



# Executive Summary

OF

**Petition filed for Annual Performance Review of FY 2018-19  
Annual Revenue Requirement of FY 2019-20  
for its  
Distribution and Retail Supply Business**

**SUBMITTED TO**

**HARYANA ELECTRICITY REGULATORY COMMISSION**

**By:**

**DAKSHIN HARYANA BIJLI VITRAN NIGAM**

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**Annual Performance Review (APR) for FY 2018-19 under MYT Control Period (FY 2014-15 to FY 2016-17) and Annual Revenue Requirement for FY 2019-20**

- DHBVN is filing Petition for True-Up of FY 2017-18, Annual Performance review for FY 2018-19 and Annual Revenue Requirement for FY 2019-20 by Dakshin Haryana Bijli Vitaran Nigam Limited under HERC (Terms and Conditions for Determination of Tariff for Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2012 along with the other guidelines and directives issued by the Hon'ble Commission from time to time and under Sections 42, 45, 46, 47, 61, 62, 64 and 86 of the Electricity Act 2003 read with the relevant guidelines.
- This Executive Summary of Annual Performance Review (APR) for FY 2018-19 and Annual Revenue Requirement for FY 2019-20 presents the key elements of the MYT ARR filing made by Dakshin Haryana Bijli Vitran Nigam (DHBVN) to the Haryana Electricity Regulatory Commission (the Commission).
- This summary is not a part of the filings made by DHBVN and interested parties are encouraged to examine the documents filed by the licensee for detailed information. Further, some of the annexure mentioned and references made in this document may not be included in this summary and would be available only with the complete document filed with the Commission.

## 1.1 SALES PROJECTIONS AND ENERGY BALANCE FOR FY 2018-19 & FY 2019-20

In order to estimate the respective consumer category wise energy sales of DHBVNL for FY 2018-19 and FY 2019-20, the Petitioner has relied upon the CAGR of previous year's data of sales. The sales of the base year i.e. FY 2017-18 has been considered for projection of category wise sales to the consumers. Similarly, category wise connected load has been projected for the FY 2018-19 and FY 2019-20 based on the CAGR of 3 to 5 years. The methodology applied by the petitioner for estimating the metered sales is as under: -

- Category wise energy sales for FY 2018-19 are estimated on the basis of actual sales for first half and projected sales of second half which are determined by escalating the sales of second half of FY 2017-18 with the CAGR of 3 to 5 years determined for second half. Category wise sales of FY 2019-20 are estimated by escalating the projected sales of FY 2018-19 with the CAGR of 3-5 years.
- Agriculture consumption for FY 2018-19 and FY 2019-20 is calculated by assuming a growth rate of 5% in sales over FY 2017-18.
- As Railways has shifted into Open Access regime, the sales for Railway is considered as nil. For determination of sales of Metro for FY 2018-19 a nominal increase of 5% in sales is considered on second half sales of FY 2017-18 to determine the sales for remaining half. However, for FY 2019-20, a nominal increase of 5% in sales is considered.

Therefore, keeping the above basis in view, DHBVNL envisages the following category wise sales for FY 2018-19 & FY 2019-20:

**Table 1: Statement of sales for FY 2018-19 and FY 2019-20 (Mus)**

Sr. No.	Category	FY 2017-18 Actual	FY 2018-19 Approved	FY 2018-19	FY 2019-20
1	Domestic	4976.56	5,269.85	5,137.30	5,394.16
2	Non-Domestic	2913.86	3,006.42	2,974.60	3,123.33
3	HT Industry	5963.04	5,162.83	6,897.95	7,558.81
4	LT- Industry	975.28	981.11	1,052.25	1,143.59

Sr. No.	Category	FY 2017-18 Actual	FY 2018-19 Approved	FY 2018-19	FY 2019-20
5	Lift Irrigation	199.79	157.32	199.98	213.08
6	AP Sales	5389.09	5,520.00	5,658.55	5,941.47
7	Bulk Supply	780.31	676.60	854.73	926.92
8	Railways	144.64	200.94	76.22	76.67
9	Street Light	88.47	95.74	95.70	100.49
10	PWW	609.97	527.08	641.55	673.63
	<b>Total</b>	<b>22041.00</b>	<b>21,597.89</b>	<b>23,588.82</b>	<b>25,152.15</b>

## 1.2 Energy Availability for Haryana

Month Wise Energy availability of generation stations at the state periphery has been projected for FY 2018-19 & FY 2019-20, on the basis of share allocated to Haryana in Central Generating Stations, State Generation Stations, IPP and other Stations.

The Energy Availability is calculated on the basis of the average PLF realised long term generating stations over the period of three years. The energy available from the tied up generating station is apportioned among Discoms at the ratio energy drawal during the FY 2017-18.

The energy sale projected for FY 2018-19 and FY 2019-20 is distributed in month wise basis in the ratio of actual month wise consumption of FY 2017-18. Subsequently, the estimated month wise sales of FY 2018-19 and FY 2019-20 is grossed up with the proposed T&D losses to determine the normative energy required at the Discom periphery and further grossed with intrastate transmission losses to arrive at the normative energy required at the State Periphery.

