level distribution losses (3+8)       7059.48       1886.24         9a       HT       1002.24       883.99       1886.24         9b       LT       3198.91       3648.25       6847.15         10       Combined Technical and Commercial losses at Distribution level       7059.48       14.80%         10b       LT       19.87%       10       10.87%       10.87%         10       Total       18.50%       18.50%       12.744.02       11.85%         11       Units sent out after accounting for Technical and Commercial Losses       7059.48       12.744.02       12.744.02       14.104.21       20358.81	4b	LT	12364.29	19078.16	31442.45
5b         LT         12.17%           5         Total         10.61%           6         Total Distribution Losses         4201.15         4532.24         8733.39           7         Total Commercial losses (6-3)         2441.17         1724.72         4165.89           8         Commercial losses allocated to HT and LT based on grossed up units (4)         701.25         444.07         1145.32           8a         HT         1739.92         1280.65         3020.57           9         Total Voltage level distribution losses (3+8)         9         1886.24           9a         HT         1002.24         883.99         1886.24           9b         LT         3198.91         3648.25         6847.15           10         Combined Technical and Commercial losses at Distribution level         14.80%           10b         LT         19.87%           10         Total         18.50%           11         Units sent out after accounting for Technical and Commercial Losses         5684.53         7059.48         12744.02           11b         LT         14104.21         20358.81         34463.01	5	Combined Technical losses			
5       Total       10.61%         6       Total Distribution Losses       4201.15       4532.24       8733.39         7       Total Commercial losses (6-3)       2441.17       1724.72       4165.89         8       Commercial losses allocated to HT and LT based on grossed up units (4)       701.25       444.07       1145.32         8a       HT       701.25       444.07       1145.32         8b       LT       1739.92       1280.65       3020.57         9       Total Voltage level distribution losses (3+8)       1002.24       883.99       1886.24         9b       LT       3198.91       3648.25       6847.15         10       Combined Technical and Commercial losses at Distribution level       14.80%         10b       LT       19.87%         10       Total       18.50%         11       Units sent out after accounting for Technical and Commercial Losses       5684.53       7059.48       12744.02         11b       LT       14104.21       20358.81       34463.01	5a	HT			6.39%
6       Total Distribution Losses       4201.15       4532.24       8733.39         7       Total Commercial losses (6-3)       2441.17       1724.72       4165.89         8       Commercial losses allocated to HT and LT based on grossed up units (4)       701.25       444.07       1145.32         8a       HT       1739.92       1280.65       3020.57         9       Total Voltage level distribution losses (3+8)       1002.24       883.99       1886.24         9b       LT       3198.91       3648.25       6847.15         10       Combined Technical and Commercial losses at Distribution level       14.80%         10b       LT       19.87%         10       Total       18.50%         11       Units sent out after accounting for Technical and Commercial Losses       5684.53       7059.48       12744.02         11b       LT       14104.21       20358.81       34463.01	5b	LT			12.17%
7       Total Commercial losses (6-3)       2441.17       1724.72       4165.89         8       Commercial losses allocated to HT and LT based on grossed up units (4)       701.25       444.07       1145.32         8a       HT       701.25       444.07       1145.32         8b       LT       1739.92       1280.65       3020.57         9       Total Voltage level distribution losses (3+8)       9       1886.24         9b       LT       3198.91       3648.25       6847.15         10       Combined Technical and Commercial losses at Distribution level       104.80%         10b       LT       19.87%         10       Total       18.50%         11       Units sent out after accounting for Technical and Commercial Losses       5684.53       7059.48       12744.02         11a       HT       14104.21       20358.81       34463.01	5	Total			10.61%
8       Commercial losses allocated to HT and LT based on grossed up units (4)       701.25       444.07       1145.32         8a       HT       701.25       444.07       1145.32         8b       LT       1739.92       1280.65       3020.57         9       Total Voltage level distribution losses (3+8)       9       1886.24         9b       LT       3198.91       3648.25       6847.15         10       Combined Technical and Commercial losses at Distribution level       14.80%         10a       HT       14.80%         10b       LT       19.87%         10       Total       18.50%         11       Units sent out after accounting for Technical and Commercial Losses       5684.53       7059.48       12744.02         11a       HT       5684.53       7059.48       12744.02         11b       LT       14104.21       20358.81       34463.01	6	Total Distribution Losses	4201.15	4532.24	8733.39
8a       HT       701.25       444.07       1145.32         8b       LT       1739.92       1280.65       3020.57         9       Total Voltage level distribution losses (3+8)	7	Total Commercial losses (6-3)	2441.17	1724.72	4165.89
8a       HT       701.25       444.07       1145.32         8b       LT       1739.92       1280.65       3020.57         9       Total Voltage level distribution losses (3+8)	8	Commercial losses allocated to HT and LT based on grossed up			
8b       LT       1739.92       1280.65       3020.57         9       Total Voltage level distribution losses (3+8)       1002.24       883.99       1886.24         9b       LT       3198.91       3648.25       6847.15         10       Combined Technical and Commercial losses at Distribution level       14.80%         10b       LT       19.87%         10       Total       18.50%         11       Units sent out after accounting for Technical and Commercial Losses       5684.53       7059.48       12744.02         11b       LT       14104.21       20358.81       34463.01		units (4)			
9       Total Voltage level distribution losses (3+8)       1002.24       883.99       1886.24         9b       LT       3198.91       3648.25       6847.15         10       Combined Technical and Commercial losses at Distribution level       104.80%         10b       LT       19.87%         10       Total       18.50%         11       Units sent out after accounting for Technical and Commercial Losses       5684.53       7059.48       12744.02         11b       LT       14104.21       20358.81       34463.01	8a	HT	701.25	444.07	1145.32
9a         HT         1002.24         883.99         1886.24           9b         LT         3198.91         3648.25         6847.15           10         Combined Technical and Commercial losses at Distribution level         10.00	8b	LT	1739.92	1280.65	3020.57
9b         LT         3198.91         3648.25         6847.15           10         Combined Technical and Commercial losses at Distribution level         10         14.80%           10a         HT         14.80%           10b         LT         19.87%           10         Total         18.50%           11         Units sent out after accounting for Technical and Commercial Losses         5684.53         7059.48         12744.02           11b         LT         14104.21         20358.81         34463.01	9	Total Voltage level distribution losses (3+8)			
10         Combined Technical and Commercial losses at Distribution level         10a         HT         14.80%           10b         LT         19.87%           10         Total         18.50%           11         Units sent out after accounting for Technical and Commercial Losses         5684.53         7059.48         12744.02           11b         LT         14104.21         20358.81         34463.01	9a	HT	1002.24	883.99	1886.24
10a       HT       14.80%         10b       LT       19.87%         10       Total       18.50%         11       Units sent out after accounting for Technical and Commercial Losses       5684.53       7059.48       12744.02         11b       LT       14104.21       20358.81       34463.01	9b	LT	3198.91	3648.25	6847.15
10b       LT       19.87%         10       Total       18.50%         11       Units sent out after accounting for Technical and Commercial Losses       5684.53       7059.48       12744.02         11b       LT       14104.21       20358.81       34463.01	10	Combined Technical and Commercial losses at Distribution level			
10       Total       18.50%         11       Units sent out after accounting for Technical and Commercial Losses       5684.53       7059.48       12744.02         11b       LT       14104.21       20358.81       34463.01	10a	HT			14.80%
11       Units sent out after accounting for Technical and Commercial Losses       5684.53       7059.48       12744.02         11b       LT       14104.21       20358.81       34463.01	10b	LT			19.87%
Losses       5684.53       7059.48       12744.02         11b       LT       14104.21       20358.81       34463.01	10	Total			18.50%
11a       HT       5684.53       7059.48       12744.02         11b       LT       14104.21       20358.81       34463.01	11	Units sent out after accounting for Technical and Commercial			
11b LT 14104.21 20358.81 34463.01		Losses			
	11a	HT	5684.53	7059.48	12744.02
11 Total 19788.74 27418.29 47207.03	11b	LT	14104.21	20358.81	34463.01
	11	Total	19788.74	27418.29	47207.03

Accordingly, based on the voltage level distribution losses as worked out above, the calculations for CSS as per National Tariff Policy formula for the FY 2020-21 is as under: -

Cost of Service for FY 2020-21 as per National Tariff Policy methodology

Elements of cost of service	Rs /kWh
Per Unit Weighted average cost of power per unit at State/ Discom periphery	4.85
Aggregate of transmission, distribution and wheeling charges applicable to the relevant voltage level	
Intrastate Transmission cost at consumers end (Paise/kWh) (Transmission and SLDC cost/ sales)	0.30
Distribution (net of power purchase cost) and Wheeling cost at consumers end (Paise/kWh)	0.98

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Aggregate of transmission, distribution and commercial losses applicable to the relevant voltage level	
HT	14.80%
LT	19.87%
Cost of Service	
C/(1-L/100) +D+R	
HT	6.97
LT	7.33
Average	7.23

The above loss allocation is reflected in the energy allocators at HT and LT voltage levels i.e. lower cost attributed to the HT consumers and higher cost attributed to the LT Consumers. Thus, the Cost of Service in the case of HT Consumers is comparatively lower than that of the consumers receiving electricity supply at LT voltage. The CSS has been worked out as the difference between the average consumer category-wise average revenue realisation per unit and the voltage-wise CoS of HT or LT as the case may be. The Cross-subsidy surcharge for the FY 2020-21 as per the NTP formula shall be as per the table that follows: -

Cross-subsidy surcharge for FY 2020-21 (Rs/kWh)

	Groce cascial cardiar go for the 2020 21 (North)							
		CoS (Rs./kWh)	Tariff (FC + EC)	Cross Subsidy Surcharge	Limited to			
			(Rs./kWh)	(Rs./kWh)	20% of Tariff			
		1	2	3= 2-1				
1	HT industry	6.97	7.59	0.62	0.62			
2	Bulk Supply (other	6.97	7.38	0.41				
	than DS)				0.41			
3	Railways (Traction)	6.97	7.24	0.27	0.27			
4	LT Industry	7.33	7.63	0.30	0.30			
5	NDS (HT)	6.97	7.71	0.74	0.74			

The applicable CSS worked out above is within 20% (+/-) limit in accordance with the National Tariff Policy.

ADDITIONAL SURCHARGE: The Commission has taken note of the proposal of the Discoms on quantification and levy of additional surcharge for the 2<sup>nd</sup> Half of the FY 2019-20 in line with Regulation 22 of the HERC (Terms and Conditions for Grant of Connectivity & Open Access for Intrastate Transmission and Distribution System) Regulations 2012 as may be amended from time to time. The Discoms have accordingly proposed to levy an additional surcharge of Rs. 1.15 / kWh from the Open Access Consumers. Given the voluminous data and objections filed by the stakeholders The Commission shall take up the issue separately. Till the time Discoms may continue to levy Additional Surcharge in vogue i.e. @ 1.15 / Unit.

