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.

6. 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

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 1st 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 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.

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 1st December, 2017 till date to the consumers.

Peak Load Exemption Charges (PLEC)

12. PLEC on Open Access consumers was introduced vide HERC 1st Amendment dated 3rd 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.

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 7th 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

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%.

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 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.

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

	Objections	Replies
	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.	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.
	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	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 a 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

	Objections	Replies
	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 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 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.	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 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. 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

	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*

	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

	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 in Haryana • The manufacturing sector of India is witnessing stagnancy and degrowth. 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 uninterrupted power at competitive rates.	It is submitted that the tariff of different states cannot be compared due to difference in power purchase mix, loss levels, Consumer Mix and thereby the Cost of Supply. The comparison of tariff in various states should be judged against respective average power purchase cost as the tariff rationalization is based on the overall approved annual revenue requirement of the DISCOMs, out of which around 85% to 90% corresponds to the net power purchase cost. The Commission has a two-sided responsibility to protect the financial interests of the distribution licensees and to balance the interests of various

<table>
<tr><th></th><th>Objections</th><th>Replies</th></tr>
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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.

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

	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] 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 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 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 1st 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 purchase cost vis-à-vis actual 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

	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

	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

	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 [PLEC] PLEC on Open Access consumers was introduced vide HERC 1st amendment dated 3rd 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.	It is submitted that the issue raised by the objector are devoid of merit, as levy of Peak Load Exemption Charges is primarily due to high cost of energy available in Energy Exchange during peak load hours. PLEC is levied keeping in view two factors i.e. to compensate the licensee for scheduling costlier power during PLHs and secondly to contain the demand within available peak capacity. As Open Access Consumers purchase power through energy exchange contributing loading on the system, even licensee are forced to back down the generating stations, still the power drawn by open access contributes in the load. Therefore, PLEC charges must be recovered from open access consumers.
	RPO Obligation for OA consumers 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 reintroduced.	Nigam submits that the Hon'ble Commission is a quasi-judicial body under the Electricity Act 2003 and the RPO obligation for short term OA is applicable as per regulations of the Hon'ble Commission.
	Replacement of Defective Meters Review of the Capex Plan reveals that electro mechanical	Nigam has been making earnest efforts to replace all electromechanical meters in the system including through various schemes

	Objections	Replies
	meters have still not been completely replaced. We request the Commission to direct the Nigam to complete this exercise in a given time frame.	being introduced like Bill Settlement Scheme, MGJG, etc. Pendency in replacement of electromechanical meters is prominent in rural areas primarily due to high public resentment for replacement of 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 of 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 7th 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

<table>
<tr><th></th><th>Objections</th><th>Replies</th></tr>
<tr><td></td><td>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 the Commission to continue the scheme on the same lines as approved in 2017 without the pre-conditions of smart meters and solar power.</td><td>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.</td></tr>
<tr><td></td><td>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.</td><td>Nigam submits that discom has been providing details as and when required by the Hon'ble Commission and also available on its website.</td></tr>
<tr><td></td><td>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.</td><td>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:<table><tr><td>Revenue Gap for FY 2017-18</td><td>(473.63)</td></tr><tr><td>Interest on UDAY</td><td>(2,138.20)</td></tr></table></td></tr>
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<table>
<tr><th></th><th>Objections</th><th>Replies</th></tr>
<tr><td></td><td>Although they have not projected any increase in tariff but we are of the considered opinion that in case, the Nigam was so efficient as any other organization should be in the current scenario, there is scope of reduction particularly in industrial tariff.</td><td><table>
<tr><td>bonds for previous years</td><td></td></tr>
<tr><td>holding Cost</td><td>(462.90)</td></tr>
<tr><td>Decrease in AP Subsidy</td><td>(636.60)</td></tr>
<tr><td>Revenue Gap carried forward</td><td>(3,711.33)</td></tr>
<tr><td>Revenue Gap for FY 2020-21</td><td>(319)</td></tr>
<tr><td>Cumulative Revenue Gap FY 2020-21</td><td>(4,030)</td></tr>
</table></td></tr>
<tr><td></td><td>Energy Sales statement table 42
DHBVN has projected a sales figure of 26394.41 MU for FY 2020-21 reduced industrial output, there is a need to review the Sales estimate for both HT and LT industry. It is pertinent that in FY 2019-20, DHBVN has projected a drop of nearly 396 MU.</td><td>Category wise energy sales for MYT Period from FY 2020-21to FY 2024-25 have been projected by considering 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.</td></tr>
<tr><td></td><td>Distribution Losses
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.
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.</td><td>Discom has submitted the distribution loss trajectory as per the MYT Regulations, 2019 where in collection efficiency to be considered is 99.50% for the entire control period. In regard to the objection of the intervener for distribution loss, Nigam submits that it avoided over commitment and submitted the target distribution loss level of 15% considering the fact that there is saturation in loss levels which can be observed in actual distribution loss of 15.34% in FY 2018-19 & 17.08% till H1 of FY 2019-20. However, Discom has endeavoured to further reduce the same over the second control period.</td></tr>
<tr><td></td><td>Admn. & General Expenses</td><td>Nigam submits that discom has projected</td></tr>
</table>