The normative energy required at the state is first balanced with the energy available from Must Run Plant like Hydro Power Plants, Solar Power Plant and Biomass etc. Thereafter, the remaining demand is met through the Thermal Generating Plants like NTPC, HPGCL and IPP as per the Merit order dispatch determined on the basis of variable charges for FY 2018-19 and FY 2019-20.

The impact of interstate losses on availability from the Inter State Generating station has already been accounted while determining the energy availability from such generating stations at the state periphery.

The backing down of the thermal/gas generating stations is assumed to be limited at backing down capacity and any surplus created on account of same is assumed to be banked with other states and consumed during next financial year.

The per unit energy charges of the tied-up generating stations, is kept same as recorded in energy bills received from the generating stations during the first half of FY 2018-19 for FY 2018-19 and the same is increase by 5% for determining the per unit variable charge for FY 2019-20. The per unit energy charges determined as above for FY 2018-19 and FY 2019-20 is multiplied with the estimated energy available from various generators as per the Merit Order dispatch to arrive at the total variable power purchase cost for the respective years.

Similarly, the fixed charges paid to the generators in FY 2017-18 are escalated at an average rate of 5% to arrive at the fixed charges to be paid for FY 2018-19 and FY 2019-20.

The plant wise energy availability for DHBVN and power purchase cost for FY 2018-19 and FY 2019-20 are tabulated as under.

**Table 2: Power Purchase Quantum Availability and Costs – Projected for 2018-19 and FY 2019-20**

Sr.No	Project	FY 2018-19				FY 2019-20			
		Quantum	Energy Charge	Fixed Charges	Total Charges	Quantum	Energy Charge	Fixed Charges	Total Charges
1	Anta	7.27	5.95	7.09	13.04	4.82	4.15	7.44	11.59
2	Auriya	8.15	3.48	11.36	14.84	5.41	2.42	11.93	14.35
3	Dadri	20.87	7.57	9.85	17.43	21.04	8.02	10.34	18.36
4	Faridabad Gas	567.84	209.59	136.22	345.81	575.62	223.08	143.03	366.11
5	Feroz Gandhi Unchahar-1	37.71	10.87	5.01	15.88	37.71	11.41	5.26	16.67
6	Feroz Gandhi Unchahar-2	78.88	22.78	9.45	32.23	78.88	23.92	9.92	33.84
7	Feroz Gandhi Unchahar-3	41.09	12.12	6.61	18.73	41.09	12.73	6.94	19.67
8	Feroz Gandhi Unchahar-4	64.85	16.26	6.08	22.33	130.06	34.23	24.31	58.54
9	Farraka Super Thermal	36.24	8.53	4.63	13.16	36.24	8.96	4.86	13.82
10	Kahalgaon-1	87.47	20.41	10.87	31.28	87.47	21.43	11.41	32.84
11	Kahalgaon-2	243.74	51.60	32.03	83.63	243.74	54.18	33.63	87.81
12	Koldam	185.10	47.92	44.15	92.08	185.10	50.32	46.36	96.68
13	NCTPS (DADRI-II)	-	-	0.00	0.00	-	-	0.00	0.00
14	Rihand Thermal Power St.-1	244.77	33.24	22.70	55.94	244.77	34.90	23.84	58.74
15	Rihand Thermal Power St.-2	219.30	29.76	20.68	50.44	219.30	31.24	21.72	52.96
16	Rihand Thermal Power St.-3	215.65	29.69	36.05	65.74	215.65	31.17	37.85	69.02
17	Singrauli Super Thermal	789.44	112.86	53.91	166.76	789.44	118.50	56.60	175.10
	<b>TOTAL NTPC LTD (A)</b>	<b>2,848.38</b>	<b>622.62</b>	<b>416.68</b>	<b>1,039.30</b>	<b>2,916.35</b>	<b>670.66</b>	<b>455.45</b>	<b>1,126.10</b>
18	BAIRASUIL	110.30	11.67	12.86	24.53	110.30	12.26	13.50	25.76
19	SALAL	272.29	17.44	46.32	63.76	272.29	18.31	48.63	66.94
20	TANAKPUR	10.76	1.84	2.92	4.76	10.76	1.93	3.06	4.99
21	CHAMERA-I	204.83	24.30	19.19	43.48	204.83	25.51	20.15	45.66
22	URI	82.53	7.05	10.03	17.08	82.53	7.41	10.53	17.93
23	CHAMERA-II	46.33	4.84	5.51	10.35	46.33	5.08	5.79	10.87
24	DHAULIGANGA	32.93	4.16	6.23	10.39	32.93	4.37	6.54	10.91
25	DHULHASTI	69.59	19.89	21.44	41.33	69.59	20.88	22.51	43.40