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#### **CHAPTER 7**

## RENEWABLE PURCHASE OBLIGATION (RPO)

Section 86 (1) (e) of the Electricity Act, 2003 mandates the Commission to promote cogeneration and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify, a percentage of the total consumption of electricity in the area of distribution licensee, for mandatory purchase of electricity from such sources.

In accordance with the Regulation 64 of HERC (Terms and Conditions for determination of Tariff for Renewable Energy Sources, Renewable Purchase Obligation and Renewable energy Certificate) Regulations, 2010 the RPO for FY 2011-12 to FY 2017-18 as approved by the Commission were as under: -

Financial year	Energy Consumpti on (MU)	%age of Non Solar RPO	Renewable energy (other than Solar) required to be purchased as per overall RPO (MU)	%age of solar RPO (as a %age of overall RPO)	Energy required to be purchased as per Solar RPO (MU)	Total renewable energy required to be purchased (MU)
2011-12	36075	1.50%	541	0.31%	1.69	543
2012-13	40000	2.00%	800	0.05%*	20	820
2013-14	41086	2.90%	1191.49	0.10%*	41.09	1232.58
2014-15	45028	3.00%	1350.84	0.25%*	112.57	1463.41
2015-16	41202	2.75%	1133.05	0.75%*	309.01	1442.06
2016-17	46827	2.75%	1287.74	1.00%*	468.27	1756.01
2017-18	39209*	2.75%	1078.25	1.25%	490.11	1568.37

<sup>\*</sup> Solar power purchase obligation is 0.05%, 0.1%, 0.25%, 0.75% & 1.00% of total energy consumption for the financial years 2012-13, 2013-14, 2014-15, 2015-16 & 2016-17, respectively.

\*\* Energy available for sale by DISCOMs excluding energy purchased from RE sources and Hydro.

The Commission has notified Haryana Electricity Regulatory Commission (Terms and Conditions for determination of Tariff from Renewable Energy Sources, Renewable Purchase Obligation and Renewable Energy Certificate) Regulations, 2017, on 24.07.2018. Regulation 54 of ibid Regulations, has revised the RPO obligation. Accordingly, RPO obligation for the FY 2017-18 (revised) & FY 2018-19, as approved by the Commission in its Order dated 15.11.2018, is as under: -

Financial	Energy	%age	of	Non	Non-	Solar RPO as	Solar	Total renewable
year	Consumption	solar	RPO	of	solar	%age of	RPO	energy required
	(MU)	energy	energy		RPO	energy sales	(MU)	to be purchased
		Consun	nptior	1	(MU)			(MU)

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2017-18	39209.18	2.75%	1078.25	2.50%	980.23	2058.48
2018-19	38231.92	3.00%	1146.96	4.00%	1529.28	2676.23
2019-20	39303.18	3.00%	1179.10	5.50%	2161.67	3340.77

As per data provided by the State Nodal Agency vide memo 1762 dated 16.05.2019, the shortfall in meeting the RPO for the aforesaid years has been worked out as under:-

				(in	MU)
Type of	RE	RPO backlog till	Shortfall FY 2017-18	Shortfall (excess)	<b>Total Shortfall</b>
source		FY 2016-17		FY 2018-19	
Solar		377	271	1202	1850
Non-Solar		405	582	-76	911
Total		782	853	1126	2761

Further, the State Nodal Agency vide its Memo no. 1259 dated 19.02.2020 has intimated the RPO compliance status of DISCOMs till Dec, 2019, wherein shortfall of 1532 Mus & 333 MUs has been reported, during the three quarters of FY 2019-20, for Solar RPO and Nonsolar RPO, respectively.

The shortfall in meeting the RPO obligations of the DISCOMs is not reducing. Accordingly, the Commission in its Order dated 22.03.2018 in case nos. HERC/PRO-26 of 2015 & HERC/PRO-28 of 2015 after examining the compliance report filed by the Nodal Agency (HAREDA) and observed that "there have been instances when the mandated reports have not been filed with the Commission in compliance of the RPO regulations. The Commission directed HAREDA and the obligated entities to strictly comply with the RPO through purchase of RE power and / or REC in case of power surplus scenario and also the filing requirements. Further, HAREDA was also directed to ensure that its website is kept uptodate with the information filed by the obligated entities. The Commission further directed that HPPC and other obligated entities shall assess the shortfall in meeting RPO for the FY 2016-17 and take suitable action to meet at least 50% of the shortfall so determined by purchase of REC's. DISCOMs are directed to file the compliance report of the same within 45 days from the date of issue of this Order."

The same decision of the Commission was reiterated in the Order of the Commission dated 07.03.2019, to ensure its compliance.

Further, DISCOMs had filed a Review Petition (HERC/RA-18 of 2019) against the Order of the Commission dated 07.03.2019, praying to either allow to procure the energy from solar generating sources at the rate available in the market or to allow to carry forward the shortfall of Solar RPO in next financial year. The said Review Petition was disposed of by the Commission, vide its Order dated 22.10.2019, deciding as under: -

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"The Commission observes with concern that even after the lapse of one and half year, the DISCOMs have not been able to meet the shortfall of RPO obligations for the FY 2016-17. Further, as per the RPO compliance report received from HAREDA, vide letter no. 1762 dated 16.05.2019, there is shortfall in meeting RPO obligations by HPPC/DISCOMs till 31.03.2019 (Solar 1850.44 MUs and Non Solar 910.8 MUs, which includes backlog of RPO obligations in 648.44 MUs and Non Solar 986.80 MUs).

In view of the above discussions, the Commission is not inclined to reconsider its decision and HPPC/DISCOMs are directed to comply with the directions of the Commission to take suitable action to meet at least 50% of the shortfall by purchase of REC's. The compliance report in this regard may be submitted within one month from the date of issue of this Order."

The Commission, issued Show Cause Notice to DISCOMs under section 142 and 146 of the Electricity Act, 2003, vide letter no. 2116-17/HERC/Tariff dated 02.03.2020 and directed them to explain within 15 days their position for continuous non-compliance in meeting the current year RPO as well as back log as per Commission's various Orders.

In reply to the Show Cause Notice dated 02.03.2020, HPPC on behalf of both the DISCOMs filed vide memo no. Ch-56/CE/HPPC/SE/C&R-I/RE Power dated 19.03.2020, has requested to drop the show cause notice, submitting as under:-

1. Haryana Electricity Regulatory Commission introduced RPOs in the State on 3<sup>rd</sup> February, 2011 vide HERC (Terms and Conditions for determination of Tariff from Renewable Regulations, 2010. The Commission subsequently revised the RPO targets vide amendment to the said Regulations on 25.11.2011 and again on 15.07.2014 fixing the RPOs at 2.5% for non-solar and 3% for solar power. The RPO targets have been revised once again vide RE Regulations, 2017 notified 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:-

FY	RPO (%) as per HER	C RE Regulations, 2010	RPO (%) as per HERC RE 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	

Thus, with effect from 23.07.2019, RPOs have been doubled from 5.5% to 11% with Solar RPOs increasing nearly three fold from 3% to 8%.

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As on date, the existing solar power capacity available with Haryana DISCOMs through long term agreements is 125.8 MW and 231 MW through solar rooftop. Further, 266 MW is available from non-solar sources.

During the last three years, the HPPC has made the following tie-ups for procurement of RE Power in order to fulfil the mandated RPOs:

#### **NON SOLAR**

	HOR GOL/AIX								
Sr.	Name of the firm and /or scheme	Contracted	Dated of Singing	Scheduled Commissioning of					
No.		capacity (MW)	of PPA	Project					
Wind	Power Projects								
1	Solar Energy Corporation of India (SECI)	150	13.12.2017	Out of 250 MW, 100 MW has started flowing and balance 150 MW is expected by March, 2020					
2	Solar Energy Corporation of India (SECI)	350	17.05.2018	March, 2021					
3	Solar Energy Corporation of India (SECI)	590	21.01.2019	Feb,2021					
4	Solar Energy Corporation of Inia (SECI) (Wind + Solar)	110	11.07.2019	April, 2021					
Wast	e to Energy Projects								
4	JBM Environment Management Pvt. Ltd.	6.77	21.09.2018	20.09.2020					
5	Ecogreen Energy Gurgaon Faridabad Pvt. Ltd.	25	Yet to be singed	2121-22					
Biom	ass Based Projects								
6	Small Biomass Projects (10 Nos)	66.2	2018 & 2019	2020-21 & 2021-22					
	Total	1297.97							

## SOLAR

		<u>30L/</u>	<u> </u>	
Sr.	Name of the Firm	Contracted	Date of signing of PPA	Scheduled Commissioning of
No		capacity (MW)		Project
1	Solar Energy Corporation of India (SECI)	100	27.11.2018	25.10.2020
2	Solar Energy Corporation of India (SECI)	400	28.05.2019	08.11.2020
3	Solar Energy Corporation of India (SECI) (Wind + Solar)	350	11.07.2019	April, 2021
4	NIT-77 (300 MW on long term basis)	240	Under process	2021-22
5	NTPC (Solar)	700	Consent given and allocation is awaited	2021-22
6	HPGCL (Solar)	93	Under process	2020-21
7	PM Kusum	25	Under process	2021-22
8	Solar Energy Corporation of India (SECI)	250	19.03.2020	2021-22
	Total	2139		

In addition to above, 100 MW per year is expected to be added every year through solar rooftop.

