

State Government under Section 27 of the Indian Electricity Act, 1910 (now repealed), till the current validity of such consent or authorisation.

8.5.3 The surcharge may be collected either by the distribution licensee, the transmission licensee, the STU or the CTU, depending on whose facilities are used by the consumer for availing electricity supplies. In all cases the amounts collected from a particular consumer should be given to the distribution licensee in whose area the consumer is located. In case of two licensees supplying in the same area, the licensee from whom the consumer was availing supply shall be paid the amounts collected”.

The Commission has carefully examined the formula for working out cross-subsidy surcharge and observes as under: -

The voltage wise technical losses filed by the Discoms and that estimated by the Commission for working out voltage wise CoS is as under: -

Voltage level losses submitted by the Discoms

| Voltage Levels | UHBVNL (%) | DHBVNL (%) |
|-----------------------------|------------|------------|
| 33 kV line losses | 0.42 | 0.42 |
| 33 kV Transformation Losses | 0.27 | 0.19 |
| 11 kV line losses | 5.35 | 6.04 |
| 11 kV Transformation Losses | 0.98 | 0.97 |
| LT Line Losses | 5.23 | 4.93 |
| Total Losses upto LT Level | 11.80 | 12.41 |

The Commission, for the purpose of estimating voltage wise CoS has considered the voltage wise losses as estimated by the Discoms.

Based on the voltage-wise loss calculations based on the data submitted by the Discoms, it is possible to work out the total losses up to 11 kV level and overall losses at LT levels. However, working out losses at different HT voltage levels i.e. 66 kV, 132 kV, 220 kV etc. is not possible till such time similar data is made available at these voltages by the Utilities. Hence, for calculating voltage wise losses, the Commission has broadly considered only two categories i.e. HT (11 kV level and above) and LT voltage levels. In line with the National Tariff Policy, the Commission has calculated the voltage wise CoS and Cross Subsidy Surcharge. The difference between technical losses so determined and actual total distribution system losses are considered to be on account of reasons other than technical losses and are therefore taken as commercial losses. The commercial losses so determined have been apportioned between HT and LT voltage levels in proportion to annual gross energy sales at these voltage levels. The annual gross energy sales at the given voltage levels has been taken as the sum of energy consumption of all consumer categories

connected at that voltage plus the technical distribution losses corresponding to that voltage level as worked out in the voltage wise loss calculations as per the details provided in the table below: -

Calculation of Voltage wise losses for the FY 2020-21

| | | UHBVNL | DHBVNL | Total |
|-----|--|----------|----------|----------|
| 1a | HT sales | 4682.29 | 6175.49 | 10857.78 |
| 1b | LT sales | 10905.30 | 16710.56 | 27615.86 |
| 1 | Total Sales | 15587.59 | 22886.05 | 38473.64 |
| 2 | Losses % | | | |
| 2a | HT | 6.04 | 6.65 | |
| 2b | LT | 11.80 | 12.41 | |
| 3 | Loss units | | | |
| 3a | HT | 300.99 | 439.93 | 740.92 |
| 3b | LT | 1458.99 | 2367.60 | 3826.59 |
| 4 | Sales grossed up by Technical losses (1+3) | | | |
| 4a | HT | 4983.28 | 6615.42 | 11598.70 |
| 4b | LT | 12364.29 | 19078.16 | 31442.45 |
| 5 | Combined Technical losses | | | |
| 5a | HT | | | 6.39% |
| 5b | LT | | | 12.17% |
| 5 | Total | | | 10.61% |
| 6 | Total Distribution Losses | 4201.15 | 4532.24 | 8733.39 |
| 7 | Total Commercial losses (6-3) | 2441.17 | 1724.72 | 4165.89 |
| 8 | Commercial losses allocated to HT and LT based on grossed up units (4) | | | |
| 8a | HT | 701.25 | 444.07 | 1145.32 |
| 8b | LT | 1739.92 | 1280.65 | 3020.57 |
| 9 | Total Voltage level distribution losses (3+8) | | | |
| 9a | HT | 1002.24 | 883.99 | 1886.24 |
| 9b | LT | 3198.91 | 3648.25 | 6847.15 |
| 10 | Combined Technical and Commercial losses at Distribution level | | | |
| 10a | HT | | | 14.80% |
| 10b | LT | | | 19.87% |
| 10 | Total | | | 18.50% |
| 11 | Units sent out after accounting for Technical and Commercial Losses | | | |
| 11a | HT | 5684.53 | 7059.48 | 12744.02 |
| 11b | LT | 14104.21 | 20358.81 | 34463.01 |
| 11 | Total | 19788.74 | 27418.29 | 47207.03 |

Accordingly, based on the voltage level distribution losses as worked out above, the calculations for CSS as per National Tariff Policy formula for the FY 2020-21 is as under: -

Cost of Service for FY 2020-21 as per National Tariff Policy methodology

| Elements of cost of service | Rs /kWh |
|---|---------|
| Per Unit Weighted average cost of power per unit at State/ Discom periphery | 4.85 |
| Aggregate of transmission, distribution and wheeling charges applicable to the relevant voltage level | |
| Intrastate Transmission cost at consumers end (Paise/kWh) (Transmission and SLDC cost/ sales) | 0.30 |
| Distribution (net of power purchase cost) and Wheeling cost at consumers end (Paise/kWh) | 0.98 |

| | | |
|--|--|--------|
| | Aggregate of transmission, distribution and commercial losses applicable to the relevant voltage level | |
| | HT | 14.80% |
| | LT | 19.87% |
| | Cost of Service | |
| | C/(1-L/100) +D+R | |
| | HT | 6.97 |
| | LT | 7.33 |
| | Average | 7.23 |

The above loss allocation is reflected in the energy allocators at HT and LT voltage levels i.e. lower cost attributed to the HT consumers and higher cost attributed to the LT Consumers. Thus, the Cost of Service in the case of HT Consumers is comparatively lower than that of the consumers receiving electricity supply at LT voltage. The CSS has been worked out as the difference between the average consumer category-wise average revenue realisation per unit and the voltage-wise CoS of HT or LT as the case may be. The Cross-subsidy surcharge for the FY 2020-21 as per the NTP formula shall be as per the table that follows: -

Cross-subsidy surcharge for FY 2020-21 (Rs/kWh)

| | | CoS (Rs./kWh) | Tariff (FC + EC) (Rs./kWh) | Cross Subsidy Surcharge (Rs./kWh) | Limited to 20% of Tariff |
|---|-----------------------------|---------------|----------------------------|-----------------------------------|--------------------------|
| | | 1 | 2 | 3= 2-1 | |
| 1 | HT industry | 6.97 | 7.59 | 0.62 | 0.62 |
| 2 | Bulk Supply (other than DS) | 6.97 | 7.38 | 0.41 | 0.41 |
| 3 | Railways (Traction) | 6.97 | 7.24 | 0.27 | 0.27 |
| 4 | LT Industry | 7.33 | 7.63 | 0.30 | 0.30 |
| 5 | NDS (HT) | 6.97 | 7.71 | 0.74 | 0.74 |

The applicable CSS worked out above is within 20% (+/-) limit in accordance with the National Tariff Policy.