	Objections	Replies
	• 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 the 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. • Similarly, DHBVN has projected a figure of Rs 121.22 Cr for FY 2020-21 applying a 4.6% indexation factor. Commission is requested to down size the projected figure for FY 2020-21 realistically.	A&G expense considering the inflation factor as per the relevant MYT regulations for FY 2019-20 and second control period FY 2020-21 to FY 2024-25. Discom has also submitted WPI and CPI data of relevant years with the MYT petition for reference.
	Employee Expenses 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 FY 2019-20. Commission is requested to approve employee expenses based on the escalate factor of 3.04%.	Nigam has the same response as that of the objection at Sr. No.13, not repeated here for the sake of brevity.
	Non-Tariff Income [NTI] DHBVN has retained NTI at the	The Nigam has not considered the delayed payment surcharge for FY 2018-19 as part

	Objections	Replies
	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.	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

	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 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 Additional Surcharge which made the OA Power financially unviable.	Nigam would like to submit that Cross Subsidy Surcharge (CSS) and Additional Surcharge (AS) are legitimate charges being levied on open access consumers as determined by the Hon'ble Commission to sustain financial viability of the Discom. And also, in line with the applicable regulations and practices followed by the other utilities.
	Para 4.21.1 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.	Nigam has provided its response to this objection in its response to objection at Sr. No. 16, not repeated here for the sake of brevity.

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.

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 electricity rate of Gaushalas	Presently, registered Gaushals are being charged electricity tariff in accordance in Sales Circular No. 69/2007 subject to a maximum rebate in bill/subsidy amount which shall not exceed Rs. 2000 per month. 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." In compliance to the announcement, a proposal for providing subsidy of Rs. 2.67 crore per annum (Subjected to True up based actual consumption at the year end) under section 65 of Electricity Act, 2003 stands submitted to Finance Department, Haryana on 04.07.2019 which is pending with FD as on date. Further, the tariff is in the purview of HERC and no rebate can be provided at the DISCOMs level.
2	To reduce the	The tariff is in the purview of HERC and no rebate

Sr.No.	Description	Reply
	electricity rate Anath Ashrams (Orphanages) and Vridhh Ashrams	can be provided at the DISCOMs Level. Further, if the tariff rates are to be reduced. The govt. of Haryana would be required to 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.

1. 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

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 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:

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 un-satisfactory 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.

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
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.	The peak load exemption charges are being charged to HT industrial consumers as per HERC Tariff Order dated 29.05.2015. Genesis 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 22nd 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.
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	The fixed charges are being charged as per the Tariff approved by the Hon'ble Commission. It may be noted that Discom being an obligated entity are bound to create necessary infrastructure and tied up generating stations under long term agreement to ensure the supply of power in most economical and reliable manner to the consumer. However, the complete capacity charges of generating station and network cost have to be borne by the Discom even if the