With the PPAs/ tie-ups as tabulated above, HPPC shall meet its yearly RPO targets by FY 2021-22 in respect of Non-Solar and Solar respectively in spite of the sharp increase in solar RPOs in July, 2018. The actual achievement of non-solar and solar RPOs shall be to the tune of 12% and 11% each by FY 2021-22. The quantum of solar and non-solar energy

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required to meet the RPOs vis-à-vis expected to achieve as per the tie-ups made by HPPC is tabulated as under:-

Year	Estimated energy	RPO ta	rgets in Mus	Mus	envisaged	% age RPC	s achieved/
	consumption by the	as per l	<u> </u>		from tie-ups		red .
	Discoms eligible for RPOs	Solar	Non solar	Solar	Non solar	Solar	Non solar
2018-19	38232	1529	1147	327	1229	0.83	3.21
2019-20	39538	2175	1186	546	986	1.38	2.49
2020-21	40997	2870	1230	1321	1631	3.22	3.98
2021-22	42510	3401	1275	4934	5220	11.61	12.28

While sufficient PPAs and tie-ups have been arranged to meet RPOs in the long run, deficit in the short run was expected, given the gestation period of various projects. In order to meet the shortfall in the short run, HPPC has taken several steps as detailed below:

## Non-solar

- ❖ HPPC during the FY 2016-17 purchased 1385 MUs of Non-solar RE Power through short term contract from HPSEBL by participating in their tender @ 4.70/- per kWh at HP periphery.
- ❖ HPPC procured 584.6 Mus of wind power @ Rs.4.77/- per kWh on short term basis during July- October, 2018 to meet the RPOs for FY 2018-19.
- ❖ Further to meet the shortfall in non solar RPOs for FY 2016-17 and 2017-18, HPPC floated NIT No. 59 on 11.11.2016, NIT-60 on 13.12.2016, NIT-63 on 07.06.2017 and NIT-65 on 06.11.2017 for procurement of Non-solar RE Power on short term basis. However, these NITs could not mature on account of poor response or the tariff discovered not adopted by the Commission being on the higher side.
- NIT-76 was issued on 25.01.2019 to meet the non solar RPOs of FY 2019-20 wherein bids for meagre quantum of 23.5 MW were received against the tendered quantum of 120 MW. Further, the Commission, did not approve the rate discovered (i.e. Rs. 5.40/- per unit) being on higher side.
- ❖ Tender (NIT-78) on 08.03.2019 was again issued for the balance quantum of NIT-76 i.e. 97 MW, however, there was no response.

## **SOLAR**

- NIT-72 was floated on 19.03.2018 for procurement of 1000 MUs Solar power but it could not materialize, the tariff discovered @ Rs. 5.18/KWh being on the high side.
- NIT-73 dated 30.07.2018 for procurement of 2031 MUs Solar Power, also could not materialize, as the tariff discovered @ Rs.5.18/KWh was on the higher side.

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- NIT-75 dated 03.12.2018 for procurement of 1700 MUs Solar Power, did not materialize, as the tariff discovered i.e. Rs. 5.95/- per kWh was on the higher side.
- The HPPC again floated NIT-79 on 26.07.2019 for procurement of 1320 MUs solar power on short term basis but no bidder turned up on the scheduled date and time.
- NIT No. 81 dated 20.09.2019 was floated to purchase 1320 MUs from 6.00 Hrs to 18.00 Hrs from 01.11.2019 to 31.10.2020. M/s PTC has offered 300 MW @ Rs.5.10/Kwh. SCPP in its 55<sup>th</sup> meeting held on 25.11.2019, followed by 13.03.2020 has approved the purchase of this power. The petition to seek source approval and adoption of tariff from the Commission has been filed.

The Commission in its order on true-up for the FY 2017-18, annual (mid-year) performance review for the FY 2018-19, aggregate revenue requirement of UHBVNL & DHBVNL and distribution & retail supply tariff for the FY 2019-20 order dated 07.03.2019 had allowed to carry forward the RPO backlog of previous years stating that:

"The Commission further directed that HPPC and other obligated entities shall assess the shortfall in meeting RPO for the FY 2016-17 and take suitable action to meet at least 50% of the shortfall so determined by purchase of REC's."

As the power sector functions in a highly structured regulatory framework, the Discoms are required to obtain approvals at every step, which often leads to delays. Some of the challenges being faced by HPPC include non-approvals, delayed approvals, frequent policy changed, uncertainties attributable to other departments/agencies, etc.

- ❖ Non-approval of 13 nos. solar PPAs with cumulative capacity of 165 MW by the Hon'ble Commission in the year 2015-16.
- ❖ Delay of one and a half year in grant of approval for procurement of 300 MW solar power on long term basis through competitive bidding for which petition was filed in the Commission on 14.07.2017 and approval was received on 18.11.2018. In the meantime, MoP/GoI amended the standard bidding guidelines and another three months were taken in obtaining Hon'ble Commission's approval for revised terms and conditions.
- ❖ Procurement of approx.1385 MUs of Hydro Power procured on short term basis from Himachal Pradesh State Electricity Board (HPSEB) in FY 2016-17 were disallowed by the Hon'ble Commission to the extent of Rs. 443.06 crores. Against the appeal preferred by HPPC before the APTEL, Hon'ble

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APTEL vide order dated 08.03.2019 remanded back the matter to the Hon'ble Commission for reconsidering the matter afresh and pass appropriate orders. The Hon'ble Commission, however, vide its order dated 08.05.2019 again disallowed the same. The Hon'ble Commission's order dated 08.05.2019 has been challenged by the HPPC in the APTEL.

- ❖ RPOs were introduced in the State in February, 2011 vide RE Regulations, 2010. The targets, thereafter, have been revised three times in a short span of eight years, making it difficult to prepare any meaningful long term plan.
- ❖ State Solar Policy was framed in the year 2014 as notified on 04.09.2014. subsequently, it was replaced by Haryana Solar Power Policy, 2016 has further been amended on 27.08.2018 and again on 13.05.2019.
- There are uncertainties associated with other departments/agencies as well. For example, HAREDA has been driving the Grid-connected Roof Top solar Power generation scheme with an ambitions target of 1600 MW by FY 2021-22. However, about 231 MW has come up so far. Similarly, plans to solarise agricultural pump sets are on the drawing board since 2018 but no concrete shape has emerged. Furthermore, various other departments/agencies like the Urban Local Bodies, Sugar mills, education, prisons, etc. have plans to generate RE Power but HPPC has no idea as to the total quantum of solar power likely to be generated from these sources.
- ❖ 700 MW solar power offered by NTPC could not be tied up on account of delay in grant of consent due to procedural delay.

In spite of various challenges mentioned above, Haryana Discoms/HPPC has been continuously endeavouring to fulfil the mandated RPOs not only in the long run but even to clear the backlog by way of short term purchase. It is pertinent to mention that SCPP in its meeting held on 13.03.2020 has also decided that RECs equivalent to 100 MUs be purchased at a ceiling rate of Rs. 1.75 /KWh in a phased manner and 400 Mw solar power at Haryana Periphery (with maximum energy up to 149 MUs in a month and 1752 MUs in a year) on short term basis from 01.05.2020 to 30.04.2121 may be purchased to clear the backlog of RPOs.

Subsequently, UHBVNL filed supplementary ARR Petition, vide memo no. Ch-36/RA-F-25/Vol-76 dated 05.05.2020, on behalf of both the DISCOMs, considering the impact of lockdown due to COVID-19 pandemic, submitting that outbreak of corona pandemic has

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further added to the procedural delays in commissioning of Renewable Energy Projects, 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 DISCOMs have requested to consider the followings:

- (a) 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.
- (b) 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.
- (c) 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.
- (d) 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.
- (e) Solar project of 93 MW envisaged by HPGCL and 25 MW under PM KUSUM will also face delays due of current situation.
- (f) Solar Project of 240 MW (M/s Avaada shortlisted under NIT-77 finalized by HPPC) may also suffer delays due to current situation.

UHBVNL has further submitted that prior to corona virus outbreak, SCPP in its 55th meeting held on 25.11.2019 & 13.02.2020 had approved purchase of solar power on short term to the tune of 1320 MUs through PTC @ Rs. 5.10/- discovered through 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.

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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.

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.

The current unprecedented situation warrants taking all possible measures required for financial viability of Discoms and insulating consumers of Haryana from tariff shock. Accordingly, UHBVNL has 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. The Commission has considered the reply filed by the DISCOMs in response to the notice issued under section 142 and 146 of the Electricity Act, 2003, justifying the reason for shortfall in RPO achievements and efforts made to achieve the target in the ensuing year. The Commission has also considered the relief in the RPO targets sought by the DISCOMs for the FY 2020-21 & FY 2021-22, in view of the COVID-19 Pandemic. Although initially Discoms did not make serious efforts to procure RE power to meet RPO targets yet they have been able to tie up with various renewable power producers to SECI etc. It has been submitted by the Discoms that already power purchase agreements for supply of 1080 MW of Solar Power has been entered and the power will start flowing from the year 2021. It has been observed by the Commission that the Discoms have put some efforts to achieve the RPO targets from the year 2021. The Commission is concerned that there is certain backlog in RPO targets for previous financial years, however, in the present scenario due to Covid-19 Pandemic, in view of low industrial demand and overall situation, the Commission has

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deliberated upon the issue and come to the conclusion that to clear the backlog of RPO by purchasing RE certificates or otherwise would be fatal at this stage as it would add to avoidable costs which would ultimately be passed on to the consumers. The Commission has decided to waive off the current backlog of RPO in view of unprecedented circumstances due to Covid-19 Pandemic as a onetime measure. The Commission is of the view that the decision to waive off the current backlog of RPO has been taken at a time which falls in rarest of rare category and the same should not be set as a precedent. The Commission directs the Discoms to make every possible endeavour to meet the RPO targets as has been given to them by the Commission in timely manner in true letter and spirit.

2. In accordance with the provisions of the HERC RE Regulations in vogue, the RPO for the FY 2020-21 is 10% of the total energy consumption of the Discoms. The approved RPO for the FY 2020-21 is as under: -

Energy Consumption for 2020-21 (MU)	%age of Non-solar RPO of energy Consumption	Non solar RPO (MU)	Solar RPO as %age of energy sales	Solar RPO (MU)	Total renewable energy required to be purchased (MU)
36320.04*	3.00%	1089.60	7.00%	2542.40	3632.0

<sup>\*</sup> Energy available for sale by DISCOMs has been taken net of intra-state transmission losses, excluding energy purchased from RE sources and Hydro.

- 3. The volume of energy to be purchased from renewable energy sources as per above table is the total RPO of the Discoms for the financial year 2020-21. Therefore, the volume of renewable energy purchased as approved by the Commission as above shall be adjusted against the total RPO of the Discoms.
- 4. The Discoms and other obligated entities are directed to provide requisite information to the State Agency on monthly basis by 10th of every month for the previous month to enable the State Agency to submit quarterly report to the Commission.

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#### **CHAPTER 8**

#### TIME OF DAY / USE TARIFF

(Avoid Power Peaking and save Money)

#### **8.1 OBJECTIVE & NEED**

If cost variations warrant and metering is cost-effective, seasonal and time-of-use tariffs may be instituted for wholesale and retail sales. It encourages to change the way we use electricity. Time of Use tariff allow customers some flexibility to choose when they use electricity. Electricity consumed in the Low Rate period will be cheaper than usage in the High Rate period. When choosing a Time of Use Tariff, customers need to consider the time and application of power usage in order to achieve the lowest cost option.