ADDITIONAL SURCHARGE: The Commission has taken note of the proposal of the Discoms on quantification and levy of additional surcharge for the 2nd Half of the FY 2019-20 in line with Regulation 22 of the HERC (Terms and Conditions for Grant of Connectivity & Open Access for Intrastate Transmission and Distribution System) Regulations 2012 as may be amended from time to time. The Discoms have accordingly proposed to levy an additional surcharge of Rs. 1.15 / kWh from the Open Access Consumers. Given the voluminous data and objections filed by the stakeholders The Commission shall take up the issue separately. Till the time Discoms may continue to levy Additional Surcharge in vogue i.e. @ 1.15 / Unit.

CHAPTER 7

RENEWABLE PURCHASE OBLIGATION (RPO)

Section 86 (1) (e) of the Electricity Act, 2003 mandates the Commission to promote cogeneration and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify, a percentage of the total consumption of electricity in the area of distribution licensee, for mandatory purchase of electricity from such sources.

In accordance with the Regulation 64 of HERC (Terms and Conditions for determination of Tariff for Renewable Energy Sources, Renewable Purchase Obligation and Renewable energy Certificate) Regulations, 2010 the RPO for FY 2011-12 to FY 2017-18 as approved by the Commission were as under: -

| Financial year | Energy Consumption (MU) | %age of Non Solar RPO | Renewable energy (other than Solar) required to be purchased as per overall RPO (MU) | %age of solar RPO (as a %age of overall RPO) | Energy required to be purchased as per Solar RPO (MU) | Total renewable energy required to be purchased (MU) |
|----------------|-------------------------|-----------------------|--|--|---|--|
| 2011-12 | 36075 | 1.50% | 541 | 0.31% | 1.69 | 543 |
| 2012-13 | 40000 | 2.00% | 800 | 0.05%* | 20 | 820 |
| 2013-14 | 41086 | 2.90% | 1191.49 | 0.10%* | 41.09 | 1232.58 |
| 2014-15 | 45028 | 3.00% | 1350.84 | 0.25%* | 112.57 | 1463.41 |
| 2015-16 | 41202 | 2.75% | 1133.05 | 0.75%* | 309.01 | 1442.06 |
| 2016-17 | 46827 | 2.75% | 1287.74 | 1.00%* | 468.27 | 1756.01 |
| 2017-18 | 39209* | 2.75% | 1078.25 | 1.25% | 490.11 | 1568.37 |

* Solar power purchase obligation is 0.05%, 0.1%, 0.25%, 0.75% & 1.00% of total energy consumption for the financial years 2012-13, 2013-14, 2014-15, 2015-16 & 2016-17, respectively.

** Energy available for sale by DISCOMs excluding energy purchased from RE sources and Hydro.

The Commission has notified Haryana Electricity Regulatory Commission (Terms and Conditions for determination of Tariff from Renewable Energy Sources, Renewable Purchase Obligation and Renewable Energy Certificate) Regulations, 2017, on 24.07.2018. Regulation 54 of ibid Regulations, has revised the RPO obligation. Accordingly, RPO obligation for the FY 2017-18 (revised) & FY 2018-19, as approved by the Commission in its Order dated 15.11.2018, is as under: -

| Financial year | Energy Consumption (MU) | %age of Non solar RPO of energy Consumption | Non-solar RPO (MU) | Solar RPO as %age of energy sales | Solar RPO (MU) | Total renewable energy required to be purchased (MU) |
|----------------|-------------------------|---|--------------------|-----------------------------------|----------------|--|
| | | | | | | |

| | | | | | | |
|---------|----------|-------|---------|-------|---------|---------|
| 2017-18 | 39209.18 | 2.75% | 1078.25 | 2.50% | 980.23 | 2058.48 |
| 2018-19 | 38231.92 | 3.00% | 1146.96 | 4.00% | 1529.28 | 2676.23 |
| 2019-20 | 39303.18 | 3.00% | 1179.10 | 5.50% | 2161.67 | 3340.77 |

As per data provided by the State Nodal Agency vide memo 1762 dated 16.05.2019, the shortfall in meeting the RPO for the aforesaid years has been worked out as under:-

| (In MU) | | | | |
|-------------------|-----------------------------|----------------------|-------------------------------|-----------------|
| Type of RE source | RPO backlog till FY 2016-17 | Shortfall FY 2017-18 | Shortfall (excess) FY 2018-19 | Total Shortfall |
| Solar | 377 | 271 | 1202 | 1850 |
| Non-Solar | 405 | 582 | -76 | 911 |
| Total | 782 | 853 | 1126 | 2761 |

Further, the State Nodal Agency vide its Memo no. 1259 dated 19.02.2020 has intimated the RPO compliance status of DISCOMs till Dec, 2019, wherein shortfall of 1532 Mus & 333 MUs has been reported, during the three quarters of FY 2019-20, for Solar RPO and Non-solar RPO, respectively.

The shortfall in meeting the RPO obligations of the DISCOMs is not reducing. Accordingly, the Commission in its Order dated 22.03.2018 in case nos. HERC/PRO-26 of 2015 & HERC/PRO-28 of 2015 after examining the compliance report filed by the Nodal Agency (HAREDA) and observed that *“there have been instances when the mandated reports have not been filed with the Commission in compliance of the RPO regulations. The Commission directed HAREDA and the obligated entities to strictly comply with the RPO through purchase of RE power and / or REC in case of power surplus scenario and also the filing requirements. Further, HAREDA was also directed to ensure that its website is kept upto-date with the information filed by the obligated entities. The Commission further directed that HPPC and other obligated entities shall assess the shortfall in meeting RPO for the FY 2016-17 and take suitable action to meet at least 50% of the shortfall so determined by purchase of REC’s. DISCOMs are directed to file the compliance report of the same within 45 days from the date of issue of this Order.”*

The same decision of the Commission was reiterated in the Order of the Commission dated 07.03.2019, to ensure its compliance.