	Intervener Objection	Discoms Comment
	is equivalent to 25 units/kVA at the current tariff rate, but not a single unit is being provided against these fixed charges.	consumer is not drawing power from the Discom. It would pertinent to mention here that the recovery of fixed charges from the 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.
3.	In the current scenario of financial hardships faced by MSMEs, deposit of ACD (Advance 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.	ACD is being charged to the consumers as per the Regulation 5.5 of the HERC Duty to Supply Regulation 2016. The ACD norms fixed by the Hon'ble Commission are already quite reasonable, as in the event of payment default by the consumer, Discoms had to serve a notice of 15 days to the consumer after grace date before disconnection. Accordingly, the Discoms are bearing the upfront cost of electricity supplied to the consumers. Therefore, ACD norms are reasonable and shall be adhered as directed by the hon'ble Commission. 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.
4.	Another burden on industries is unheard of charges on account of Feeder line losses which is T&D	UHBVN has reduced AT&C losses by 12.16% over the period of four years i.e. from FY 2014-15 to FY 2018-19. It may further be

	Intervener Objection	Discoms Comment
	loss due to inefficiency of Utility's own control/ infrastructure. 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	noted that the Hon'ble Commission has been determining the ARR of Discoms as per the approved T&D losses therefore no inefficiency due to T&D losses had been passed to the consumers through the tariff. Thus, the contention of objector is devoid of any merit. Further, the works of undergrounding the overhead cable has already been initiated by the Discoms under the Smart City project. The 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 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.	The retail supply tariff approved by the Hon'ble Commission is being charged to the various category of consumers. Regarding the rebate of Rs 2/kWh to MSME industries of C&D blocks, it is submitted that the amount balancing the rebate is being provided by the 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 on back flow of current and voltage fluctuations, it would be good to install circuit breaker, which would save opportunity loss on account of replacement of cables and labour.	UHBVN is making earnest efforts to ensure quality and reliable power supply to the consumers. UHBVN has already installed the requisite circuit breakers at substation end to safeguard the distribution infrastructure.

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

(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

1. 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.

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

3. UHBVNL approved the electrical plan for industrial colony of METL, vide later dated 24th 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

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.[1] (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.'

…

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

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.

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 19th 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

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

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 electricity currently being charged at NDS tariff, have made Agro-industries un-viable. 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.

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:

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. 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."

The Commission had issued the Tariff Order on Distribution & Retail Supply ARR & Tariff for FY 2018-19 on 15th 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 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**

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).

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

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 Order dated 15.11.2018	Actual as per Audited accounts	HERC Revised approval
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.**

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 15th 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:

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 20th Nov 2015 under which State shall take over 75% of Discoms debt as on 30th 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: -

- 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	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 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 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 GoI, 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

	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 ***distribution licensee submits all relevant data and information to the satisfaction of the Commission*** **(emphasis added).** *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.*

- *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.**

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	-
2	Bad & Debts written off (Sale of Power + FSA) Domestic & Non-Domestic consumer under Bill Settlement Scheme	637.29	44.00
3	Compensation for injury, death and damage and penalties	6.34	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 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, 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.

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)

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 i.e. @Rs. 2.61 per unit	Rs. Crore	14	127.02	412.05	539.07
Two third to be borne by the Discoms	Rs. Crore	15	84.68	274.70	359.38
One third to be borne by the consumers	Rs. Crore	16	42.34	137.35	179.69
Thus, out of total power purchase cost incurred by DISCOMs, only 2/3rd determined above shall be disallowed and the remaining actual cost shall be allowed					
Actual cost incurred by DISCOMs during the FY 2018-19 (incl HVPNL and SLDC charges)	Rs. Crore	17	11314.36	16029.65	27344.01
Less two third cost of losses to be borne by the Discom	Rs. Crore	21	84.68	274.70	359.38
Net power purchase cost admitted by the Commission for the FY 2018-19	**Rs. 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.

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**

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*		
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*
4.5	*Other Interest and Finance charges including MDR/ 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. 1st 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

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

Sr. no.	Total ARR for FY2018-19	As per Order dated 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 *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 7th 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, pro-rata 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

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.