The cost differences during different time blocks over a period of 24 hours are currently large enough to warrant time differentiated prices for electricity at both the bulk and retail levels. Such a change in tariff design would increase the efficient use of electricity in Discoms service territory i.e. UHBVNL & DHBVNL. Marginal cost principles also establish that sufficient differences exist in the cost of power across the hours of the day to warrant the institution of time-differentiated prices for bulk service and retail service to large supply customers, where meters are already in place. Further, the Grid Frequency based UI charges in the Northern Region also establishes the fact that in 96-time blocks of 15 minutes each the UI rates shows wide intra –day variations.

The Time of Use (TOU) tariff is designed to encourage large consumers of electricity to use more during the off-peak period than the peak period. The off-peak period is during the night, when our generating system has capacity that is not being used. Hence, by opting for ToD both the Discoms as well as the Consumers stand to gain. The Discoms can avoid purchase of expensive power during the peak period as well as save on Capex on expansion / augmentation of the distribution system while the consumer can lower the average cost of power being consumed by them.

## 8.2 Proposal by DHBVNL and UHBVNL

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 as under: -

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i. 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.

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

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

- iii. 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.
- iv. 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.
- v. 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.
- vi. Other terms and conditions can be as may be prescribed by the Hon'ble Commission.

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#### 8.3 Comments/Suggestions made by Stakeholders on ToD

## 8.3.1 Comments filed by M/s Jindal Stainless (Hisar) Limited, Hisar

Need for simplifying the Schedule of Tariff for Industrial consumers with special reference to the Time of Use Tariff: -

While commenting on the Time of Use Tariff in the ARR order dated 07.03.19, it was submitted that the ToU tariff was introduced by the Hon'ble Commission in the year 2017 to make available heretofore surplus power of the Discoms in the 'off-peak hours' to industrial consumers at concessional rate. Hon'ble Commission had amended the earlier rebate of 15% on the normal tariff during off-Peak night hours (10 PM to 05-30 AM), which was reduced to 10% in ARR order of 07.03.19 and that too with an unrealistic condition which reads as under.

Note: This rebate shall be allowed only to the consumers who install Smart Meter/Smart Grid, irrespective of the consumer category. The same may be installed by the DISCOMs as well as by the consumer themselves as per the directions of DISCOMs. Further, if such consumer install rooftop solar system also then the rebate shall be increased to 15% and in case the rooftop solar system is accompanied by battery storage system (minimum 15% of Sanctioned Load), the rebate shall increase to 20%. The consumers may be allowed to avail these benefits by giving an undertaking to comply with the terms and conditions mentioned herein above within seven months of the date of undertaking. In case any consumers fails to comply with the undertaking within the period of seven months, the benefits so availed shall have to be refunded immediately along with the interest of 17% per annum. The ToD tariff shall not be applicable to the consumers, who source their power from Captive Generation or Open Access at any point of time after 15.06.2019.

With the above condition having been introduced in ToU, it became un-economical for the Industry to avail this ToU rebate as the Smart Grid was not to be set up by the consumers but it was to be done by the Licensee. Thus there was no use of such a provision in the Tariff Order which is only on paper and not available to any consumer.

Moreover, the surplus power available with the Discoms during night hours is not being utilized by the Industry and this power remains unutilized.

A copy of the article on Smart Grid was handed over to the Hon'ble Commission and a copy of the same is attached for record.

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#### Reply of DHBVN:

It is submitted that the Smart Metering is being implemented in Gurugram and Faridabad cities under pilot project. DHBVN has planned to roll out 5 Lakhs smart meters through EESL under OPEX mode by March'2021. The smart metering project is expected to get commissioned by the end of FY 2020-21. DHBVN has also planned to roll out smart metering in balance part of urban areas for which tendering is under process.

However, regarding rebate on ToU tariff, rebate shall be allowed only to the consumers who install Smart Meter in line with Commission's directives.

## Commission's View:

The Commission has considered the submissions of the Intervener mostly related to the conditionalities attached with the existing ToD as well as the reply of DHBVNL on the issue of smart metering. The Commission observes that installing smart meter has now become a national agenda. Hence, the same shall remain a pre-requisite for availing ToD tariff. The same, if not installed by the Discoms, can be installed by the Consumers as per CEA norms. The meters should have appropriate registers to record the consumption during ToD hours for commercial ToD accounting. However, the dispensation of smart grid and rooftop solar related additional incentive shall be done away with.

#### 8.3.2 Comments filed by M/s Faridabad Industries Association

- a. The Commission in its Order of 7<sup>th</sup> March, 2019 had laid down such pre-conditions which made it impossible to opt for Time of Day/ToU during 2019-20. The Nigam has now proposed a revised procedure which includes a third ToD segment charge.
- b. The scheme approved initially by the Commission was aimed at flattening the demand curve. For any new scheme it takes time for the same to be accepted by the consumer. Unfortunately, the scheme was mismanaged at the field level to the extent that consumers who had utilised the scheme in October, 2018 March, 2019 have not been paid their dues till date. Secondly there was lack of awareness of the system at the grass root, level; the scheme needs to be marketed properly and we are certain it will achieve desired results.
- c. We do not agree with the proposal to levy a higher rate of tariff for normal hours for consumers who opt for the scheme. We request the Commission to continue the

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scheme on the same lines as approved in 2017 without the pre-conditions of smart meters and solar power.

## **Reply of DHBVN:**

Nigam has been levying ToD/ToU tariff as approved by the Hon'ble Commission. Further, the claim of the intervener regarding levy of higher tariff in normal hours is devoid of merit as the tariff being levied by the Discom for consumption against normal hours is the tariff approved by the commission in tariff order. Even same was followed under the earlier approval of the Hon'ble Commission in 2017.

In regard to the claim of the intervener regarding non-payment of dues during the period Oct'18 to Mar'19 to its consumers who opted for ToD/ToU tariff, Nigam is in process of adjusting the dues due to billing system automation for slab wise calculation of ToU tariff, and likely to be completed in due course of time.

In regard to the claim of the intervener regarding lack of awareness regarding the scheme, Nigam submits that such observation is vague as the scheme is available in the form of sales circular on the website of Discom.

## Commission's View:

The Commission has perused the objections filed by the Intervener herein as well as the reply of DHBVN thereto. The Commission observes that the Discoms, in the present ToD petition has proposed introduction of i) ToD benefits for additional consumption ii) 5% surcharge on normal consumption. While the Commission tends to agree with the former due to revenue impact, the latter is not acceptable. Hence, during the normal load hours the tariff shall remain as determined by the Commission even for the consumers who opts for ToD tariff. As far as non-payment of dues are concerned, the Commission has taken note of it and directs the Discoms to settle the dues in each billing cycle, there ought not to be any gap as such. The Discoms are further directed to give wide publicity to the schedule of tariff including ToD Tariff, sales circular may not be sufficient.

## 8.4 Legal and Policy Framework for ToD Tariff

The section 62 (3) of the Electricity Act 2003 says that:

"The Appropriate Commission shall not, while determining the tariff under this Act, show undue reference to any consumer of electricity but may differentiate according to the consumer's load factor, power factor, voltage, total consumption of electricity

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during any specified period or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required"

The provision no 5.4.9 of the National Electricity Policy also advocates the ToD tariff *which* says that

"The Act requires all consumers to be metered within two years. The SERCs may obtain from the Distribution Licensees their metering plans, approve these, and monitor the same. The SERCs should encourage use of prepaid meters. In the first instance, TOD meters for large consumers with a minimum load of one MVA are also to be encouraged. The SERCs should also put in place independent third-party meter testing arrangements"

NTP (8.4 Definition of tariff components and their applicability) envisages explicitly the emphasis on the ToD *Tariff*.

"Two-part tariffs featuring separate fixed and variable charges and Time differentiated tariff shall be introduced on priority for large consumers (say, consumers with demand exceeding 1 MW) within one year. This would also help in flattening the peak and implementing various energy conservation measures"

#### **Earlier orders related to ToD Tariff**

1. 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. The ToD tariff approved by the Hon'ble Commission was as under: -

Time of Day (ToD) Tariff

Period	Charge	Time
Off-Peak (October to March)	15 % rebate on the normal energy charges as approved by the Commission.	From 10 P.M to 05.30 A.M
Peak (October to	19% premium over the energy charges	From 06.30 P.M hours to up to
March)	determined by the Commission	10.00 P.M
Normal demand Hours (October to March)	Normal Tariff	From 05.30 A.M to 06.30 P.M
Demand Charges	I be the same for all categories of ontinue to be applicable for Open	

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2. In the ARR/ Tariff Order for Discoms dated 15.11.2018, the Commission decided that the Time of Use/ Time of Day (ToD) tariff introduced by the Commission vide ARR Order dated 11.07.2017 shall continue till further Orders except that the rebate for energy drawl during Off Peak hours shall be @10% (instead of 15% earlier) as per Tariff Order dated 11.07.2017. The ToD tariff was accordingly approved as under:

Time of Use (ToU) Tariff

Period	Charge	Time		
Off-Peak Demand (October to March)	10 % rebate on the normal energy charges as approved by the Commission. *	From 10:00 P.M to 05.30 A.M		
Peak Demand (October to March)	19% premium over the energy charges determined by the Commission	From 06.30 P.M to 10.00 P.M		
Normal Demand (October to March)	Normal Tariff	From 05.30 A.M to 06.30 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.			

Note: The rebate of 10% shall be increased to 15% in case the consumer installs Smart Meter/Smart Grid as per CEA norms. Further, if such consumer install rooftop solar system also then the rebate shall be increased to 20% and in case the rooftop solar system is accompanied by battery storage system, the rebate shall be increased to 25%. The consumers may be allowed to avail these benefits by giving an undertaking to comply with the terms and conditions mentioned herein above within seven months of the date of undertaking. In case any consumers fail to comply with the undertaking within the period of seven months, the benefits so availed shall have to be refunded immediately along with the interest of 17% per annum.

3. In the ARR/ Tariff Order dated 07.03.2019 for FY 2019-20 the Commission continued the ToD tariff as approved vide ARR/Tariff Order dated 15.11.2018 i.e. the rebate during off peak hours was retained at 10% but an additional condition was imposed as under:-

Note: This rebate shall be allowed only to the consumers who install Smart Meter/Smart Grid, irrespective of the consumer category. The same may be installed by the DISCOMs as well as by the consumer themselves as per the directions of DISCOMs. Further, if such consumer install rooftop solar system also then the rebate shall be increased to 15% and in case the rooftop solar system is accompanied by battery storage system (minimum 15% of Sanctioned Load), the rebate shall increase to 20%. The consumers may be allowed to avail these benefits by giving an

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undertaking to comply with the terms and conditions mentioned herein above within seven months of the date of undertaking. In case any consumers fails to comply with the undertaking within the period of seven months, the benefits so availed shall have to be refunded immediately alongwith the interest of 17% per annum. The ToD tariff shall not be applicable to the consumers, who source their power from Captive Generation or Open Access at any point of time after 15.06.2019.