Further, DISCOMs had filed a Review Petition (HERC/RA-18 of 2019) against the Order of the Commission dated 07.03.2019, praying to either allow to procure the energy from solar generating sources at the rate available in the market or to allow to carry forward the shortfall of Solar RPO in next financial year. The said Review Petition was disposed of by the Commission, vide its Order dated 22.10.2019, deciding as under: -

“The Commission observes with concern that even after the lapse of one and half year, the DISCOMs have not been able to meet the shortfall of RPO obligations for the FY 2016-17. Further, as per the RPO compliance report received from HAREDA, vide letter no. 1762 dated 16.05.2019, there is shortfall in meeting RPO obligations by HPPC/DISCOMs till 31.03.2019 (Solar 1850.44 MUs and Non Solar 910.8 MUs, which includes backlog of RPO obligations in 648.44 MUs and Non Solar 986.80 MUs).

In view of the above discussions, the Commission is not inclined to reconsider its decision and HPPC/DISCOMs are directed to comply with the directions of the Commission to take suitable action to meet at least 50% of the shortfall by purchase of REC’s. The compliance report in this regard may be submitted within one month from the date of issue of this Order.”

The Commission, issued Show Cause Notice to DISCOMs under section 142 and 146 of the Electricity Act, 2003, vide letter no. 2116-17/HERC/Tariff dated 02.03.2020 and directed them to explain within 15 days their position for continuous non-compliance in meeting the current year RPO as well as back log as per Commission’s various Orders.

In reply to the Show Cause Notice dated 02.03.2020, HPPC on behalf of both the DISCOMs filed vide memo no. Ch-56/CE/HPPC/SE/C&R-I/RE Power dated 19.03.2020, has requested to drop the show cause notice, submitting as under:-

1. Haryana Electricity Regulatory Commission introduced RPOs in the State on 3rd February, 2011 vide HERC (Terms and Conditions for determination of Tariff from Renewable Regulations, 2010. The Commission subsequently revised the RPO targets vide amendment to the said Regulations on 25.11.2011 and again on 15.07.2014 fixing the RPOs at 2.5% for non-solar and 3% for solar power. The RPO targets have been revised once again vide RE Regulations, 2017 notified on 24.07.2018. as per the revised RPO trajectory. Discoms have to achieve 11% (3% non-solar and 8% solar) by FY 2021-22 against the pre-revised target of 5.5% as shown below:-

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

Thus, with effect from 23.07.2019, RPOs have been doubled from 5.5% to 11% with Solar RPOs increasing nearly three fold from 3% to 8%.

As on date, the existing solar power capacity available with Haryana DISCOMs through long term agreements is 125.8 MW and 231 MW through solar rooftop. Further, 266 MW is available from non-solar sources.

During the last three years, the HPPC has made the following tie-ups for procurement of RE Power in order to fulfil the mandated RPOs:

NON SOLAR

| Sr. No. | Name of the firm and /or scheme | Contracted capacity (MW) | Dated of Singing of PPA | Scheduled Commissioning of Project |
|---------------------------------|---|--------------------------|-------------------------|---|
| Wind Power Projects | | | | |
| 1 | Solar Energy Corporation of India (SECI) | 150 | 13.12.2017 | Out of 250 MW, 100 MW has started flowing and balance 150 MW is expected by March, 2020 |
| 2 | Solar Energy Corporation of India (SECI) | 350 | 17.05.2018 | March, 2021 |
| 3 | Solar Energy Corporation of India (SECI) | 590 | 21.01.2019 | Feb,2021 |
| 4 | Solar Energy Corporation of India (SECI) (Wind + Solar) | 110 | 11.07.2019 | April, 2021 |
| Waste to Energy Projects | | | | |
| 4 | JBM Environment Management Pvt. Ltd. | 6.77 | 21.09.2018 | 20.09.2020 |
| 5 | Ecogreen Energy Gurgaon Faridabad Pvt. Ltd. | 25 | Yet to be singed | 2121-22 |
| Biomass Based Projects | | | | |
| 6 | Small Biomass Projects (10 Nos) | 66.2 | 2018 & 2019 | 2020-21 & 2021-22 |
| Total | | 1297.97 | | |

SOLAR

| Sr. No | Name of the Firm | Contracted capacity (MW) | Date of signing of PPA | Scheduled Commissioning of Project |
|--------------|---|--------------------------|---|------------------------------------|
| 1 | Solar Energy Corporation of India (SECI) | 100 | 27.11.2018 | 25.10.2020 |
| 2 | Solar Energy Corporation of India (SECI) | 400 | 28.05.2019 | 08.11.2020 |
| 3 | Solar Energy Corporation of India (SECI) (Wind + Solar) | 350 | 11.07.2019 | April, 2021 |
| 4 | NIT-77 (300 MW on long term basis) | 240 | Under process | 2021-22 |
| 5 | NTPC (Solar) | 700 | Consent given and allocation is awaited | 2021-22 |
| 6 | HPGCL (Solar) | 93 | Under process | 2020-21 |
| 7 | PM Kusum | 25 | Under process | 2021-22 |
| 8 | Solar Energy Corporation of India (SECI) | 250 | 19.03.2020 | 2021-22 |
| Total | | 2139 | | |

In addition to above, 100 MW per year is expected to be added every year through solar rooftop.