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)

AP consumption	UHBVN (2018-19)	DHBVN (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

AP consumption	**UHBVN (**2018-19**)**	**DHBVN (**2018-19**)**
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:

- 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.**

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 7th 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

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)

AP Sales Projections	Oct-March					CAGR % for H2 FY20				FY 2019-20		
	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)

AP Sales Projections	Oct-March					CAGR % for H2 FY20				FY 2019-20		
	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					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 (H1 Actual + H2 Proj)	CAGR from FY 20 to FY 15					FY 2020-21 Projected
		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**	Manual = 1%					3,657.12
AP Billing of consumers on feeder other than AP feeder (MU)	**45.14**						45.59
Consumption of other category consumers on AP Feeders (MU)	**16.97**						17.14
Net Normative AP Consumption (MU's)	**3649.07**						3,685.56

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

AP Sales Projections	**FY 2019-20 (H1 Actual + H2 Proj)**	**CAGR from FY 20 to FY 15**					**FY 2020-21**
		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

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 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: -

	UHBVNL		DHBVNL		Total Discoms
	Proposed FY 2020-21	HERC Approved FY 2020-21	Proposed FY 2020-21	HERC Approved FY 2020-21	HERC Approved 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 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.

(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 24th 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: -

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
BBMB	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.

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.

(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:

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, 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%

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 un-allocated 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

Source	HERC Approved FY 2020-21 Power Purchase Quantum 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

Source	HERC Approved FY 2020-21 Power Purchase Quantum and Cost				
	Quantum	Fixed Charges	Energy Charges	Energy Charges	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 21st 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 th 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.

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

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

	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)

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)

AP consumption	UHBVN (2018-19)	DHBVN (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.

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:

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 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**

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".

$$\mathbf{O\&M_n = (R\&M_n + EMP_n + A\&G_n)* (1-Xn) + Terminal\ Liabilities}$$

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.

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

(b) EMP_n *(excluding terminal liabilities)* $+ A\&G_n = (EMP_{n-1} + A\&G_{n-1}) * (INDX_n / INDX_{n-1})$

Where,

$INDX_n$ – 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.

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 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.)

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:

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)

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:

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 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

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

Capital Work in Progress (CWIP)	**FY 2020-21**	**FY 2021-22**	**FY 2022-23**	**FY 2023-24**	**FY 2024-25**
	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	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					

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;

(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 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

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

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	-	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;

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;

*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

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)

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 Deposits	70.27	103.11	112.04	121.35	131.07
Other Interest and Finance charges	10.00	-	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**

Interest on Working Capital Loan	159.30	138.77	140.28	142.16	143.26
Interest on UDAY Bonds	-	-	-	-	-
Total Interest & Finance charges	**442.51**	**536.65**	**610.59**	**677.92**	**728.94**

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 *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)

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Land & Land Rights	-	-	-	-	-
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	-	0.05	0.05	-	-
Less: Depreciation on assets contributed by Consumers and grants	55.23	57.87	59.85	61.83	63.81
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	-	-	-	-	-
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

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)

	FY 2020-21	*FY 2021-22*	*FY 2022-23*	*FY 2023-24*	*FY 2024-25*
Depreciation Particulars					
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: -

*"**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

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 for assets not put to use	283.92	273.40	279.46	263.74	220.14
Add: Equity Received for Capex	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

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

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)

Sr. No.	Particulars	FY 2020-21 (Projected)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)	FY 2024-25 (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 andFinance 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)

Sr. No	Particulars	UHBVN		DHBVN	
		MYT Projection	Revised Projection	MYT Projection	Revised Projection
1	Power Purchase Expense	12,083.67	11,573.32	16,872.46	16,112.62
1.1	Power Purchase Expense	10,605.27	9,981.04	14,896.95	13,969.40
1.2	Interstate transmission Charge	830.40	947.17	1,216.80	1,387.90
1.3	Intrastate transmission charges and SLDC charges	648.00	645.11	758.71	755.33
2	Operations and Maintenance Expenses	1,308.81	1,308.35	1,597.59	1,597.06

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

HERC Approved ARR of DHBVNL for MYT Control Period (Rs Crores)

S. No.	Particulars	FY 2020-21 Proposed	FY 2020-21 Revised ARR	FY 2020-21 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	-	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.**

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 inter-state 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**	

	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

	Elements of cost of service	
1	Per Unit Weighted average cost of power per unit at State/ Discom periphery	485
2	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)	30
	Distribution (net of power purchase cost) and Wheeling cost at consumers end (Paise/kWh)	98
3	Aggregate of transmission, distribution and commercial losses applicable to the 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

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)

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

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)

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)

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

Total ARR for FY 2020-21		DISCOM ARR Filing	Discom Revised Filing	HERC Revenue gap at current 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