Besides, it was provided that all consumers opting for ToU/TOD tariff with smart meter/smart grid shall be allowed additional rebate of 2% on the additional consumption i.e. consumption over and above the consumption during the corresponding period of previous financial year except for load enhancement cases. Discoms were further directed to submit a comprehensive proposal for ToD tariff including night time concessional tariff.

## 8.5 Time of Day Tariff in Other States

The Commission, in order to take a view on the ToD Tariff Design considered it appropriate to refer to the ToD tariff as determined by a few States as under:-

	Bihar	Chhattisgarh	Delhi	Gujrat	Jharkhand	Punjab	Kerala
Peak Hours Surcharge	20%	20%	20%	Rs 60 paise per unit	20%	Rs 2.00/kVA h	50%
Off Peak Hours Rebate	15%	25%	20%	Rs 30 paise per kWh (Night time concession, exclusively)	15%	Rs 1.25/ kVAh	25%
Normal hours	Normal	Normal Rate	Normal	Normal Rate	Normal	Normal	Normal
premium	Rate		Rate		Rate	Rate	Rate

#### 8.6 Revised ToD Tariff

- 1. A perusal of the table above, reveals that none of the SERCs have allowed any surcharge on the normal period consumption. Hence, the Commission finds no justification to introduce 5% surcharge on the tariff applicable for consumption during the normal period. The peak period surcharge in most of the States (except) Kerala is about 20% and the rebate during the off-peak period is 15% to 25%.
- 2. It is observed that the cost of power purchase during peak hours is quite high. Time of Day (ToD) tariff is an important Demand Side management (DSM) measure to flatten the load curve and avoid such high cost peaking power purchases. Accordingly, the Commission had introduced Time of Day (ToD) tariff wherein peak hour consumption is charged at higher rates which reflect the higher cost of power

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purchase during peak hours. At the same time, a rebate is being offered on consumption during off-peak hours. This is also meant to incentivise consumers to shift a portion of their loads from peak time to off-peak time, thereby improving the system load factor and flatten the load curve. The ToD tariff is aimed at optimizing the cost of power purchase, which constitutes over 80% of the tariff charged from the consumers. It also assumes importance in the context of propagating and implementing DSM and achieving energy efficiency.

- 3. Introduction of higher peak hour tariff would initially generate additional revenue which would compensate for the reduction in revenue on account of lower tariff during off-peak hours. In the long run, this would provide signals to the consumers to reduce load during peak hours and, wherever possible, shift this consumption to off-peak hours. Any loss of revenue to the utility on account of shifting of load from peak to off-peak hours in the long run would by and large get compensated by way of reduction of off-peak surplus to the extent of increase in off-peak demand.
- 4. The ToD Tariff would thus have immediate as well as long term benefits for both, consumers as well as the utility and contribute towards controlling the rise in power purchase costs. The Commission has kept the period as as well as time for ToD as proposed by the Discoms. Resultantly, the ToD Tariff approved by the Commission for HT Industry (including Arc Furnace), LT Industry, NDS, Bulk Supply (other than Bulk (DS) as under: -

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

- a) The Discoms may extend the ToD Tariff to any other consumer category of consumer receiving supply at HT level / with connected load / contract demand of 50 kW / MVA and above.
- b) The off-peak discount under ToD tariff shall be applicable for power drawn during off peak hours in excess of the normal consumption during the off peak of the corresponding month in the preceding year.

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- c) The ToD tariff shall be an option available to the eligible consumers. The consumer may exercise the option by applying to the Discoms for approval. The ToD Consumers have the option to move back to non-ToD regime only once within one Financial Year.
- d) For other than Peak and Off-Peak hours normal Energy Charges shall be applicable.

Concessional Tariff: As the ToD approved by the Commission is on optional basis. The Commission, in order to reduce the burden of fixed cost of surrendered power to the extent possible, has considered it appropriate to allow concessional tariff as approved by the Commission vide Memo No. 822-823/HERC/Tariff dated 13.12.2019 to the HT Consumers for incremental consumption during winter season (November to March), vis-à-vis same period / months of the previous year, during night hours i.e. from 22:00 Hrs to 04:00 Hours. The balance electricity consumption, for consumers opting for this dispensation, shall be billed as per the normal tariff approved by the Commission in the present Order. In case there has been increase or decrease in the load of a particular consumer, the Consumption figures shall be re-worked on a prorate basis i.e. if the load has been increased by say 10%, the base line consumption shall be escalated by 10% for the purpose of working out incremental / additional consumption ( $\Delta$  kWh /  $\Delta$  kW). The benefits of ToD and Concessional Tariff shall not be allowed concurrently.

The ToD and Concessional Tariff as determined above shall continue unless the same, by a specific Order and after holding consultation with the stakeholders, is amended / withdrawn by the Commission.

The Discoms are directed to submit a Quarterly report with the analysis of the Load Curve of the State depicting the data on different days and hours. The report should include the details of the demand and supply of power with regard to the PPA's and actual power consumption in the State. The data should be made to compare the before and after scenario in view of adoption of ToD and its impact. Also, the accuracy of the data used to compute the period and time of peak and non-peak hours should be submitted with facts to the Commission. It shall be the duty of the Discoms along with SLDC to ensure accurate Demand Side Management (DSM) so that benefit of ToD is optimised.

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#### **CHAPTER 9**

#### **DISTRIBUTION & RETAIL SUPPLY TARIFF**

The Commission observes that the Discoms have projected cumulative revenue gap of Rs. 4030.39 Crores during the first year of the Control Period i.e. FY 2020-21. However, they have prayed that the Commission may continue with the current level of energy charges for the ensuing years of the MYT Control Period.

The Commission has considered the ibid submission and is of the considered view that given the continued un-certainties arising out of COVID – 19 Pandemic, it is difficult to assess the impact on revenue of the Discoms including various concessions to the electricity consumers given by the Discoms / State as well as the CERC / Central Government and the concessions and relief package announced by the Government of India. Hence, the Commission limited to the FY 2020-21, is not inclined to review the existing schedule of Distribution and Retail Supply Tariff. The present exercise is limited to re-alignment of DS Supply Tariff and the tariff applicable to the MSME sector / Agro Industries in Haryana. The Commission directs the Discoms to conduct a detailed consumer category wise CoS study and submit the same for consideration and approval of the Commission within six months of this Order to enable the Commission to take a comprehensive view on the existing tariff and charges.

## **Domestic Supply (DS) Tariff**

The Commission observes that at the existing tariff, the revenue realised from the DS Consumers by both the Discoms in the FY 2020-21 shall be about Rs. 6019 Crore at an average rate of revenue realisation Rs. 5.06 / kWh. The Commission observes that a lot of DS consumers fall in Category – I of the existing schedule of tariff. Considering the fact that a high percentage of such consumers are being billed at the MMC rate i.e. Rs. 115 per month of the connected load up to 2 KW and Rs. 70 / KW per month above 2 KW. It is felt that MMC rates trigger in if the consumption of a consumer falls below the threshold level i.e about 93 Units per month or even if the consumption is nil. In effect the MMC indirectly encourages wasteful consumption. Keeping these factors in mind the Commission, in order to make attractive billing on the basis of tariff instead of MMC and also to provide some relief to the DS Consumers at the margin given the impact of COVID – 19 Pandemic and its impact on employment, income and earnings of the small DS Consumers, has considered it appropriate to revise the tariff applicable for such consumers as under: -

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	Revised Domestic Supply Tariff w.e.f 1.04.2020							
Category I	,	Total Consumption up to 100 Units / Month						
	Energy Charges	Fixed Charge	MMC (Rs. Per kW / Month of the					
			Connected Load or part thereof)					
0-50 Units / Month	Rs. 2.0 / kWh	NIL	Rs. 115 upto 2 kW and Rs. 70					
51-100 Units	Rs. 2.50 / kWh	Nil	above 2 kW					
Category II	Total Consumptio	n of more than 100 Units /	Month and up to 800 Units / Month					
0-150	Rs. 2.50 / kWh	Nil	Rs. 125 upto 2 kW and Rs. 75					
151-250	Rs. 5.25 / kWh	Nil	above 2 kW					
251-500	Rs. 6.30 /kWh	Nil						
501-800	Rs. 7.10 / kWh	Nil						
Category III	Tota	I Consumption of 801 Unit	ts and above / Month					
801 Units and above	Rs. 7.10 (flat rate	Nil	Rs. 125 upto 2 kW and Rs. 75					
	with no telescopic		above 2 kW					
	tariff benefits)							

All other terms and conditions shall remain the same.

## Tariff for Agro – Industries / FPO

The issue of special dispensation to the Agro – based / FPO Industries in Haryana mentioned at para 2.3.3 of the present Order was deliberated at length in the Public Hearing on the ARR / Tariff Petition filed by the Haryana Power Utilities, State Advisory Committee (SAC).

The Commission agrees with the stakeholders that such Industries have very strong backward and forward linkage with the State Agrarian Economy in terms of employment, income and earnings of the farmers. Additionally, such consumers have very limited ability to pass – on the 'input cost' including cost of electricity to their ultimate consumers unlike the established Industrial Consumers of electricity. Hence, the Commission is inclined to accept the contention of the stakeholders that some cushion ought to be provided to such consumers without disturbing the revenue balance of the Distribution Licensee(s) in Haryana i.e. UHBVNL and DHBVNL. More so, given the impact of COVID – 19 Pandemic on such small Industries the Commission has considered it appropriate to lower the applicable tariff for such consumers who may be paying Industrial / Commercial tariff.

The Tariff applicable for the aforesaid category of consumers including Pack House, Grading, Packing, Pre-Cooling and Ripening Chamber, Honey Bee, Honey Processing, Tissue culture, Zinga and Fish Farming, Poultry Farm, Pig Farm, Milk Chilling Plant and Cold Storage, Mushroom Farming up to 20 kW load shall pay a single part tariff of Rs. 4.75 / kWh. The MMC shall be Rs. 235 / kW in such cases and no Fixed Charges, if applicable shall be levied.