With the PPAs/ tie-ups as tabulated above, HPPC shall meet its yearly RPO targets by FY 2021-22 in respect of Non-Solar and Solar respectively in spite of the sharp increase in solar RPOs in July, 2018. The actual achievement of non-solar and solar RPOs shall be to the tune of 12% and 11% each by FY 2021-22. The quantum of solar and non-solar energy

required to meet the RPOs vis-à-vis expected to achieve as per the tie-ups made by HPPC is tabulated as under:-

| Year | Estimated energy consumption by the Discoms eligible for RPOs | RPO targets in Mus as per HERC | | Mus envisaged from tie-ups | | % age RPOs achieved/ to be achieved | |
|---------|---|--------------------------------|-----------|----------------------------|-----------|-------------------------------------|-----------|
| | | Solar | Non solar | Solar | Non solar | Solar | Non solar |
| 2018-19 | 38232 | 1529 | 1147 | 327 | 1229 | 0.83 | 3.21 |
| 2019-20 | 39538 | 2175 | 1186 | 546 | 986 | 1.38 | 2.49 |
| 2020-21 | 40997 | 2870 | 1230 | 1321 | 1631 | 3.22 | 3.98 |
| 2021-22 | 42510 | 3401 | 1275 | 4934 | 5220 | 11.61 | 12.28 |

While sufficient PPAs and tie-ups have been arranged to meet RPOs in the long run, deficit in the short run was expected, given the gestation period of various projects. In order to meet the shortfall in the short run, HPPC has taken several steps as detailed below:

Non-solar

- ❖ HPPC during the FY 2016-17 purchased 1385 MUs of Non-solar RE Power through short term contract from HPSEBL by participating in their tender @ 4.70/- per kWh at HP periphery.
- ❖ HPPC procured 584.6 Mus of wind power @ Rs.4.77/- per kWh on short term basis during July- October, 2018 to meet the RPOs for FY 2018-19.
- ❖ Further to meet the shortfall in non solar RPOs for FY 2016-17 and 2017-18, HPPC floated NIT No. 59 on 11.11.2016, NIT-60 on 13.12.2016, NIT-63 on 07.06.2017 and NIT-65 on 06.11.2017 for procurement of Non-solar RE Power on short term basis. However, these NITs could not mature on account of poor response or the tariff discovered not adopted by the Commission being on the higher side.
- ❖ NIT-76 was issued on 25.01.2019 to meet the non solar RPOs of FY 2019-20 wherein bids for meagre quantum of 23.5 MW were received against the tendered quantum of 120 MW. Further, the Commission, did not approve the rate discovered (i.e. Rs. 5.40/- per unit) being on higher side.
- ❖ Tender (NIT-78) on 08.03.2019 was again issued for the balance quantum of NIT-76 i.e. 97 MW, however, there was no response.

SOLAR

- ❖ NIT-72 was floated on 19.03.2018 for procurement of 1000 MUs Solar power but it could not materialize, the tariff discovered @ Rs. 5.18/KWh being on the high side.
- ❖ NIT-73 dated 30.07.2018 for procurement of 2031 MUs Solar Power, also could not materialize, as the tariff discovered @ Rs.5.18/KWh was on the higher side.

- ❖ NIT-75 dated 03.12.2018 for procurement of 1700 MUs Solar Power, did not materialize, as the tariff discovered i.e. Rs. 5.95/- per kWh was on the higher side.
- ❖ The HPPC again floated NIT-79 on 26.07.2019 for procurement of 1320 MUs solar power on short term basis but no bidder turned up on the scheduled date and time.
- ❖ NIT No. 81 dated 20.09.2019 was floated to purchase 1320 MUs from 6.00 Hrs to 18.00 Hrs from 01.11.2019 to 31.10.2020. M/s PTC has offered 300 MW @ Rs.5.10/Kwh. SCPP in its 55th meeting held on 25.11.2019, followed by 13.03.2020 has approved the purchase of this power. The petition to seek source approval and adoption of tariff from the Commission has been filed.

The Commission in its order on true-up for the FY 2017-18, annual (mid-year) performance review for the FY 2018-19, aggregate revenue requirement of UHBVNL & DHBVNL and distribution & retail supply tariff for the FY 2019-20 order dated 07.03.2019 had allowed to carry forward the RPO backlog of previous years stating that:

“The Commission further directed that HPPC and other obligated entities shall assess the shortfall in meeting RPO for the FY 2016-17 and take suitable action to meet at least 50% of the shortfall so determined by purchase of REC’s.”

As the power sector functions in a highly structured regulatory framework, the Discoms are required to obtain approvals at every step, which often leads to delays. Some of the challenges being faced by HPPC include non-approvals, delayed approvals, frequent policy changes, uncertainties attributable to other departments/agencies, etc.

- ❖ Non-approval of 13 nos. solar PPAs with cumulative capacity of 165 MW by the Hon'ble Commission in the year 2015-16.
- ❖ Delay of one and a half year in grant of approval for procurement of 300 MW solar power on long term basis through competitive bidding for which petition was filed in the Commission on 14.07.2017 and approval was received on 18.11.2018. In the meantime, MoP/GoI amended the standard bidding guidelines and another three months were taken in obtaining Hon'ble Commission's approval for revised terms and conditions.
- ❖ Procurement of approx.1385 MUs of Hydro Power procured on short term basis from Himachal Pradesh State Electricity Board (HPSEB) in FY 2016-17 were disallowed by the Hon'ble Commission to the extent of Rs. 443.06 crores. Against the appeal preferred by HPPC before the APTEL, Hon'ble

APTEL vide order dated 08.03.2019 remanded back the matter to the Hon'ble Commission for reconsidering the matter afresh and pass appropriate orders. The Hon'ble Commission, however, vide its order dated 08.05.2019 again disallowed the same. The Hon'ble Commission's order dated 08.05.2019 has been challenged by the HPPC in the APTEL.

- ❖ RPOs were introduced in the State in February, 2011 vide RE Regulations, 2010. The targets, thereafter, have been revised three times in a short span of eight years, making it difficult to prepare any meaningful long term plan.
- ❖ State Solar Policy was framed in the year 2014 as notified on 04.09.2014. subsequently, it was replaced by Haryana Solar Power Policy, 2016 has further been amended on 27.08.2018 and again on 13.05.2019.
- ❖ There are uncertainties associated with other departments/agencies as well. For example, HAREDA has been driving the Grid-connected Roof Top solar Power generation scheme with an ambitions target of 1600 MW by FY 2021-22. However, about 231 MW has come up so far. Similarly, plans to solarise agricultural pump sets are on the drawing board since 2018 but no concrete shape has emerged. Furthermore, various other departments/agencies like the Urban Local Bodies, Sugar mills, education, prisons, etc. have plans to generate RE Power but HPPC has no idea as to the total quantum of solar power likely to be generated from these sources.
- ❖ 700 MW solar power offered by NTPC could not be tied up on account of delay in grant of consent due to procedural delay.