26	SEWA-II	16.59	3.73	4.94	8.68	16.59	3.92	5.19	9.11
27	CHAMERA III	48.16	10.63	13.91	24.54	48.16	11.16	14.61	25.77
28	PARBATI III	32.69	9.31	9.33	18.64	32.69	9.77	9.80	19.57
29	URI-II	39.14	9.66	15.73	25.39	39.14	10.14	16.52	26.66
	<b>TOTAL NHPC LTD (B)</b>	<b>966.13</b>	<b>124.52</b>	<b>168.41</b>	<b>292.93</b>	<b>966.13</b>	<b>130.75</b>	<b>176.83</b>	<b>307.58</b>
30	SJVNL	169.69	21.42	21.95	43.37	169.69	22.49	23.05	45.54
31	SJVNL (RAMPUR)	41.04	6.88	9.37	16.26	41.04	7.23	9.84	17.07
32	THDC	113.33	31.30	33.47	64.76	113.33	32.86	35.14	68.00
33	THDC KOTESHWAR	29.02	5.90	5.86	11.75	29.02	6.19	6.15	12.34
34	RAPS	315.02	120.04	0.01	120.05	315.02	126.04	0.01	126.06
35	NAPS	107.62	35.80	-	35.80	107.62	37.59	-	37.59
36	BBMB	1,629.77	101.50	-	101.50	1,629.77	106.58	-	106.58
37	PTC TALA	26.16	5.87	-	5.87	26.16	6.17	-	6.17
38	PTC J&K	163.25	63.14	-	63.14	163.25	66.30	-	66.30
39	Aravali Co. Pvt. Ltd.	1,437.59	475.27	436.27	911.53	1,604.96	557.13	458.08	1,015.21
40	JHAJJAR POWER LTD. (CLP)	3,396.86	1,103.98	480.97	1,584.95	3,296.57	1,124.95	505.02	1,629.97
41	PRAGATI POWER	48.92	19.09	57.59	76.69	65.41	26.80	60.47	87.28
42	Coastal Gujrat Power Ltd.	1,486.59	304.49	139.55	444.04	1,486.59	304.49	139.55	444.04
43	ADANI POWER LTD	5,466.16	1,302.59	626.12	1,928.71	5,466.16	1,302.59	605.27	1,907.86
44	SASAN POWER LIMITED	1,740.65	226.04	30.15	256.19	1,740.65	226.04	29.98	256.02
45	PTC GMR KAMALANGA	1,220.23	179.50	175.10	354.60	1,220.23	179.50	173.03	352.53
46	PTC KARCHAMWANGTOO (200 MW)	466.46	86.96	126.61	213.56	466.46	91.31	132.94	224.24
47	PTC Lanco Amarkantak	1,078.01	234.92	138.58	373.50	1,078.01	246.67	145.51	392.18
48	DVC MEJIA	271.75	67.67	50.78	118.45	271.75	71.05	53.32	124.37
49	DVC KODERMA	195.12	38.67	63.30	101.97	195.12	40.60	66.46	107.06
50	DVC Raghunathpur	369.19	87.29	21.05	108.34	369.19	91.65	22.10	113.76
51	PTPS-V (HPGCL)	323.02	126.75	43.42	170.17	321.51	132.47	45.59	178.06
52	PTPS-VI (HPGCL)	323.02	126.75	51.93	178.68	321.51	132.47	54.52	186.99
53	PTPS-VII (HPGCL)	925.63	317.68	97.94	415.62	925.87	333.65	102.84	436.48
54	PTPS-VIII (HPGCL)	925.63	317.68	86.30	403.98	925.87	333.65	90.62	424.27

55	YTPP-I&2 (HPGCL)	1,321.05	441.23	277.57	718.80	1,335.67	468.42	291.44	759.86
56	RGTPS 1&2 (HPGCL)	3,086.69	1,045.15	489.12	1,534.27	3,036.54	1,079.58	513.57	1,593.15
57	WYC Kakaroi	116.21	25.17	-	25.17	116.21	26.43	-	26.43
	<b>OTHER LONG TERM (C)</b>	<b>26,793.68</b>	<b>6,918.73</b>	<b>3,463.00</b>	<b>10,381.73</b>	<b>26,839.18</b>	<b>7,180.90</b>	<b>3,564.51</b>	<b>10,745.40</b>
59	P&R GOGRIPUR small hydro	5.64	2.24	-	2.24	5.64	2.36	-	2.36
60	Bhoruka Power Corps. Ltd. Small hydro	16.91	5.37	-	5.37	16.91	5.64	-	5.64
61	HPSEB/MITTAL SMALL HYD.	-	-	-	-	-	-	-	-
62	Megahalya/ APPC	-	-	-	-	-	-	-	-
63	SHAHBAD SUGAR MILL	46.89	18.99	-	18.99	46.89	19.94	-	19.94
64	CH. DEVI LAL SUGAR MILL	5.21	2.10	-	2.10	5.21	2.21	-	2.21
65	Haryana Co. Sugar Mill.	31.26	12.66	-	12.66	31.26	13.29	-	13.29
66	Hafed Sugar Mill	5.21	2.11	-	2.11	5.21	2.21	-	2.21
67	Meham Sugar Mill	5.21	-	-	-	5.21	-	-	-
68	Puri Oil Mill small hydro	7.89	3.00	-	3.00	7.89	3.15	-	3.15
	<b>SUGAR MILL AND SMALL HYDRO (D)</b>	<b>124.23</b>	<b>46.48</b>	<b>-</b>	<b>46.48</b>	<b>124.23</b>	<b>48.80</b>	<b>-</b>	<b>48.80</b>
69	SDS SOLAR PVT LTD. DH	0.97	0.55	-	0.55	0.97	0.58	-	0.58
70	C&S Electrical DH	0.97	0.55	-	0.55	0.97	0.58	-	0.58
71	CHANDRALEELA SOLAR DH	0.77	0.44	-	0.44	0.77	0.46	-	0.46
72	SUKHBIR SOLAR DH	0.97	0.55	-	0.55	0.97	0.58	-	0.58
73	ZAMIL SOLAR DH	0.97	0.55	-	0.55	0.97	0.58	-	0.58
74	SIWANA SOLAR POWER DH	4.83	2.74	-	2.74	4.83	2.88	-	2.88
75	H.R. MINERAL SOLAR UH	0.97	0.55	-	0.55	0.97	0.58	-	0.58
76	TAYAL & CO SOLAR UH	0.97	0.55	-	0.55	0.97	0.58	-	0.58
77	VKG SOLAR UH	0.97	0.55	-	0.55	0.97	0.58	-	0.58
78	Utrecht Solar Pvt. Ltd.	0.97	0.55	-	0.55	0.97	0.58	-	0.58
79	Subhash Infra Engineers Pvt ltd.	0.97	0.55	-	0.55	0.97	0.58	-	0.58
80	JBM Solar	19.32	10.97	-	10.97	19.32	11.52	-	11.52
81	Balarch Solar	0.97	0.55	-	0.55	0.97	0.58	-	0.58
82	HPGCL-Solar	9.66	4.71	-	4.71	9.66	4.95	-	4.95
83	Solar Energy Corporation of India Ltd.	77.28	42.50	-	42.50	77.28	44.63	-	44.63