The Commission observes that in line to the decision of Haryana Govtt., the Discoms issued sales circular giving relief to the DS Consumers in the State by way of granting subsidy on

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applicable tariff as determined by the Commission. The Tariff as determined by the Commission and effective tariff after Subsidy is re-produced below:-

Existing Tariff	(Rs. / kWh)	Effective Tariff After Govtt. Subsidy (Rs/kWh)		
Category I				
0-50 Units / Month	2.70	0-50#	2.00	
51-100 Units / Month	4.50	-	-	
Category II				
0-150 Units / Month	4.50	0-200	2.50	
151-250 Units / Month	5.25	201-250	5.25	
251-500 Units / Month	6.30	251-500 **	6.30	
501-800 Units / Month	7.10	501-800	7.10	
Category III				
Above 801 Units and	7.10 (Flat Rate no	Above 800	7.10	
above / Month	lower slab rate			
	benefits			

The effective tariff(s), besides other terms and conditions mentioned in the Sales Circular No. U-16 / 2018, was subject to the following-

# Only consumers having monthly consumption of 50 Units or less will get the benefit of subsidised tariff of Rs. 2 / kWh. If the monthly consumption exceeds 50 Units then the tariff for Category II will be applicable for first 50 Units also.

\*\* Only the consumers having monthly consumption of 500 Units or less will get the benefit of proposed subsidised tariff. If the monthly consumption exceeds 500 Units, the existing tariff will be applicable.

The Commission observes, that the aforesaid relief on the tariff determined by the Commission u/s 62 of the Electricity Act, 2003, shall create a revenue gap between the revenue requirement (after allocating surplus available from the subsidising consumer categories) of DS Consumers and revenue realisation at the tariff determined by the Commission.

As per section 65 of the Electricity Act, 2003, "65. Provision of subsidy by State Government – If the State Government requires the grant of any subsidy to any consumer or class of consumers in the tariff determined by the State Commission under section 62 of the Act, the State Government shall, notwithstanding any direction which may be given under section 108, pay, in advance and in such manner as may be specified, the amount to compensate the person affected by the grant of subsidy in the manner the State Commission may direct ...".

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In view of the ibid statute, the Commission, for the FY 2020-21 and after taking into account the revised DS Supply Tariff, has quantified the subsidy required for the DS Consumer category in the FY 2020-21, being the difference between the revenue realised at the revised DS tariff and the subsidised tariff (Supra). The Commission observes that there are about 55 lakh DS Consumers in Haryana. The average revenue realisation from the DS Consumer after HERC revised tariff of the DS Consumers falling is estimated at Rs. 4.66 / kWh. Due to the relief granted by the Discoms / Haryana Government, the average revenue realisation works out to Rs. 4.24 / kWh i.e. a reduction of Rs. 0.42 / kWh. Resultantly, there is a revenue gap of Rs. 4654.02 Million for the FY 2020-21. The DS Subsidy is tentative estimates only as the exact sales figures in different slabs, as adopted by the Discoms for working out subsidy eligibility could not be established. Hence, the subsidy estimated is subject to true-up on availability of slab wise actual figures.

Consumer Category	HERC Approved Sales (MU)	Revenue (Rs Million)	Average Revenue Realisation (Rs/kWh)	Estimated Subsidised Rates (Rs/kWh)	Revised Revenue Realisation at Subsidised Tariff (Rs. Million))
0 - 50	2,105	4211	2.00	2.00	4211
51-100	1,884	4709	2.50	2.50	4709
0-150	1,108	4986	4.50	2.50	2770
151-200	886	4645	5.24	2.50	2215
201-250	776	4080	5.26	5.26	4080
251-400	1,108	6981	6.30	6.30	6981
401-500	443	2797	6.31	6.31	2797
501-800	1,330	8976	6.75	6.75	8976
801 Unit and above	1441	10231	7.10	7.10	10,231
Total	11,081	51616	4.66	4.24	46970

It is evident from the table above, that due to the relief extended to the DS Consumers up to monthly energy consumption of 500 Units per month, the loss of revenue to the Discoms works out to Rs. 465.402 Crore. The same needs to be bridged by way of Subsidy to be provided by the State Government in advance at the beginning of each quarter of the financial year in line with Section 65 of the Act. The Discoms, at the beginning of each quarter, shall seek subsidy from the State Government.

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Average Rev Realised Rs. 4.66 / R	Average Rev Subsidised Rs. 4.24		
revised tariff	/ kWh at subsidised tariff		
Difference	Rs. Per Unit		
Quantum	11081	MU	
Deficit / Subsidy Required	4654.02	Rs. Million	

## **Agro Industries / FPO:**

Keeping in view the above and the Cross - subsidy surcharge limits of the National Tariff Policy of +/- 20%, the tariff determined by the Commission for the NDS category as per the present Order is as under: -

Non-Domestic Supply	Energy Charges (Rs/kWh/ kVAh)	Fixed Charges (Rs/kW/Month	MMC (Rs/kW/Month of the Connected Load or part thereof)	
Upto 5 kW (LT)	6.35/kWh	Nil	Rs. 235	
Above 5 kW and Up to 20 kW	7.05/kWh	Nil	Rs 235	

The average revenue realisation from the NDS Consumers for both the Discoms (UH and DH) up to 20 kW taken together is estimated at Rs. 6.70 / kWh on a sale of 218.36 MUs (20 % of NDS sales up to 20 kW i.e. 1091.82 Million Units). Assuming further (in the absence of data) that 20% of sales i.e. 218.36 Million Units is accounted for by the Agro – Industries. The loss of revenue shall be Rs. 1.95 / kWh (6.70-4.75) i.e. Rs. 42.58 Crore (rounded off) in the FY 2020-21.

The Tariff and charges for all other Consumer Categories shall remain unchanged. The schedule of Tariff and Charges is attached at Annexure – A of the present Order.

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#### **CHAPTER 10**

#### **DIRECTIVES**

## 1. Smart & Prepaid Meters

The Commission observes that in addition to installation of Smart Meters, the Discoms have also submitted a proposal for introduction of prepaid meters. The same has been approved by the Commission. The Commission directs that the Discoms shall ensure that work of installation of 10 Lakhs Smart Meters is completed at the earliest and not later than six months from the date of this Order. The facility of prepaid connection may also be provided to all consumers having smart meters within six months. DISCOMs are directed to expedite the Installation of Smart Meter with associated features and submit year-wise detailed plan of three years to replace conventional energy meters by prepaid smart meters.

## 2. Consultancy Service

The Commission has taken note that HPPC (a joint venture of UHBVNL and DHBVNL) has initiated the process of appointing Consultancy Firm with the broad objective of providing Consultancy Services for Long Terms Demand Forecasting, Optimum Power Availability Portfolio, Least Cost Power Procurement Strategy, Optimum Utilisation of Surplus Power etc. The Commission observes that transparency and efficiency in managing power purchase cost which comprises about 80% of the cost of power delivered to the electricity consumers as well as the trading function vis-à-vis surplus power is of crucial significance. Hence, the Commission directs that this exercise must be completed at the earliest in Public interest.

#### 3. Solar Power Availability

The Commission has noted with serious concern that the Discoms are lagging behind in achieving Solar RPO targets including the backlog. During the period 1.01.2019 to 31.12.2019 out of total supply of 53099 MUs the supply of solar power was an abysmal 206 MUs i.e. 0.39% The quantum of solar power projected to be available in the FY 2020-21 is only about 744 MU in a total power availability of 68520 MU projected by the Discoms. Given the National / State target for Solar Power and the likely escalation in the Solar RPO under the proposed amendment of the EA, 2003, the available quantum in the FY 2020-21 and the likely additional availability of about 1800 MUs in next two to three years, shall also fall short of the desired levels. The Commission directs the Discoms / HPPC to promote generation and purchase of solar power commensurate with the National Targets. It needs to be noted that the RPO prescribed by the Commission is the minimum benchmark only. Progress of solar power plants to be set up under KUSUM at the tariff determined by the Commission may also be intimated.

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- **4.** The relief extended to the electricity consumers due to COVID 19, reproduced at Para 1.27 of the present Order is approved.
- 5. The Commission, for the purpose of the present Order and limited to the FY 2020-21 has pegged the distribution loss of the Discoms at 18.5% as against 21.50% and 18.73% proposed by UHBVNL and DHBVNL respectively. As far as the trajectory going forward is concerned the Commission shall re-visit the same after availability of actual data for the FY 2020-21. NMJ

#### 6. DMRC (Commercial Supply)

Given the peculiar and commercially win-win situation for both DHBVNL and DMRC, the Commission considers it appropriate to relax anything to the contrary contained in the Single Point Supply Regulations, and directs that DMRC shall carry out metering, billing and revenue collection for the commercial consumers within its premises subject to installation of correct meters as per CEA norms duly tested and jointly sealed with Discoms. The difference between DMRC (Traction) Tariff and NDS Tariff as determined by the Commission shall be credited by the DMRC into the accounts of the Discom concerned as per the billing cycle.

#### 7. AP Sales Third Party Authentication

The Commission notes with concern that despite issuance of directives to this effect in its previous orders a fact also pointed out by the Intervener, DHBVN did not engage a third party for analysing and authenticating its AP sales data for FY 2017-18.

In view of the above, the Commission again directs DHBVN to engage a third party for analysing and authenticating its AP sales of FY 2017-18 and FY 2018-19 and submit its report within 3 months from the date of this order and also to examine the AP sales data meticulously for the FY 2019-20.

## 8. Power Procurement Plan

while resorting to bidding or calling for expression of interest for power procurement the Discoms must ensure that the power under PPAs already approved by the Commission materialises and also the intra-State generator i.e. HPGCL's power plants are scheduled at least upto the critical minimum threshold before considering backing down.

The DISCOMs are directed to perform cost benefit analysis including trade-off between purchase of REC and RE Power before rushing with proposal to procure RE Power.

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As per Commission estimates, the availability of energy is considerably in excess of the estimated requirement during the FY 2020-21. In view of the above observation, the Discoms must gear up their power purchase procurement planning and strengthen its trading activities for disposal of surplus power. It would be appropriate for the licensee to closely monitor, on daily basis, the surplus capacity, which could neither be backed down nor sold off even at variable cost and is therefore leading to trading losses. The Discoms must fine tune their projection models and ensure that surplus energy available is disposed of in a cost-effective manner.

## 9. Capex

There seems to be lack of proper planning and execution of the Capital works on the part of the licensee. The licensee needs to exercise proper monitoring of execution of capital works and control over the item wise expenditure approved by the Commission and also explain the deviations with proper justifications.

UHBVNL- The Commission observes that no expenditure has been indicated for scheme at Sr. No. 4, 14, 15, 16 & 18 for which an amount of Rs. 185.63 Cr. was approved by the Commission. The licensee (UHBVNL) is required to give reasons along with proper justification for no program against these works during FY 2019-20.