In spite of various challenges mentioned above, Haryana Discoms/HPPC has been continuously endeavouring to fulfil the mandated RPOs not only in the long run but even to clear the backlog by way of short term purchase. It is pertinent to mention that SCPP in its meeting held on 13.03.2020 has also decided that RECs equivalent to 100 MUs be purchased at a ceiling rate of Rs. 1.75 /KWh in a phased manner and 400 Mw solar power at Haryana Periphery (with maximum energy up to 149 MUs in a month and 1752 MUs in a year) on short term basis from 01.05.2020 to 30.04.2021 may be purchased to clear the backlog of RPOs.

Subsequently, UHBVNL filed supplementary ARR Petition, vide memo no. Ch-36/RA-F-25/Vol-76 dated 05.05.2020, on behalf of both the DISCOMs, considering the impact of lockdown due to COVID-19 pandemic, submitting that outbreak of corona pandemic has

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

- (a) Delay in Commissioning of projects under PSAs executed with SECI for supply of 150 MW, 350 MW and 590 MW wind power has led to shortfall of about 750 MUs during FY 2019-20. Similarly, shortfall of about 2500 MUs is expected during FY 2020-21 for delay in commissioning of projects.
- (b) Delay in Commissioning of solar projects under PSAs, executed with SECI for supply of 100 MW, 400 MW and 330 MW solar power, is expected to result into a shortfall of about 525 MUs during FY 2020-21.
- (c) The current situation will hamper the growth of Solar Rooftop in the state and anticipated capacity addition of 100 MW to 150 MW will suffer.
- (d) Delay in processing of power purchase cases/approvals of power purchase due to current situation arising on account of Pandemic Covid-19 may further lead to delay in Renewable Energy Projects for fulfilment of RPOs.
- (e) Solar project of 93 MW envisaged by HPGCL and 25 MW under PM KUSUM will also face delays due of current situation.
- (f) Solar Project of 240 MW (M/s Avaada shortlisted under NIT-77 finalized by HPPC) may also suffer delays due to current situation.

UHBVNL has further submitted that prior to corona virus outbreak, SCPP in its 55th meeting held on 25.11.2019 & 13.02.2020 had approved purchase of solar power on short term to the tune of 1320 MUs through PTC @ Rs. 5.10/- discovered through competitive bidding, floating of another tender for purchase of 400 MW solar power equivalent to the tune of 1800 MUs on short term basis along with purchase of REC equivalent to 100 MUs in order to meet the solar RPO backlog. These measures would have been sufficient to meet the backlog of solar RPOs considerably. However, in the present situation these purchases would impact the Discoms adversely.

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

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

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

1. The Commission has considered the reply filed by the DISCOMs in response to the notice issued under section 142 and 146 of the Electricity Act, 2003, justifying the reason for shortfall in RPO achievements and efforts made to achieve the target in the ensuing year. The Commission has also considered the relief in the RPO targets sought by the DISCOMs for the FY 2020-21 & FY 2021-22, in view of the COVID-19 Pandemic. Although initially Discoms did not make serious efforts to procure RE power to meet RPO targets yet they have been able to tie up with various renewable power producers to SECI etc. It has been submitted by the Discoms that already power purchase agreements for supply of 1080 MW of Solar Power has been entered and the power will start flowing from the year 2021. It has been observed by the Commission that the Discoms have put some efforts to achieve the RPO targets from the year 2021. The Commission is concerned that there is certain backlog in RPO targets for previous financial years, however, in the present scenario due to Covid-19 Pandemic, in view of low industrial demand and overall situation, the Commission has

deliberated upon the issue and come to the conclusion that to clear the backlog of RPO by purchasing RE certificates or otherwise would be fatal at this stage as it would add to avoidable costs which would ultimately be passed on to the consumers. The Commission has decided to waive off the current backlog of RPO in view of unprecedented circumstances due to Covid-19 Pandemic as a onetime measure. The Commission is of the view that the decision to waive off the current backlog of RPO has been taken at a time which falls in rarest of rare category and the same should not be set as a precedent. The Commission directs the Discoms to make every possible endeavour to meet the RPO targets as has been given to them by the Commission in timely manner in true letter and spirit.

2. In accordance with the provisions of the HERC RE Regulations in vogue, the RPO for the FY 2020-21 is 10% of the total energy consumption of the Discoms. The approved RPO for the FY 2020-21 is as under: -

| Energy Consumption for 2020-21 (MU) | %age of Non-solar RPO of energy Consumption | Non solar RPO (MU) | Solar RPO as %age of energy sales | Solar RPO (MU) | Total renewable energy required to be purchased (MU) |
|-------------------------------------|---|--------------------|-----------------------------------|----------------|--|
| 36320.04* | 3.00% | 1089.60 | 7.00% | 2542.40 | 3632.0 |

* Energy available for sale by DISCOMs has been taken net of intra-state transmission losses, excluding energy purchased from RE sources and Hydro.

3. The volume of energy to be purchased from renewable energy sources as per above table is the total RPO of the Discoms for the financial year 2020-21. Therefore, the volume of renewable energy purchased as approved by the Commission as above shall be adjusted against the total RPO of the Discoms.

4. **The Discoms and other obligated entities are directed to provide requisite information to the State Agency on monthly basis by 10th of every month for the previous month to enable the State Agency to submit quarterly report to the Commission.**

CHAPTER 8

TIME OF DAY / USE TARIFF

(Avoid Power Peaking and save Money)

8.1 OBJECTIVE & NEED

If cost variations warrant and metering is cost-effective, seasonal and time-of-use tariffs may be instituted for wholesale and retail sales. It encourages to change the way we use electricity. Time of Use tariff allow customers some flexibility to choose when they use electricity. Electricity consumed in the Low Rate period will be cheaper than usage in the High Rate period. When choosing a Time of Use Tariff, customers need to consider the time and application of power usage in order to achieve the lowest cost option.

The cost differences during different time blocks over a period of 24 hours are currently large enough to warrant time differentiated prices for electricity at both the bulk and retail levels. Such a change in tariff design would increase the efficient use of electricity in Discoms service territory i.e. UHBVNL & DHBVNL. Marginal cost principles also establish that sufficient differences exist in the cost of power across the hours of the day to warrant the institution of time-differentiated prices for bulk service and retail service to large supply customers, where meters are already in place. Further, the Grid Frequency based UI charges in the Northern Region also establishes the fact that in 96-time blocks of 15 minutes each the UI rates shows wide intra –day variations.