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	CAPEX as approved by HERC (Rs. in Cr.)	Expenditure incurred up to 31.03.2019 (Rs. in Cr.)	Funding Agency	Reasons for short fall
1.	**MM Wing**				
a	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	-
e	Material required for release of Non-AP connections & replacement of old assets	230.00	315.18	REC	-
	Total	**352.76**	**382.14**		

Sr. No	Categories	CAPEX as approved by HERC (Rs. in Cr.)	Expenditure incurred up to 31.03.2019 (Rs. in Cr.)	Funding Agency	Reasons for short fall
2.	**PD&C Wing**				
A					
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 sub-stations	96.00	92.29	REC, JICA & DDU	
c	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 & IPDS	Due to delay in award of the project. The work could not be completed within stipulated time period. The work is in progress and likely to be completed by January 2020 under DDUGJY scheme. All the works of 11 kV completed except in Karnal Circle under IPDS. The work of Karnal Circle also completed in June 2019
j	Distribution Transformer (63,100, 200 kVA)	37.55	30.38		
k	LT ABC & LT Armoured Cable Line	32.67	25.67		
l	Augmentation- DTR, Existing line on conductor to ABXLPE, Augmentation of 11kV lines	9.46	6.46		
m	Energy Meters along with allied material	5.20	5.20		
n	Solar Project	1.71	1.71		
	Total-A	**400.11**	**318.79**		
B					
o	Mhara Gaon Jagmag Gaon scheme for rural area and feeder sanitization for Urban area/LRP/Replacement of iron pole.	300.00	180.42	REC	The work has been delayed due to re-allotment of work in Karnal Circle. Initially the works could not pick up the pace however the

Sr. No	Categories	CAPEX as approved by HERC (Rs. in Cr.)	Expenditure incurred up to 31.03.2019 (Rs. in Cr.)	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**				
a	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
c	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	
e	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	
	Total	**135.00**	**0.00**		
4.	**CAPEX under UDAY (Ujjwal DISCOM Assurance Yojana)**				
a	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

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**

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 actual CAPEX during FY 2018-19 (in Cr.)	
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**

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 actual CAPEX during FY 2018-19 (in Cr.)	
2		**Load Growth schemes**				
2 (a)		New 33 kV Substations with connected lines	150.00		101.52	91.44
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(e)		Material required for release of Non-AP connections & replacement of old assets	171.00		164.24	165.89
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(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(l)		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
		Total	**543.87**		**536.97**	**535.33**
3		**R-APDRP**				
		Implementation of R-APDRP (Part-A)	8.80		88.75	0.00
		Total	**8.80**		**88.75**	**0.00**
4		**Other works**				
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

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 actual CAPEX during FY 2018-19 (in Cr.)	
		02.06.2017. Approximately 40% work already completed and provision has been made for taking care of remaining works.				
4 (c)		Civil works	10.00		9.00	8.38
4 (d)		Shifting of dangerous 33 kV lines passing over residential areas under DHBVN	5.00		10.39	5.78
4 (e)		Mhara Gaon Jagmag Gaon	190.00		119.74	118.89
4 (f)		Other works for system improvement - Procurement of IT Equipment &Softwares	8.00		9.00	2.55
4 (g)		Smart City Gurgaon (HT& LT Lines, DTs, U/G Cables, RMUs and FRTUs Etc.) including SCADA Project, IMT, Manesar	235.00		138.00	137.08
4 (h)		Smart City Faridabad, Hisar & Rewari (HT & LT Lines, DTs, U/G Cables, RMUs and FRTUs Etc.)	68.00		0.00	0.00
4 (i)		Shifting of 11 lines passing over residential areas under DHBVN.	20.00		5.00	0.00
4 (J)		Works under EESL (Smart Meters)	55.00		0.00	0.00
		Total	**596.00**		**298.04**	**276.03**
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	12.33		2.41	0.00
5 (b)		Boundary meters for Villages in Rural Areas (3648 number of villages i.e. 7296 meters)	10.00		0.00	0.00
		Total	**22.33**		**2.41**	**0.00**
	G. Total	**1300.00**	**1170.00**	**975.00**	**839.30**	

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 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 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)