The Commission further observes that the proposed Capital Expenditure of Rs. 192 Cr. (at Sr. No. 3(e)) for smart metering appears to be an optimistic target. Keeping in view of the above facts, the Commission approves overall Capital Expenditure Plan of Rs. 980 Cr. for UHBVNL for FY 2020-21 which includes Rs. 225 Cr. for release of AP tube well connections

The Licensee is directed to revise its Capital expenditure plan accordingly and submit the scheme wise details of the proposed expenditure to the Commission within one month of the order.

DHBVNL - The expenditure of Rs. 9.91 Cr. incurred on system strengthening works under IBRD funded projects has been incurred without the approval of the commission which needs to be explained by the Licensee. The Licensee has not specified any reason for the deviations made from the approved CAPEX.

#### 10. Business Plan

The Commission is of the considered view that in light of the lock down and reduction in demand by the Industrial and commercial consumers, the business plan for the MYT

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period would require a relook. Accordingly, the licensee is directed to resubmit its business plan along with projected capital investment for the MYT period within 1 months of this order to enable the Commission to take a view in the matter.

#### 11. Feeder Losses

The distribution Licensees are directed to reduce AT&C losses of all urban feeders below 25% and that of Rural feeders below 50% in FY 2020-21. DISCOMs shall submit detailed action plan to achieve the target within two months of issuance of orders.

#### 12. Aggregate Technical & Commercial Loss

UHBVNL is directed to explain, within three months, from the date of this order, the reasons of under achievement and submit an action plan to achieve the target for the FY 2019-20 and FY 2020-21.

## 13. DT Damage Rate

The commission again directs the licensees to bring down the distribution transformer damage rate below the prescribed limits by FY 2020-21. Any slippage on account of the timeline shall lead to penalty as deemed fit and appropriate by the Commission as per various provisions of the Act and Regulations framed thereunder.

As per MYT Regulations the distribution licensee shall maintain a proper record of failure of the distribution transformers and submit the same in the quarterly report to the Commission. The DISCOMs are again directed to ensure that quarterly reports be submitted regularly without fail and to host the circle wise information on its website regularly.

## 14. Replacement of electro-mechanical Meters

Petitioners are again directed to replace all the electromechanical meters at least in urban area before filing of next year's ARR / Tariff Petition.

#### 15. Renewable Purchase Obligation

The Commission is not imposing any penalty on the DISCOMs for non-compliance of its earlier orders regarding achievement of RPO targets/purchase of REC. Further, DISCOMs are allowed to carry forward the shortfall, if any, in the achievement of RPO targets for the FY 2020-21 to FY 2021-22. The DISCOMs are required to clear the carried forward backlog of the FY 2020-21, if any, along with the FY 2021-22 targets of

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RPO by 31.03.2022 and no further carry forward beyond 31.03.2022 shall be allowed. The Discoms and other obligated entities are directed to provide requisite information to the State Agency on monthly basis by 10th of every month for the previous month to enable the State Agency to submit quarterly report to the Commission.

#### 16. Performance Parameters

The Discoms are directed to publish their performance parameters so that the consumers know how their service provider fares in comparison to the peers.

#### 17. Fully Solar Powered City

In view of the call given by the Hon'ble Prime Minister that every State should have at least one city (either the Capital City, in Haryana it could be Panchkula, or any other renowned tourist destination) which is fully solar powered using Rooftop Solar Generation. The Discoms are directed to coordinate with HAREDA to make this possible in at least one city of Haryana.

## 18. Prepaid meter

The Commission had notified "the Haryana Electricity Regulatory Commission (Prepaid Metering) Regulations, 2014 (Regulation No. HERC / 32 / 2014). Accordingly, as per regulation 8 of the ibid Regulations a rebate of 5% shall be allowed on the applicable tariff for the consumers availing supply through pre-paid meters subject to the terms and conditions of the said Regulations.

The Commission observes that a lot of dispute / litigations arise between the owner of the premises and tenants including due to the observations of the Auditors of the Discoms. Hence, the Commission directs that wherever facilities exists the Discoms shall issue pre-paid meter for new connections for such premises.

#### 19. Additional Surcharge

The Discoms are directed to file complete data / details of the second half of FY 2019-20 and also place the same on its website for determination of Additional Surcharge to be levied in the first half of the FY 2020-21.

All the directives contained in the various chapters of the present Order shall be complied with by the Discoms within the time line specified for the purpose and all sales circulars/commercial circulars be issued by both the Distribution Licensees uniformly and in consonance with each other.

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The Tariff and charges for Distribution & Retail Supply of electricity in Haryana by the distribution licensees i.e. UHBVNL & DHBVNL including CSS and Additional Surcharge as determined in the present Order shall be applicable from the date of this Order i.e. 1.06.2020.

The tariff & charges including CSS and Additional Surcharge shall remain effective until these are revised / amended by the Commission.

This order is signed, dated and issued by the Haryana Electricity Regulatory Commission on 1.06.2020.

Date: 01.06.2020 Naresh Sardana Pravindra Singh Chauhan D.S. Dhesi Place: Panchkula Member Member Chairman

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# ANNEXURE -A SCHEDULE OF TARIFF AND CHARGES

Sr. No.						Tariff for 2020-21 (W.E.F. 01.06.2020)			
	Category of consumers	Energy Charges (Paisa / kWh or/ kVAh)	Fixed Charge (Rs. per kW per month of the connected load / per kVA of sanctioned contract demand (in case supply is on HT) or as indicated	MMC (Rs. per kW per month of the connected load or part thereof)	Category of consumers	Energy Charges (Paisa / kWh or/ kVAh)	Fixed Charge (Rs. per kW per month of the connected load / per kVA of sanctioned contract demand (in case supply is on HT) or as indicated	MMC (Rs. per kW per month of the connected load or part thereof)	
1	Domestic Sup				Domestic Sur	oply			
	Category I: (To	otal consum	ption up to 100 unit	s per month)	Category I: (T	otal consumpti	on up to 100 units per month)		
	0 - 50 units per month	270/kWh	Nil	Rs. 115 up to 2 kW and Rs.	0 - 50 units per month	200/kWh	Nil	Rs. 115 up to 2 kW and Rs. 70	
	51-100	450/kWh	Nil	70 above 2 kW	51-100	250/kWh	Nil	above 2 kW	
	Category II: (T and up to 800		nption more than 10	0 units/month	Category II: (*units/month))		ion more than 100 units/month	and up to 800	
	0-150	450/kWh	Nil	Rs 125 upto 2 kW and Rs.75 above 2 kW	0-150	250/kWh	Nil	Rs 125 upto 2 kW and Rs.75 above 2 kW	
	151-250 251-500	525/kWh 630/kWh	Nil Nil		151-250 251-500	525kWh 630/kWh	Nil Nil		
	501-800	710/kWh	Nil		501-800	710/kWh	Nil		
	Category III:	7 10/10/11	140		Category III:	7 10/10	140		
	801 Unit and	710/kWh	Nil		801 Unit and		Nil	Rs 125 upto 2	
	above	(flat rate	INII	Rs. 125 up to	above	710/kWh	IVII	kW and Rs.75	
	abovo	no		2 kW and	abovo	(Flat rate no		above 2 kW	
		telescopic		Rs.75 above 2		telescopic		above 2 KVV	
		benefits)		kW		benefit			
2	Lightning) / Do supply and ot	ecorative Lig hers)	ndependent Hoardi ghtning / Temporary	Metered	Decorative Li	ghtning / Temp	ependent Hoarding / Decorative orary Metered supply and other	ers)	
	Upto 5 kW (LT)	635/kWh	Nil	Rs. 235/kW	Upto 5 kW (LT)	635/kWh	Nil	Rs. 235/kW	
	Above 5 kW and Up to 20 kW	705/kWh	Nil		Above 5 kW and Up to 20 kW	705/kWh	Nil		
	Above 20 kW and upto 50 KW (LT)	660/kVAh	160 / kW	Nil	Above 20 kW and upto 50 KW (LT)	660/kVAh	160 / kW	Nil	
	Existing consumers above 50 kW upto 70 kW	695/kVAh	160 / kW	Nil	Existing consumers above 50 kW upto 70	695/kVAh	160 / kW	Nil	
	(LT)	675/12/21	150 (1)11		kW (LT)	675 (1) (4)	460 /1114	Aut	
	Consumers above 50 kW (HT) New	675/kVAh	160 / kW	Nil	Consumers above 50 kW (HT) New	675/kVAh	160 / kW	Nil	
3	HT Industry (a	bove 50 kW	)		HT Industry (a	above 50 kW)			
_	Supply at 11 KV	665/kVAh	170/kVA	Nil	Supply at 11 KV	665/kVAh	170/kVA	Nil	
	Supply at 33 KV	655/kVAh	170/kVA	Nil	Supply at 33 KV	655/kVAh	170/kVA	Nil	
	Supply at 66 kV or higher	645/kVAh	170/kVA	Nil	Supply at 66 kV or higher	645/kVAh	170/kVA	Nil	
	Supply at 220 kV	635/kVAh	170/kVA	NIL	Supply at 220 kV	635/kVAh	170/kVA	Nil	
	Supply at 400 kV	625/kVAh	170/kVA	NIL	Supply at 400 kV	625/kVAh	170/kVA	Nil	
	Arc furnaces/ Steel Rolling	695 Paisa per kVAh	170/kVA	Nil	Arc furnaces/	695 Paisa per kVAh if	170/kVA	Nil	
	Mills also	if supply			Steel Rolling	supply is at			
	applicable to	is at 11			Mills also	11 kV (See			