	<b>SOLAR POWER (E)</b>	<b>121.53</b>	<b>66.85</b>	<b>-</b>	<b>66.85</b>	<b>121.53</b>	<b>70.20</b>	<b>-</b>	<b>70.20</b>
84	STAR WIRE INDIA	38.51	31.27	-	31.27	38.51	32.84	-	32.84
85	GEMCO ENERGY LTD.	31.12	24.99	-	24.99	31.12	26.24	-	26.24
86	AB GRAIN SPIRIT PVT LTD.	19.45	15.40	-	15.40	19.45	16.17	-	16.17
87	SRI JYOTI	36.95	29.26	-	29.26	36.95	30.73	-	30.73
	<b>BIOMASS POWER (F)</b>	<b>126.02</b>	<b>100.93</b>	<b>-</b>	<b>100.93</b>	<b>126.02</b>	<b>105.97</b>	<b>-</b>	<b>105.97</b>
	<b>Total Long term (A+B+C+D+E+F)</b>	<b>30,979.97</b>	<b>7,880.14</b>	<b>4,048.09</b>	<b>11,928.23</b>	<b>31,093.43</b>	<b>8,207.28</b>	<b>4,196.78</b>	<b>12,404.06</b>
88	PTC KARCHAMWANGTOO (176MW)	376.75	69.80	-	69.80	410.49	79.86	-	79.86
89	GATI HYDRO/Chuzachain HEP Sikkim	215.05	104.87	-	104.87	234.31	119.97	-	119.97
90	DANS HYDRO/Tashiding HEP, Sikkim	206.23	98.21	-	98.21	224.70	112.35	-	112.35
91	SHIGA HYDRO/Jorethang HEP, Sikkim	206.45	101.10	-	101.10	224.94	115.66	-	115.66
92	IA HYDRO/Chanju HEP, HP	62.83	29.40	-	29.40	75.44	37.06	-	37.06
93	Naraingarh Sugar Mill	39.93	18.21	-	18.21	80.08	38.34	-	38.34
	<b>Total New Plants (FY 2018-19)</b>	<b>1,107.25</b>	<b>421.58</b>	<b>-</b>	<b>421.58</b>	<b>1,249.96</b>	<b>503.24</b>	<b>-</b>	<b>503.24</b>
94	Tehri PSP (Uttranachal)-THDC					134.11	68.66	-	68.66
95	Parbati II, HEP (H.P.)-NHPC					48.28	24.72	-	24.72
96	Wind Power of 1000 MW from SECI-I					195.07	57.92	-	57.92
97	Wind Power of 2000 MW from SECI-II					273.09	74.83	-	74.83
98	Solar Power through SECI under 2000MW ISTS scheme					67.66	19.28	-	19.28
	<b>New Plants (FY 2019-20)</b>					<b>718.21</b>	<b>245.42</b>	<b>-</b>	<b>245.42</b>
	<b>Total Power Purchase cost</b>	<b>32,087.22</b>	<b>8,301.72</b>	<b>4,048.09</b>	<b>12,349.81</b>	<b>33,061.60</b>	<b>8,955.94</b>	<b>4,196.78</b>	<b>13,152.73</b>
99	Hon'ble APTEL Judgement								-
100	<b>Total Cost of Power Purchase</b>	<b>32,087.22</b>	<b>8,301.72</b>	<b>4,048.09</b>	<b>12,349.81</b>	<b>33,061.60</b>	<b>8,955.94</b>	<b>4,196.78</b>	<b>13,152.73</b>

The Nigam prays that in case of any variance in the cost of new plants, the Nigam should be allowed to recover the additional cost.