The Time of Use (TOU) tariff is designed to encourage large consumers of electricity to use more during the off-peak period than the peak period. The off-peak period is during the night, when our generating system has capacity that is not being used. Hence, by opting for ToD both the Discoms as well as the Consumers stand to gain. The Discoms can avoid purchase of expensive power during the peak period as well as save on Capex on expansion / augmentation of the distribution system while the consumer can lower the average cost of power being consumed by them.

8.2 Proposal by DHBVNL and UHBVNL

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

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

Peak demand hours: 17.30 to 21.00 hrs.

Off Peak demand hours: 21.00 to 05.30 hrs

Normal demand hours: 05.30 to 17.30 hrs.

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

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

- iii. Since the ToU tariff shall be optional, once electing to be charged at the Time of Use Tariff, the consumer / applicant opting for the same shall continue to be charged from the date the Discoms, on an application submitted by a consumer allows the same, upto 31st March.
- iv. All other charges except PLEC on power purchased from the Discoms during the ToU period shall be applicable for the electricity consumers opting for ToU Tariff. But during the non ToU period (April to October) PLEC shall continue to be levied. Also, PLEC shall continue to be levied for Open Access Power during ToU period (November to March) as well as non-ToU period.
- v. In case a consumer opting for ToU tariff does not have ToU compatible meter installed, the ToU compatible meter, as per specifications of the Discoms/CEA shall be procured by the Consumer opting for ToU Tariff. The Discoms shall test, seal and install the same within ten days counted from the day a consumer hands over the meter to the Discoms.
- vi. Other terms and conditions can be as may be prescribed by the Hon'ble Commission.

8.3 Comments/Suggestions made by Stakeholders on ToD

8.3.1 Comments filed by M/s Jindal Stainless (Hisar) Limited, Hisar

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

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

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

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

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

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

Reply of DHBVN:

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

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

Commission's View:

The Commission has considered the submissions of the Intervener mostly related to the conditionalities attached with the existing ToD as well as the reply of DHBVNL on the issue of smart metering. The Commission observes that installing smart meter has now become a national agenda. Hence, the same shall remain a pre-requisite for availing ToD tariff. The same, if not installed by the Discoms, can be installed by the Consumers as per CEA norms. The meters should have appropriate registers to record the consumption during ToD hours for commercial ToD accounting. However, the dispensation of smart grid and rooftop solar related additional incentive shall be done away with.

8.3.2 Comments filed by M/s Faridabad Industries Association

- a. The Commission in its Order of 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.
- b. The scheme approved initially by the Commission was aimed at flattening the demand curve. For any new scheme it takes time for the same to be accepted by the consumer. Unfortunately, the scheme was mismanaged at the field level to the extent that consumers who had utilised the scheme in October, 2018 – March, 2019 have not been paid their dues till date. Secondly there was lack of awareness of the system at the grass root, level; the scheme needs to be marketed properly and we are certain it will achieve desired results.
- c. We do not agree with the proposal to levy a higher rate of tariff for normal hours for consumers who opt for the scheme. We request the Commission to continue the

scheme on the same lines as approved in 2017 without the pre-conditions of smart meters and solar power.

Reply of DHBVN:

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

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

In regard to the claim of the intervener regarding lack of awareness regarding the scheme, Nigam submits that such observation is vague as the scheme is available in the form of sales circular on the website of Discom.

Commission's View:

The Commission has perused the objections filed by the Intervener herein as well as the reply of DHBVN thereto. The Commission observes that the Discoms, in the present ToD petition has proposed introduction of i) ToD benefits for additional consumption ii) 5% surcharge on normal consumption. While the Commission tends to agree with the former due to revenue impact, the latter is not acceptable. Hence, during the normal load hours the tariff shall remain as determined by the Commission even for the consumers who opts for ToD tariff. As far as non-payment of dues are concerned, the Commission has taken note of it and directs the Discoms to settle the dues in each billing cycle, there ought not to be any gap as such. The Discoms are further directed to give wide publicity to the schedule of tariff including ToD Tariff, sales circular may not be sufficient.

8.4 Legal and Policy Framework for ToD Tariff

The section 62 (3) of the Electricity Act 2003 says that:

"The Appropriate Commission shall not, while determining the tariff under this Act, show undue reference to any consumer of electricity but may differentiate according to the consumer's load factor, power factor, voltage, total consumption of electricity

“during any specified period or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required”

The provision no 5.4.9 of the National Electricity Policy also advocates the ToD tariff which says that

“The Act requires all consumers to be metered within two years. The SERCs may obtain from the Distribution Licensees their metering plans, approve these, and monitor the same. The SERCs should encourage use of prepaid meters. In the first instance, TOD meters for large consumers with a minimum load of one MVA are also to be encouraged. The SERCs should also put in place independent third-party meter testing arrangements”

NTP (8.4 Definition of tariff components and their applicability) envisages explicitly the emphasis on the ToD Tariff.

“Two-part tariffs featuring separate fixed and variable charges and Time differentiated tariff shall be introduced on priority for large consumers (say, consumers with demand exceeding 1 MW) within one year. This would also help in flattening the peak and implementing various energy conservation measures”

Earlier orders related to ToD Tariff

1. The ToD tariff was introduced for the first time by the Commission vide its ARR/Tariff Order for Discoms dated 11.07.2017 on optional basis. This option was available to the H.T Industry including Furnace, L.T. Industry, H.T. Non-Domestic, Bulk Supply consumers (Excluding Bulk DS), Public Water Works and Lift Irrigation during October to March, the low demand winter period of the year. The ToD tariff approved by the Hon'ble Commission was as under: -

Time of Day (ToD) Tariff

| Period | Charge | Time |
|--|--|---|
| Off-Peak (October to March) | 15 % rebate on the normal energy charges as approved by the Commission. | From 10 P.M to 05.30 A.M |
| Peak (October to March) | 19% premium over the energy charges determined by the Commission | From 06.30 P.M hours to up to 10.00 P.M |
| Normal demand Hours (October to March) | Normal Tariff | From 05.30 A.M to 06.30 P.M |
| Demand Charges | As determined by the Commission - shall be the same for all categories of consumers including ToU. PLEC shall continue to be applicable for Open Access Power. | |