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Sr. No.	Т	Tariff for 2019-20 (W.E.F 01.11.2019)				Tariff for 2020-21 (W.E.F. 01.06.2020)			
	Category of consumers	Energy Charges (Paisa / kWh or/ kVAh)	Fixed Charge (Rs. per kW per month of the connected load / per kVA of sanctioned contract demand (in case supply is on HT) or as indicated	MMC (Rs. per kW per month of the connected load or part thereof)	Category of consumers	Energy Charges (Paisa / kWh or/ kVAh)	Fixed Charge (Rs. per kW per month of the connected load / per kVA of sanctioned contract demand (in case supply is on HT) or as indicated	MMC (Rs. per kW per month of the connected load or part thereof)	
	Open Access	kV (See note 3 below)			applicable to Open Access	note 3 below)			
4	LT Industry - (				LT Industry -	upto 50 kW			
	Upto 10 KW	635/kVAh	Nil	Rs. 185/kW	Upto 10 KW	635/kVAh	Nil	Rs. 185/kW	
	Above 10 KW & upto 20 kW	665/kVAh	Nil	Rs. 185/kW	Above 10 KW & upto 20 kW	665/kVAh	Nil	Rs. 185/kW	
	Above 20 KW and upto 50 KW	640/kVAh	Rs 160 on 80% of CL	Nil	Above 20 KW and upto 50 KW	640/kVAh	Rs 160 on 80% of CL	Nil	
	Existing consumers above 50 kW upto 70 kW (LT)	665/kVAh	Rs 160 on 80% of CL	Nil	Existing consumers above 50 kW upto 70 kW (LT)	665/kVAh	Rs 160 on 80% of CL	Nil	
5		es / FPO (Ne	w Category up to 20	kW		475 / kWh	Nil	Rs. 235/kW	
6	Agriculture Tu	ihe-well Sun	nly		Agriculture T	ube-well Suppl	v		
"	Metered:	10/kWh	Nil	Rs. 200 / BHP	Metered:	10/kWh	Nil	Rs. 200 / BHP	
	(i) with motor upto 15 BHP			per year	(i) with motor upto 15 BHP			per year	
	(ii) with motor above 15 BHP	8/kWh	Nil		(ii) with motor above 15 BHP	8/kWh	Nil		
	Un-metered (Rs. / Per BHP / Month): (i) with motor upto 15 BHP	Nil	Rs. 15 / Per BHP / Month	Nil	Un-metered (Rs. / Per BHP / Month): (i) with motor upto 15 BHP	Nil	Rs. 15 / Per BHP / Month	Nil	
	(ii) with motor above 15 BHP	Nil	Rs. 12 / Per BHP / Month	Nil	(ii) with motor above 15 BHP	Nil	Rs. 12 / Per BHP / Month	Nil	
7	Public Water Works / Lift Irrigation / MITC / Street Light	735/kWh	180/kW or BHP except street Light	Nil	Public Water Works / Lift Irrigation / MITC / Street Light	735/kWh	180/kW or BHP except street Light	Nil	
8	Railway Tract			1	Railway Tract		1	T	
	Supply at 11 KV Supply at 33	655/kVAh 645/kVAh	160/kVA 160/kVA	Nil Nil	Supply at 11 KV Supply at 33	655/kVAh 645/kVAh	160/kVA 160/kVA	Nil Nil	
	KV Supply at 66	635/kVAh	160/kVA	Nil	KV Supply at 66	635/kVAh	160/kVA	Nil	
	or 132 kV	62E/1/\/ / \ \ \	160/3//	Nil	or 132 kV	625/12\/^ 12	160/2//	Nil	
11	Supply at	625/kVAh	160/kVA	INII	Supply at	625/kVAh	160/kVA	INII	

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Sr. No.	Т	Tariff for 2019-20 (W.E.F 01.11.2019)				Tariff for 2020-21 (W.E.F. 01.06.2020)			
	Category of consumers	Energy Charges (Paisa / kWh or/ kVAh)	Fixed Charge (Rs. per kW per month of the connected load / per kVA of sanctioned contract demand (in case supply is on HT) or as indicated	MMC (Rs. per kW per month of the connected load or part thereof)	Category of consumers	Energy Charges (Paisa / kWh or/ kVAh)	Fixed Charge (Rs. per kW per month of the connected load / per kVA of sanctioned contract demand (in case supply is on HT) or as indicated	MMC (Rs. per kW per month of the connected load or part thereof)	
	220 kV				220 kV				
9	DMRC				DMRC				
	Supply at 66 kV or 132 kV	625/kVAh	160/kVA	Nil	Supply at 66 kV or 132 kV	625/kVAh	160/kVA	Nil	
10	Bulk Supply		T		Bulk Supply			T	
	Supply at LT	650/kVAh	160/kW or Rs.	Nil	Supply at LT	650/kVAh	160/kW or Rs. 160/kVA as	Nil	
	Supply at 11 kV	640/kVAh	160/kVA as applicable (see	Nil	Supply at 11 kV	640/kVAh	applicable (see note 5)	Nil	
	Supply at 33 kV	630/kVAh	note 5)	NI	Supply at 33 kV	630/kVAh		Nil	
	Supply at 66 or 132 kV	620/kVAh		Nil	Supply at 66 or 132 kV	620/kVAh		Nil	
	Supply at 220 kV	615/kVAh		Nil	Supply at 220 kV	615/kVAh		Nil	
11	Bulk Supply (Domestic)				Bulk Supply (Domestic)				
	For total consumption in a month not exceeding 800 units/ flat/dwelling unit (DU).	525 /kWh	Rs. 100 /kW of the recorded demand	Nil	For total consumption in a month not exceeding 800 units/ flat/dwelling unit (DU).	525 /kWh	Rs. 100 /kW of the recorded demand	Nil	
	For total consumption in a month exceeding 800 units/flat/ DU.	620 /kWh	Rs. 100 /kW of the recorded demand	Nil	For total consumption in a month exceeding 800 units/flat/ DU.	620 /kWh	Rs. 100 /kW of the recorded demand	Nil	

## Notes:

- 1. The incentive on installation of rooftop solar system as per HAREDA guidelines, shall be Rs. 1/- per unit only for all DS consumers/Bulk supply (domestic) consumers, installing solar system. In case the solar system is accompanied by battery storage system of the equivalent capacity, additional incentive of Rs. 1/- per unit shall also be provided, for Bulk Supply (Domestic) consumers only.
- 2. Energy charges in case of Domestic consumers are telescopic in nature up to the consumption of 800 Units / month. In case of consumption more than 800 units/month, no slab benefit shall be admissible and tariff applicable will be 710 paisa/kWh for total consumption.

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- 3. In case of Arc furnaces/ Steel Rolling Mills for supply at 33 kV and above, the HT Industrial tariff at the corresponding voltage level shall be applicable.
- 4. Fixed charges for HT Industrial supply and Bulk Supply category are in Rs./kVA of Contract Demand. For Railways and DMRC, the fixed charges are in Rs./kVA of the billable demand.
- 5. In case of Bulk Supply Consumers (other than Bulk Supply DS), the fixed charges are in Rs./kW of the connected load where contract demand is not sanctioned and in Rs./kVA of contract demand where contract demand is sanctioned.
- 6. 80% of the connected load shall be taken into account for levying fixed charges where leviable in case of LT industrial Supply. In case of LT industry above 20 KW where MDI meter is installed the fixed charges shall be Rs. 160/kw/month of recorded demand if it is in kW or Rs. 144/kya/month of recorded demand if the same in in kVA.
- 7. Fixed charges for Bulk Supply Domestic are in Rs. / kW of the recorded demand.
- 8. The above tariff does not include Electricity Duty, Municipal Tax and FSA.
- 9. The consumers who will deposit advance payment online through RTGS/NEFT in the banks authorized by the Discoms equivalent to 120% of energy charges paid in the previous year, within two months of this Order, shall be given a discount of equivalent to Savings Bank rate till the time entire advance is adjusted.
- 10. Fixed charges for unmetered AP consumers, MITC and Lift Irrigation category are in Rs. / BHP / month. For MITC and Lift Irrigation, DISCOMs are directed to install smart meter as per DISCOMs norms, within three months from the date of this Order. In case the DISCOMs are unable to do so, it may authorize the consumers accordingly, under intimation to the Commission. This exercise be completed within a period of six months from the date of this Order, otherwise tariff equivalent to three times of the normal tariff shall be applicable. AP consumption shall also be metered by utilizing the meter replaced by smart meter. It should be ensured that no supply is un-metered.
- 11. Under Bulk Supply (Domestic) category no benefit of lower slab shall be admissible in the higher consumption slabs. Total consumption shall be charged at a single tariff depending upon the average consumption/flat/residential unit for that month.
- 12. Bulk Supply Tariff shall be applicable to orphanage, old-age home, kushtrog ashram and working women hostel. The tariff for Electric Charging Station shall be Rs. 6.20/kWh or Rs.

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- 5.58/kVAh and Rs. 100/kW/month as fixed charges. The tariff for electric crematorium in Haryana shall be Rs. 5.80/kVAh. There shall not be any fixed charges.
- 13. Certain consumers, during public hearing and other-wise, have expressed the views that sometimes it is difficult to deposit additional consumer security deposit and additional demand charges on enhancement of load. The Commission Orders that in case of enhancement of load where the additional ACD is higher than Rs. 10,000/-, the existing consumer (Panchayat/Nagar Palika/any other social society installing electric crematorium with Smart Meter/Smart Grid as per DISCOMs norms, cremation ground, orphanage, oldage home, kushtrog ashram, working women hostel and E-Vehicle charging station) may be allowed to deposit ACD in 12 equal installments, without payment of any interest. However, facility of depositing additional demand charges/ connection charges in 12 installments along with interest at an appropriate rate not less than 12% p.a., may also be extended to the existing consumers with good payment record. Both the amount as above may form part of energy bills in the next 12 months.
- 14. In case of Single point supply connections, Bank Guarantee equal to 1.5 times as per the applicable Regulations shall be payable which may be recovered in maximum of 4 (four) phases spanning over a period of 5 (five) years. Such type of instalment facility shall be provided only to those consumers/developer which install Smart meter along-with Smart Grid technologies both internally as well as the main meter. Also consumers/developer should provide undertaking for installation of Roof top Solar as per HAREDA norms.
- 15. In addition to the tariff as above, the Discoms shall levy FSA as per HERC (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2012.
- 16. The surcharge of 45 paise/ per unit arc furnace/ steel rolling mills shall also be applicable on Open Access power.
- 17. Mobile/Telephone towers/Street light of Municipal Corporation be provided circle wise single bill.
- 18. The consumers of all categories may download their bills from Discoms website. The consumers shall be provided bills through SMS alerts and/ or e-mail without any charge, wherever AMR meter reading has been started. Urban domestic consumers above 10 KW, where AMR reading has started, opting for hard copy of the bill shall have to pay Rs. 20/- per

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bill. All other consumers of the urban area, opting for hard copy of the bill, shall have to pay Rs. 100/- per bill. However, no charges on account of distribution of hard copy of the bill shall be levied on the consumers below 10 KW, AP consumers, BPL consumers and consumers in Rural area.

19. Transaction charges (MDR) for payment through payment gateway on the website of the Discoms by way of credit card, debit card, net banking and also the transaction charges for payment through POS machines at the Discoms counters and e-wallets etc. shall be borne by the Discoms subject to a maximum of Rs. 150 / - . Any amount exceeding Rs. 5000 / - shall not be accepted by cash. Payments up to Rs. 20,000 / can be made through cheque. The consumers of urban areas under Municipal Corporations/Municipal Committee shall pay their bills for amount exceeding Rs. 5000/- through above mode of payments including RTGS/NEFT and only through the banks authorized by the Discoms for the purpose.

Provided no benefit/concession provided in this Order shall be applicable to those consumers who are defaulters or whose bill is outstanding for more than two billing cycles.

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