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 sub-stations 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	Consumer 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 completed 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

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 &LT Lines, DTs, U/G Cables, RMU and FRTUs etc)	72.00	-	100.00	Nigam's Funding
15	Smart City Panchkula (HT &LT Lines, DTs, U/G Cables, RMU and FRTUs etc)	46.00			
16	Smart City Panipat (HT &LT Lines, DTs, U/G Cables, RMU and FRTUs etc)	41.00			
17	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. Data Migration (IPDS & Balance Areas) 3.GIS Indexing (IPDS & Balance areas)	5.47 2.61 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	263.02	6.83	REC
21	Procurement of three phase meters for replacement of defective meters & release of new connections.	10.12		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

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)

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	123.85	66.80	203.93	270.73
	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				
	Metering (3 phase), Solar Energy Meter				
	Solar Project				
	Total	**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/un-authorized 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, RMUs and FRTUs Etc.) including SCADA Project, IMT,	300.00	105.92	153.00	258.92

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 8for 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:

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 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 strengthening including 2 Nos. GIS substations	2 Nos.	10 crores	20.00
	LRP works (Urban sanitization) and works to be carried out under 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 &LT Lines, DTs, U/G Cables, RMU and FRTUs etc)			0.00
	Smart City Panchkula (HT &LT Lines, DTs, U/G Cables, RMU and FRTUs etc)			22.00
	Smart City Panipat (HT &LT 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: -			
	1. 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
	Total			**235.38**
	Grand Total			**1,154.23**

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 2020-21is 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
c	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**			
a	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
c	Augmentation of existing 33 kV lines	50 KM	800000	4.00
d	Bifurcation of 11 kV feeders (Work of bifurcation of feeders, augmentation of ACSR).			70.00
e	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			**652.50**
3	**Other works**			
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
c	Shifting of HT line (33 kv), passing over authorized/un-authorized 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
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)			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

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. No.	Name of the Scheme	Qty.	Cost
1	Creation of new 33 kV sub-stations alongwith Spill Over and associated 33 kV & 11 kV lines including civil works / Normal development (33 kV & 11 kV)	40 Nos.	95.00
2	Augmentation of existing 33 kV sub-stations including civil works	44 Nos.	36.00
3	Augmentation of existing 33 kV lines	56 km	4.00
4	Bifurcation/Trifurcation of overloaded 11 kV feeders	150	25.00
5	Release of tube well connections on Turn Key Basis	15000 Nos.	187.50
6	Construction of UHBVN Head office Buildings		17.00
7	Civil Works other than substation buildings		3.00
8	Works to be carried out under IPDS scheme for system strengthening including 2 Nos. GIS substations	2 Nos.	20.00
9	LRP works (Urban sanitization) and works to be carried out under MGJG scheme		30.00
10	Shifting of 11 kV lines passing over residential areas under UHBVN	595.58 km	10.00
11	Shifting of HT line (33 kV), passing over authorized/un-authorized colonies under jurisdiction of UHBVN	84.38 km	10.00
12	AMC for 33 kV substations		1.00
13	Capacitor Bank		30.00
14	Strengthing of 11 kV lines, 11 kV Ringmain System, New DTs & normal		20.00

Sr. No.	Name of the Scheme	Qty.	Cost
	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 &LT Lines, DTs, U/G Cables, RMU and FRTUs etc)		0.00
17	Smart City Panchkula (HT &LT Lines, DTs, U/G Cables, RMU and FRTUs etc)		22.00
18	Smart City Panipat (HT &LT Lines, DTs, U/G Cables, RMU and FRTUs etc)		22.00
19	SCADA 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

S. No.	Category	Quantity (In Nos.)	Unit Rate (In Rs.)	Revised CAPEX
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	32.00
B	Procurement of three phase meters for replacement of defective meters & release of new connections and procurement of Smart Meters.	50000	1688	10.00
C	Power Factor Improvement (Providing automatic power factor correctors)			10.00
D	Providing of LT Capacitors on 400 KVA and above Distribution Transformers			4.00
	Total			**56.00**
2	**Load Growth schemes**			
a	Creation of new 33 kV sub-stations alongwith associated 33 kV & 11 kV lines	35	55000000	100.00
B	Augmentation of existing 33 kV sub-stations	30	6000000	18.00
C	Augmentation of existing 33 kV lines	50 KM	800000	4.00
D	Bifurcation of 11 kV feeders (Work of bifurcation of feeders, augmentation of ACSR).			40.00