Further, the Nigam has projected the Interstate Transmission charges for FY 2018-19 and 2019-20 by escalating the actual interstate transmission charges of FY 2017-18 by 5%, while Nigam has considered Intrastate Transmission charges as approved by the Hon'ble Commission vide its Tariff Order dated 15<sup>th</sup> November 2018 and escalation of 3.32% has been considered in FY 2019-20 which is rate of escalation considered by Hon'ble CERC for escalating the transmission charges. The summary of same is given below:

**Table 3. Summary of Power Purchase in Rs Cr.**

<i>Output</i>	<i>FY 2018-19</i>	<i>FY 2019-20</i>
<b>Power Purchase Cost</b>	12,349.81	13,152.73
<b>Interstate Transmission Cost</b>	1,219.21	1,280.17
<b>Intra-state Transmission Cost</b>	969.15	1,071.61
<b>Total Power Purchase Cost</b>	14,538.18	15,450.51

The total power purchase cost from external and state sources for DHBVN are assessed at **Rs. 14,538.18** Crores for FY 2018-19 and **Rs. 15,450.51** Crores for FY 2019-20.

### **Transmission losses**

For FY 2018-19 and FY 2019-20, the inter-state transmission losses have been considered as 3.82% and intra-state transmission losses have been considered as 2.44% and 2.42% for FY 2018-19 & FY 2019-20 respectively, in line to the loss trajectory approved for HVPNL in HERC Tariff Order dated 29<sup>th</sup> May 2014.

### **Distribution losses**

The Hon'ble Commission vide its Tariff Order dated 15<sup>th</sup> November 2018 has approved AT&C loss level of 15.00% for DHBVN for the FY 2018-19 which is in accordance with the targets laid down in the UDAY MoU. Against the committed AT&C losses of 18.76% for FY 2017-18 in the UDAY MoU, the Discom has been able to achieve actual AT&C loss level of 17.90%. Further, as per the UDAY MoU, both the Discoms were required to achieve an AT&C loss

level of 15% for the FY 2018-19. As such a loss reduction of approx. 3% has to be achieved during the current financial year to meet the UDAY targets.

In view of above, DHBVN has considered AT&C loss target of 15.00% for FY 2018-19 and continue the same level of losses for the FY 2019-20.

### Energy Balance - DHBVN

On the basis of the above projections, the Energy Balance for DHBVN for FY 2018-19 and FY 2019-20 is summarized below.

**Table 4: Energy Balance for DHBVN**

Energy Balance	Units	FY 2018-19	FY 2019-20
Energy Sales to the Consumers	Mus	23,588.82	25,152.15
T&D loss	%age	14.14%	14.14%
Energy Input at Discom Periphery	Mus	27,473.59	29,294.86
Intra- State Transmission Loss	%age	2.44%	2.42%
<b>Energy Input at State Periphery</b>	<b>Mus</b>	<b>28,160.71</b>	<b>30,021.38</b>
<b>Total Energy Available</b>	<b>Mus</b>	<b>33,180.26</b>	<b>34,106.39</b>
Inter-state Power Purchase considering MoD	Mus	13,064.65	13,997.74
Inter State transmission losses	%age	3.82%	3.82%
Inter-state Power Purchase at State Periphery	Mus	12,565.58	13,463.03
Intra state Power Purchase Considering MoD	Mus	19,521.64	19,593.36
<b>Power Purchase at State Periphery</b>	<b>Mus</b>	<b>32,087.22</b>	<b>33,061.60</b>
<b>Surplus</b>	<b>Mus</b>	<b>3,926.51</b>	<b>3,040.22</b>

The Nigam has assumed that the surplus power available will be sold entirely as 'inter-state sales' throughout FY 2018-19 and FY 2019-20 at average variable power purchase cost.

### 1.3 Operation & Maintenance Expenses

The operation and maintenance expenditure of DHBVN comprises of Employee Expenses, Repair & Maintenance expenses and Administration & General expenses. The O&M expenses, as per the MYT Regulations, 2012 are considered as Controllable Factor with the exception of terminal benefits. The cost of terminal benefits has been considered as Uncontrollable Factor.

The summary of projected O&M expenses for FY 2018-19 and FY 2019-20 is tabulated below for reference:

**Table 5: Summary of O&M Expenses for FY 2018-19 and FY 2019-20 (In Crs.)**

<i>Particulars</i>	FY 2017-18	FY 2018-19	FY 2019-20
	<i>Actual</i>	<i>Projected</i>	<i>Projected</i>
<b>Employee Expense</b>	913.29	947.87	983.77
<b>A&amp;G Expense</b>	88.70	92.18	95.67
<b>R&amp;M Expense</b>	107.00	142.86	165.34
<b>Terminal Benefit</b>	429.00	424.50	426.75
<b>Total</b>	<b>1,538.00</b>	<b>1607.42</b>	<b>1671.53</b>

DHBVN prays the Hon'ble Commission to approve total O&M expenses for FY 2018-19 and FY 2019-20 as tabulated above.