2. In the ARR/ Tariff Order for Discoms dated 15.11.2018, the Commission decided that the Time of Use/ Time of Day (ToD) tariff introduced by the Commission vide ARR Order dated 11.07.2017 shall continue till further Orders except that the rebate for energy drawl during Off Peak hours shall be @10% (instead of 15% earlier) as per Tariff Order dated 11.07.2017. The ToD tariff was accordingly approved as under:

Time of Use (ToU) Tariff

| Period | Charge | Time |
|---------------------------------------|--|-----------------------------|
| Off-Peak Demand (October to March) | 10 % rebate on the normal energy charges as approved by the Commission. * | From 10:00 P.M to 05.30 A.M |
| Peak Demand (October to March) | 19% premium over the energy charges determined by the Commission | From 06.30 P.M to 10.00 P.M |
| Normal Demand (October to March) | Normal Tariff | From 05.30 A.M to 06.30 P.M |
| Demand Charges | As determined by the Commission - shall be the same for all categories of consumers including ToU. PLEC shall continue to be applicable for Open Access Power. | |

Note: The rebate of 10% shall be increased to 15% in case the consumer installs Smart Meter/Smart Grid as per CEA norms. Further, if such consumer install rooftop solar system also then the rebate shall be increased to 20% and in case the rooftop solar system is accompanied by battery storage system, the rebate shall be increased to 25%. The consumers may be allowed to avail these benefits by giving an undertaking to comply with the terms and conditions mentioned herein above within seven months of the date of undertaking. In case any consumers fail to comply with the undertaking within the period of seven months, the benefits so availed shall have to be refunded immediately along with the interest of 17% per annum.

3. In the ARR/ Tariff Order dated 07.03.2019 for FY 2019-20 the Commission continued the ToD tariff as approved vide ARR/Tariff Order dated 15.11.2018 i.e. the rebate during off peak hours was retained at 10% but an additional condition was imposed as under:-

Note: This rebate shall be allowed only to the consumers who install Smart Meter/Smart Grid, irrespective of the consumer category. The same may be installed by the DISCOMs as well as by the consumer themselves as per the directions of DISCOMs. Further, if such consumer install rooftop solar system also then the rebate shall be increased to 15% and in case the rooftop solar system is accompanied by battery storage system (minimum 15% of Sanctioned Load), the rebate shall increase to 20%. The consumers may be allowed to avail these benefits by giving an

undertaking to comply with the terms and conditions mentioned herein above within seven months of the date of undertaking. In case any consumers fails to comply with the undertaking within the period of seven months, the benefits so availed shall have to be refunded immediately alongwith the interest of 17% per annum. The ToD tariff shall not be applicable to the consumers, who source their power from Captive Generation or Open Access at any point of time after 15.06.2019.

Besides, it was provided that all consumers opting for ToU/TOD tariff with smart meter/smart grid shall be allowed additional rebate of 2% on the additional consumption i.e. consumption over and above the consumption during the corresponding period of previous financial year except for load enhancement cases. Discoms were further directed to submit a comprehensive proposal for ToD tariff including night time concessional tariff.

8.5 Time of Day Tariff in Other States

The Commission, in order to take a view on the ToD Tariff Design considered it appropriate to refer to the ToD tariff as determined by a few States as under:-

| | Bihar | Chhattisgarh | Delhi | Gujrat | Jharkhand | Punjab | Kerala |
|-----------------------|-------------|--------------|-------------|--|-------------|---------------|-------------|
| Peak Hours Surcharge | 20% | 20% | 20% | Rs 60 paise per unit | 20% | Rs 2.00/kVA h | 50% |
| Off Peak Hours Rebate | 15% | 25% | 20% | Rs 30 paise per kWh (Night time concession, exclusively) | 15% | Rs 1.25/ kVAh | 25% |
| Normal hours premium | Normal Rate | Normal Rate | Normal Rate | Normal Rate | Normal Rate | Normal Rate | Normal Rate |

8.6 Revised ToD Tariff

1. A perusal of the table above, reveals that none of the SERCs have allowed any surcharge on the normal period consumption. Hence, the Commission finds no justification to introduce 5% surcharge on the tariff applicable for consumption during the normal period. The peak period surcharge in most of the States (except) Kerala is about 20% and the rebate during the off-peak period is 15% to 25%.
2. It is observed that the cost of power purchase during peak hours is quite high. Time of Day (ToD) tariff is an important Demand Side management (DSM) measure to flatten the load curve and avoid such high cost peaking power purchases. Accordingly, the Commission had introduced Time of Day (ToD) tariff wherein peak hour consumption is charged at higher rates which reflect the higher cost of power

purchase during peak hours. At the same time, a rebate is being offered on consumption during off-peak hours. This is also meant to incentivise consumers to shift a portion of their loads from peak time to off-peak time, thereby improving the system load factor and flatten the load curve. The ToD tariff is aimed at optimizing the cost of power purchase, which constitutes over 80% of the tariff charged from the consumers. It also assumes importance in the context of propagating and implementing DSM and achieving energy efficiency.

3. Introduction of higher peak hour tariff would initially generate additional revenue which would compensate for the reduction in revenue on account of lower tariff during off-peak hours. In the long run, this would provide signals to the consumers to reduce load during peak hours and, wherever possible, shift this consumption to off-peak hours. Any loss of revenue to the utility on account of shifting of load from peak to off-peak hours in the long run would by and large get compensated by way of reduction of off-peak surplus to the extent of increase in off-peak demand.
4. The ToD Tariff would thus have immediate as well as long term benefits for both, consumers as well as the utility and contribute towards controlling the rise in power purchase costs. The Commission has kept the period as as well as time for ToD as proposed by the Discoms. **Resultantly, the ToD Tariff approved by the Commission for HT Industry (including Arc Furnace), LT Industry, NDS, Bulk Supply (other than Bulk (DS) as under: -**

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

- a) The Discoms may extend the ToD Tariff to any other consumer category of consumer receiving supply at HT level / with connected load / contract demand of 50 kW / MVA and above.
- b) The off-peak discount under ToD tariff shall be applicable for power drawn during off peak hours in excess of the normal consumption during the off peak of the corresponding month in the preceding year.

- c) The ToD tariff shall be an option available to the eligible consumers. The consumer may exercise the option by applying to the Discoms for approval. The ToD Consumers have the option to move back to non-ToD regime only once within one Financial Year.
- d) For other than Peak and Off-Peak hours normal Energy Charges shall be applicable.