E	Material required for release of Non-AP connections & replacement of old assets			180.00
F	Release of Tube well connection on turnkey basis and segregation of AP load from Rural Urban feeders.	10000	150000	100.00
G	Procurement of power transformers and allied equipment such as 33 kV CTs, 33 kV PTs, 33 kV and 11 kV VCBs, 33 kV Control and Relay Panels etc.	10 MVA-20 Nos 12.5 MVA- 8 Nos		28.00
H	11 KV Lines			138.18
I	Distribution Transformer (25, 63,100, 200 kVA)			
J	LT line with ABC/XLPE Armoured Cable			
K	Augmentation- DTR, Existing line on conductor to ABXLPE, Augmentation of 11kV lines			
L	Metering (3 phase) , Solar Energy Meter			
m	Solar Project			
	Total			**608.18**
3	**Other works**			
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
C	Shifting of HT line (33 kv), passing over authorized/un-authorized colonies under jurisdiction of DHBVN. Note:-Hon'ble Chief Minister has made an announcement on the floor of Haryana Vidhan Sabha that all dangerous wires of 33 KV and above levels passing over the various colonies shall be removed. Accordingly, Worthy ACS/Power, Govt. of Haryana, Power Deptt. directed to prepare the detailed scheme in this regar. Also, Worthy ACS/Power, Govt. of Haryana, Power Deptt. has desired that it may be made part of the CAPEX Plan and approval of HERC be obtained.			10.00
D	Mahara Gaon Jagmag Gaon scheme for rural area and feeder sanitization for Urban area/LRP/Replacement of iron pole.			110.00
E	Other works for system improvement - Procurement of IT Equipment & Softwares			3.00
F	Smart City Gurgaon (HT & LT Lines, DTs, U/G Cables, RMUs and FRTUs Etc.) including SCADA Project, IMT, Manesar(Rs. 24 Crores)			310.00
G	Smart City (Hisar & Rewari (HT & LT Lines, DTs, U/G Cables, RMUs and FRTUs Etc.)			0.00
H	Shifting of 11 lines passing over residential areas under DHBVN.			15.79
I	Double Source of 33 KV Supply	50 KM	4000000	20.00
J	Muffing of existing poles of 11 KV Lines			5.71
	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

	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			**1254.06**

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

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%

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:

Status of Rural Feeder

Distribution Losses	FY 2016-17				FY 2017-18				FY 2018-19			
	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 Losses	FY 2016-17				FY 2017-18				FY 2018-19			
	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 2014-15		FY 2015-16		FY 2016-17		FY 2017-18		FY 2018-19	
	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

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 Licensee	FY 2016-17 (Actual)	FY 2017-18 (Actual)	FY 2018-19 (Actual)	FY 2019-20 (Projected)	FY 2020-21 (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, 2012*that 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 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

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

Particulars	FY 2018-19 (Actual)		FY 2019-20 (Projected)		FY 2020-21 (Projected)	
	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%

Particulars	FY 2018-19 (Actual)		FY 2019-20 (Projected)		FY 2020-21 (Projected)	
	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%		

*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	UHBVN		DHBVN		Discom (Total)	
	MYT Projection	Revised Projection	MYT Projection	Revised Projection	MYT Projection	Revised Projection
Distribution Losses	18.50%	21.50%	14.60%	16.75%	16.22%	18.73%
Collection Efficiency	99.50%	99.00%	99.50%	99.00%	99.50%	99.00%
AT&C Losses	18.91%	22.29%	15.03%	17.58%	16.64%	19.54%

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 over-achieved 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 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) <u>FY 2020-21</u>

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 2020-21and 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: -

Distribution Transformers Failure Rate %

Sr. No.	Year		UHBVNL		DHBVNL	
			Failure Rate excluding transformers damaged within warranty period	Failure Rate including transformers damaged within warranty period	Failure Rate excluding transformers damaged within warranty period	Failure Rate including transformers damaged within warranty period
1	2009-10	Urban	6.56	8.95	4.58	5.79
		Rural	10.78	15.84	9.36	12.52
		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	2011-12	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
		Overall	6.49	10.08	7.14	9.94
5	2013-14	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
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
7	2015-16	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
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%
		Rural	4.64	6.95	3.56%	5.45%
		Overall	4.47	6.67	3.42%	5.20%