#### **1.4 Capital Expenditure**

The Hon'ble Commission vide order dated 15<sup>th</sup> November, 2018 has approved a Capex Plan of Rs 1170 Cr. for FY 2018-19. DHBVN has estimated to undertake an expenditure of Rs 975 Cr based on the actual capital expenditure incurred in first half of FY 2018-19. In order to achieve the loss targets as proposed in the following chapters, DHBVN propose a Capital Expenditure of Rs 1355.89 Cr for FY 2019-20.

Capital Work in Progress for the control period has been projected on the basis of estimated capital expenditure and the capitalization schedule assuming 60% transfer of total capex (including the CWIP carried forward from the previous year and capex added during the year) to fixed assets and 40% transfer of total capex to capital works in progress (CWIP) for each year of operation.

**While estimating CWIP, it is assumed that 60% of the opening balance of CWIP and fresh capital investment shall be capitalized during each year of operation.**

#### **1.5 Return on Equity**

It is submitted that the Petitioner in line to the methodology adopted for determination of Return of Equity for FY 2017-18, has computed the Return of equity for FY 2018-19 and FY 2019-20. The detail pertaining to the same is

tabulated as under:

**Table 6: Return on Equity for FY 2018-19 & FY 2019-20**

Particulars	FY 2017-18	FY 2018-19	FY 2019-20
Opening Share Capital	1,639.99	1,709.33	1,904.33
Add: Equity Received for GFA	69.34	195.00	266.18
Closing Share Capital	1,709.33	1,904.33	2,170.51
Average Share Capital	1,674.66	1,806.83	2,037.42
Rate of Return on Equity (RoE)	14.00%	14.00%	14.00%
<b>Total Return on Equity (RoE)</b>	<b>234.45</b>	<b>252.96</b>	<b>285.24</b>

## 1.6 Interest & Finance Charges

The total interest and finance charges of DHBVN for FY 2018-19 and FY 2019-20 have been estimated as below:

**Table 7: Net Interest & Finance Charges (Rs. In Crores)**

Particulars	FY 2018-19	FY 2019-20
Interest on Long Term CAPEX loans	120.17	140.77
Interest on UDAY bonds payable to the State Government	295.84	95.99
Interest on WC loans including bank cash credit	134.76	126.70
Interest Cost on Consumer Security Deposit	81.53	87.12
Guarantee Fees to State Govt. & other finance charges	8.64	5.00
<b>Net Interest</b>	<b>640.94</b>	<b>455.58</b>

## 1.7 Depreciation

For FY 2018-19 and FY 2019-20, DHBVN has estimated depreciation charges on the basis of estimated additions in GFA as per the capital investment plan for FY 2018-19 and FY 2019-20. The transfer of total Capex to fixed asset has been considered as 60%.

For the purpose of projecting depreciation charges for FY 2018-19 and FY 2019-20, the licensee has considered the category-wise actual depreciation rates (as a percentage of opening balance of asset-class-wise GFA for that year).

The following depreciation workings have been provided for reference:

**Table 8.1: Depreciation for FY 2018-19 (Rs. Cr.)**

Particulars	Accumulated Depreciation (1 <sup>st</sup> Apr 2018)	Additions during the year			Balance Depreciation (31 <sup>st</sup> Mar 2019)
		Rate of Depreciation (%)	Depreciation during the year	Total	
Land & Land Rights	-	0.00%	-		-
Buildings & Civil Structure	58.08	3.34%	8.73		66.81
Plant & Machinery	2,546.80	5.28%	406.74		2,953.54
Vehicles	12.89	18.00%	3.44		16.33
Furniture & Fixture	12.77	6.33%	1.37		14.14
Less: Depreciation on assets contributed by Consumers and grants	-		120.46		-
<b>Total</b>	<b>2,630.54</b>		<b>299.82</b>		<b>3,050.82</b>

**Table 8.2: Depreciation for FY 2019-20 (Rs. Cr.)**

Particulars	Accumulated Depreciation (1 <sup>st</sup> Apr 2019)	Additions during the year			Balance Depreciation (31 <sup>st</sup> Mar 2020)
		Rate of depreciation (%)	Depreciation during the year	Total	
Land & Land Rights	-	0.00%	-		-
Buildings & Civil Structure	66.81	3.34%	10.88		77.70
Plant & Machinery	2,953.54	5.28%	488.22		3,441.76
Vehicles	16.33	18.00%	4.15		20.48
Furniture & Fixture	14.14	6.33%	1.63		15.77
Less: Depreciation on assets contributed by Consumers and grants	-		121.69		-
<b>Total</b>	<b>3,050.82</b>		<b>383.19</b>		<b>3,555.71</b>

## 1.8 Non-Tariff Income

The petitioner has projected Rs 469.51 Cr as a non-tariff income for FY 2018-19 and has considered the same level of non-tariff income for FY 2019-20, the Hon'ble Commission is requested to approve the same.

It is requested to the Hon'ble Commission to kindly allow Rs. 469.51 Crores of Non-tariff Income for FY 2018-19 and FY 2019-20.

## 1.9 Revenue Estimations

The Petitioner has projected the revenue from intra-state sales for the FY 2018-19 based on the sales distributed sub-category wise based on the past years sub-

category wise distribution and multiplying the projected sub-category wise distributed sales with the Tariff determined by the Hon'ble Commission. Similarly, the licensee has projected the revenue for the FY 2019-20. The details of the same have been given as under:

**Table 9: Revenue Estimations for FY 2018-19 and 2019-20 (In Crs.)**

Category	FY 2018-19	FY 2019-20
Domestic	2,684.67	2,818.90
Non-Domestic	2,134.02	2,240.72
HT Industry	4,836.20	5,299.53
LT industry	758.06	823.86
Lift irrigation	146.98	156.61
Agriculture	42.37	37.60
Bulk supply	517.56	561.27
Railway traction	50.94	51.25
Street Lighting	69.65	73.86
PWW	471.54	495.12
<b>Total Energy Charge</b>	<b>11,711.99</b>	<b>12,558.72</b>
<b>Fixed Charges</b>	<b>1,279.15</b>	<b>1,362.39</b>
<b>Total Revenue</b>	<b>12,991.14</b>	<b>13,921.11</b>
Collection Efficiency	99.00%	99.00%
<b>Revenue Realised</b>	<b>12,861.23</b>	<b>13,781.90</b>

#### 1.10 Revenue from inter-state sales:

Revenue from inter-state sales projected for FY 2018-19 and FY 2019-20 has been considered at average variable power purchase cost.

#### 1.11 Government Subsidy on Domestic Supply Tariff

The Petitioner has filed an additional submission to the Commission through Petition No. PRO-85 & 83 of 2017 for Annual Revenue Requirement (ARR) for FY 2018-19 under HERC (Terms and Conditions for determination of tariff for generation, transmission, wheeling and distribution & retail Supply under Multi Year Tariff Framework) Regulations, 2012.

Further, the Hon'ble Commission in Tariff Order dated 15<sup>th</sup> November 2018 has allowed the tariff subsidy extended by the Government of Haryana on

reservation of the certain provisions related to payment of working capital due to delay payment of subsidy.

The Discom proposes to continue the same level of subsidy for the domestic category consumers in FY 2019-20. The effective applicable tariff after subsidy has also been notified by DHBVN through Sales Circular No. D-25/2018 dated 22<sup>nd</sup> September 2018.

Therefore, on the basis of similar grounds, the subsidy assessed for FY 2019-20 has combinedly been worked out as Rs 841.38 Crores combinedly for both DISCOMs. Further, the subsidy pertaining to DHBVN will be claimed on the basis of actual energy sales accounted during the year. The revenue estimated in above table is at current level of domestic tariff without accounting any subsidy.

### 1.12 Agriculture Subsidies

Agriculture Subsidy for the FY 2018-19 is considered of **Rs.7,139.72 Crores**, as approved by the Hon'ble Commission in Tariff Order dated 15<sup>th</sup> November 2018. Further the subsidy of FY 2018-19 is increased by the 5% to determine the subsidy for FY 2019-20.

### 1.13 Annual Performance Review for FY 2018-19 and Annual Revenue Requirement for FY 2019-20

The following table summarizes the estimated Aggregate Revenue Requirement (ARR) of DHBVN for FY 2018-19 and FY 2019-20.

**Table10: Estimated Aggregate Revenue Requirement (ARR) for FY 2018-19 and FY 2019-20 (In Crs.)**

Sr. No.	Particulars	FY 2018-19 (Approved)	FY 2018-19 (Projected)	FY 2019-20 (Projected)
<b>1</b>	<b>Total Power Purchase Expense</b>	<b>13,720.50</b>	<b>14,538.18</b>	<b>15,450.51</b>
1.1	Power Purchase Expense (incl. CIL)	11,907.61	12,349.81	13,152.73
1.2	Interstate transmission Charge	843.74	1,219.21	1,280.17
1.3	Intrastate trans. charges and SLDC charges	969.15	969.15	1,017.61
<b>2</b>	<b>Operations &amp; Maintenance Expenses</b>	<b>1,397.45</b>	<b>1,607.42</b>	<b>1,671.53</b>
2.1	Employee Expense	820.03	947.87	983.77
2.2	Administration & General Expense	85.18	92.18	95.67
2.3	Repair & Maintenance Expense	148.99	142.86	165.34
2.4	Terminal Liability	343.25	424.50	426.75