* 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, 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 defective meters (ending March, 2019)			No. of defective meters (ending Sept. '19)		
	Rural	Urban	Total	Rural	Urban	Total
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

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…

(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, <u>after the expiry of two years from the appointed date,</u> (emphasis added) except through installation of a <u>correct meter</u> 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 yet to be replaced

Meter Category	Electro-mechanical meters in respect of UHBVNL (ending June, 2019)			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	-	-	-	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 replacement of electromechanical meters, which is evident from the data provided as under:

Details of Electromechanical Meters Pending for Replacement

Particulars	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.

Sr. No.	Directives	Response/Reply by DISCOMs
15.	Smart Meters: DISCOMs are directed to finalize the specifications of smart meters in line	The specifications of the Smart Meters have been finalized and approved by the

Sr. No.	Directives	Response/Reply by DISCOMs
	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 requirement formulated by CEA. 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.

Sr. No.	Directives	Response/Reply by DISCOMs
		Further, keeping in view the requirement of meters the necessary action will be taken accordingly.
16.	Smart Meters: The Commission has analyzed the submissions of the Petitioners and is not satisfied with the progress related to installation of Smart Meters in the State. The petitioners are directed to expedite the installation of all the smart meters along with backend integration work by FY 2019-20. The Commission advise that DISCOMs should not outsource this type of work and do the necessary work at the department level. Further, the help may be taken from the Electronics/Electrical students of technical institutions of Haryana, which would impart training to the students also. A roadmap for the installation of smart meter may be prepared by the concerned S.E/Xen after holding discussion with the head of the concerned institutions. Such step shall lead to minimization of the financial impact, provide relief to the consumers and message will convey to the public consumers that DISCOMs/Govt. is working in their interest. (page 315). DISCOMs shall submit a complete action plan with target dates for introduction of new metering technologies such as smart pre-paid	So far more than 35,000 Smart Meters have been installed in Karnal and Gurugram. All backend system integration work has also been completed. DISCOMs are targeting to install 5 Lac meters by end of 31st June 2021. Further, DISCOMs are in process to purchase the additional 20 Lakh Smart Meters, which are also expected to get installed by 31st December 2021. In regard to outsourcing of smart metering works, it is submitted that new technology being the integral part of the project, DISCOMs has carried out the smart metering on turnkey basis through Corporate System Integrators. The works like replacement of existing meters and installation on smart meters are within the scope of system integrator, as they have taken such component into their cost while participating into the bid. Therefore, keeping the above in view training/internships to institutes/collages will be planned by the DISCOMs in accordance to the implementation of smart metering projects.

Sr. No.	Directives	Response/Reply by DISCOMs
	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 .**

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*

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 name			Number delivered within 30 days			% delivered within 30 days		
	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.

Details of Industrial Applications

Period	Number of services delivered pertaining to new connection EOL, ROL and change of name			Number delivered within 30 days			% delivered within 30 days		
	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

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

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:

Sr. No.	Name of Circle	Total Applications received	Total Number of connections released	Applications Cancelled	Balance Applications	Remarks
UHBVN						
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	Gurugram-2	158	155	2	1	Pending due to stay 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 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.

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

1 Network Expenses (per kWh)		
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)	22414.18
b.	Allowed gross volume of power purchase by the Discoms at State Periphery (MUs) excluding inter-state sales.	47207.03

c.	Expenses (Rs / kWh) (a/b)	0.47
2. **Cost of losses in the system**		
a	Approved Energy available for sale to Discoms (MU)	47207.03
b	Distribution system losses (technical) %	10.61%
c	Losses (MU) (2a X 2b))	5009.58
d	Bulk supply power purchase rate for the Discoms (Rs. / kWh)	4.93
e	Total cost of losses (2dx2c) Rs. million	24693
f	Cost per unit of losses (Rs. /unit) (2e/1b)	0.52
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".

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 **surcharge shall not exceed 20% (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