Sr. No.	Particulars	FY 2018-19 (Approved)	FY 2018-19 (Projected)	FY 2019-20 (Projected)
3	<b>Depreciation</b>	<b>288.09</b>	299.82	383.19
4	<b>Return on Equity Capital</b>	<b>198.23</b>	<b>252.96</b>	<b>285.24</b>
5	<b>Provision for Bad &amp; Doubtful Debts</b>		64.31	68.91
6	<b>Interest and Finance Charges</b>	<b>437.29</b>	<b>640.94</b>	<b>455.58</b>
6.1	<i>Interest on UDAY bonds payable to the State Government</i>	-	295.84	95.99
6.2	<i>Interest on WC loans including CC/OD limits</i>	171.68	134.76	126.70
6.3	<i>Interest on CAPEX loans</i>	184.73	120.17	140.77
6.4	<i>Interest Cost on Consumer Security Deposit</i>	76.87	81.53	87.12
6.5	<i>Other Interest Cost</i>	4.01	8.64	5.00
7	<b>Total Expenditure</b>	<b>16,041.67</b>	<b>17,403.61</b>	<b>18,314.95</b>
8	Less: Non-Tariff Income	247.47	469.51	469.51
9	<b>Net Aggregate Revenue Requirement</b>	<b>15,794.20</b>	<b>16,934.10</b>	<b>17,845.44</b>
10	<b>Total Revenue</b>		<b>13,877.11</b>	<b>14,605.45</b>
10.1	<i>Revenue from Interstate sales</i>		1,015.88	823.56
10.2	<i>Revenue from Intrastate sales / Sale of Power</i>		12,861.23	13,781.90
13	<b>Net Gap</b>		<b>-3,056.99</b>	<b>-3,239.98</b>
14.1	<i>Less: AP-Subsidy</i>		2,855.89	2,998.68
15	<b>GAP After AP Subsidy</b>		<b>-201.11</b>	<b>-241.30</b>
16	Revenue Gap of True Up carried forward			(1,651.04)
17	<b>Net Gap</b>			<b>(1,892.34)</b>

**Table 11: Wheeling and Retail ARR for FY 2018-19 and FY 2019-20 (In Crs.)**

Summary of ARR of DHBVN		FY 2018-19		FY 2019-20			
S. No.	Particulars	Wheeling	Retail	Wheeling	Retail	Wheeling	Retail
<b>1</b>	<b>Total Power Purchase Expense</b>	<b>0.00%</b>	<b>100.00%</b>	-	<b>14,538.18</b>	-	<b>15,450.51</b>
1.1	Power Purchase Expense	0.00%	100.00%	-	12,349.81	-	13,152.73
1.2	Interstate transmission Charge	0.00%	100.00%	-	1,219.21	-	1,280.17
1.3	Intrastate transmission charges and SLDC charges	0.00%	100.00%	-	969.15	-	1,017.61
<b>2</b>	<b>Operations and Maintenance Expenses</b>			<b>797.46</b>	<b>809.96</b>	<b>832.97</b>	<b>838.56</b>
2.1	Employee Expense	48.00%	52.00%	454.98	492.89	472.21	511.56
2.2	Administration & General Expense	42.00%	58.00%	38.72	53.46	40.18	55.49
2.3	Repair & Maintenance Expense	70.00%	30.00%	100.01	42.86	115.74	49.60
2.4	Terminal Liability	48.00%	52.00%	203.76	220.74	204.84	221.91
<b>3</b>	<b>Depreciation</b>	<b>82.00%</b>	<b>18.00%</b>	<b>245.85</b>	<b>53.97</b>	<b>314.22</b>	<b>68.97</b>
<b>4</b>	<b>Return on Equity Capital</b>	<b>90.00%</b>	<b>10.00%</b>	<b>227.66</b>	<b>25.30</b>	<b>256.71</b>	<b>28.52</b>
<b>5</b>	<b>Other Expenses</b>	<b>29.00%</b>	<b>71.00%</b>	<b>18.65</b>	<b>45.66</b>	<b>19.98</b>	<b>48.93</b>
<b>6</b>	<b>Interest on Actual Working Loans</b>			<b>152.08</b>	<b>488.86</b>	<b>149.46</b>	<b>306.11</b>
6.1	Interest on UDAY bonds	10.00%	90.00%	29.58	266.26	9.60	86.39
6.2	Interest WC loans including CC/OD limits	10.00%	90.00%	13.48	121.29	12.67	114.03
6.3	Interest on CAPEX loans	90.00%	10.00%	108.15	12.02	126.70	14.08
6.4	Interest on Consumer Security Deposit	0.00%	100.00%	-	81.53	-	87.12
6.5	Other Interest Cost	10.00%	90.00%	0.86	7.78	0.50	4.50
<b>7</b>	<b>Total Expenditure</b>			<b>1,441.70</b>	<b>15,961.92</b>	<b>1,573.35</b>	<b>16,741.60</b>
<b>8</b>	<b>Less: Non-Tariff Income</b>	<b>11.00%</b>	<b>89.00%</b>	<b>51.65</b>	<b>417.87</b>	<b>51.65</b>	<b>417.87</b>
<b>9</b>	<b>Net Aggregate Revenue Requirement</b>			<b>1,390.05</b>	<b>15,544.05</b>	<b>1,521.70</b>	<b>16,323.74</b>

### 1.14 Recovery of Gaps

The ARR has been prepared on the basis of actuals, and the foreseeable expenses and revenue. The Hon'ble Commission is requested to continue with the current levels of tariff and FSA based on which the total gap after True-up for FY 2017-18 comes at Rs. 1,651.04 Crores; after re-assessment of ARR gap for FY 2018-19 comes out to be Rs. 201.11 Crores and for FY 2019-20 at Rs. 1,892.34 Crores respectively.

The resultant gap after continuation of current levels of tariff will be met through the OFR as proposed under UDAY.