Concessional Tariff: As the ToD approved by the Commission is on optional basis. The Commission, in order to reduce the burden of fixed cost of surrendered power to the extent possible, has considered it appropriate to allow concessional tariff as approved by the Commission vide Memo No. 822-823/HERC/Tariff dated 13.12.2019 to the HT Consumers for incremental consumption during winter season (November to March), vis-à-vis same period / months of the previous year, during night hours i.e. from 22:00 Hrs to 04:00 Hours. The balance electricity consumption, for consumers opting for this dispensation, shall be billed as per the normal tariff approved by the Commission in the present Order. In case there has been increase or decrease in the load of a particular consumer, the Consumption figures shall be re-worked on a prorate basis i.e. if the load has been increased by say 10%, the base line consumption shall be escalated by 10% for the purpose of working out incremental / additional consumption (Δ kWh / Δ kW). **The benefits of ToD and Concessional Tariff shall not be allowed concurrently.**

The ToD and Concessional Tariff as determined above shall continue unless the same, by a specific Order and after holding consultation with the stakeholders, is amended / withdrawn by the Commission.

The Discoms are directed to submit a Quarterly report with the analysis of the Load Curve of the State depicting the data on different days and hours. The report should include the details of the demand and supply of power with regard to the PPA's and actual power consumption in the State. The data should be made to compare the before and after scenario in view of adoption of ToD and its impact. Also, the accuracy of the data used to compute the period and time of peak and non-peak hours should be submitted with facts to the Commission. It shall be the duty of the Discoms along with SLDC to ensure accurate Demand Side Management (DSM) so that benefit of ToD is optimised.

CHAPTER 9

DISTRIBUTION & RETAIL SUPPLY TARIFF

The Commission observes that the Discoms have projected cumulative revenue gap of Rs. 4030.39 Crores during the first year of the Control Period i.e. FY 2020-21. However, they have prayed that the Commission may continue with the current level of energy charges for the ensuing years of the MYT Control Period.

The Commission has considered the ibid submission and is of the considered view that given the continued un-certainties arising out of COVID – 19 Pandemic, it is difficult to assess the impact on revenue of the Discoms including various concessions to the electricity consumers given by the Discoms / State as well as the CERC / Central Government and the concessions and relief package announced by the Government of India. Hence, the Commission limited to the FY 2020-21, is not inclined to review the existing schedule of Distribution and Retail Supply Tariff. The present exercise is limited to re-alignment of DS Supply Tariff and the tariff applicable to the MSME sector / Agro Industries in Haryana. **The Commission directs the Discoms to conduct a detailed consumer category wise CoS study and submit the same for consideration and approval of the Commission within six months of this Order to enable the Commission to take a comprehensive view on the existing tariff and charges.**

Domestic Supply (DS) Tariff

The Commission observes that at the existing tariff, the revenue realised from the DS Consumers by both the Discoms in the FY 2020-21 shall be about Rs. 6019 Crore at an average rate of revenue realisation Rs. 5.06 / kWh. The Commission observes that a lot of DS consumers fall in Category – I of the existing schedule of tariff. Considering the fact that a high percentage of such consumers are being billed at the MMC rate i.e. Rs. 115 per month of the connected load up to 2 KW and Rs. 70 / KW per month above 2 KW. It is felt that MMC rates trigger in if the consumption of a consumer falls below the threshold level i.e. about 93 Units per month or even if the consumption is nil. In effect the MMC indirectly encourages wasteful consumption. Keeping these factors in mind the Commission, in order to make attractive billing on the basis of tariff instead of MMC and also to provide some relief to the DS Consumers at the margin given the impact of COVID – 19 Pandemic and its impact on employment, income and earnings of the small DS Consumers, has considered it appropriate to revise the tariff applicable for such consumers as under: -

| Revised Domestic Supply Tariff w.e.f 1.04.2020 | | | |
|---|---|--------------|--|
| Category I | Total Consumption up to 100 Units / Month | | |
| | Energy Charges | Fixed Charge | MMC (Rs. Per kW / Month of the Connected Load or part thereof) |
| 0-50 Units / Month | Rs. 2.0 / kWh | NIL | Rs. 115 upto 2 kW and Rs. 70 above 2 kW |
| 51-100 Units | Rs. 2.50 / kWh | Nil | |
| Category II | Total Consumption of more than 100 Units / Month and up to 800 Units / Month | | |
| 0-150 | Rs. 2.50 / kWh | Nil | Rs. 125 upto 2 kW and Rs. 75 above 2 kW |
| 151-250 | Rs. 5.25 / kWh | Nil | |
| 251-500 | Rs. 6.30 / kWh | Nil | |
| 501-800 | Rs. 7.10 / kWh | Nil | |
| Category III | Total Consumption of 801 Units and above / Month | | |
| 801 Units and above | Rs. 7.10 (flat rate with no telescopic tariff benefits) | Nil | Rs. 125 upto 2 kW and Rs. 75 above 2 kW |

All other terms and conditions shall remain the same.

Tariff for Agro – Industries / FPO

The issue of special dispensation to the Agro – based / FPO Industries in Haryana mentioned at para 2.3.3 of the present Order was deliberated at length in the Public Hearing on the ARR / Tariff Petition filed by the Haryana Power Utilities, State Advisory Committee (SAC).

The Commission agrees with the stakeholders that such Industries have very strong backward and forward linkage with the State Agrarian Economy in terms of employment, income and earnings of the farmers. Additionally, such consumers have very limited ability to pass – on the ‘input cost’ including cost of electricity to their ultimate consumers unlike the established Industrial Consumers of electricity. Hence, the Commission is inclined to accept the contention of the stakeholders that some cushion ought to be provided to such consumers without disturbing the revenue balance of the Distribution Licensee(s) in Haryana i.e. UHBVNL and DHBVNL. More so, given the impact of COVID – 19 Pandemic on such small Industries the Commission has considered it appropriate to lower the applicable tariff for such consumers who may be paying Industrial / Commercial tariff.

The Tariff applicable for the aforesaid category of consumers including Pack House, Grading, Packing, Pre-Cooling and Ripening Chamber, Honey Bee, Honey Processing, Tissue culture, Zinga and Fish Farming, Poultry Farm, Pig Farm, Milk Chilling Plant and Cold Storage, Mushroom Farming up to 20 kW load shall pay a single part tariff of Rs. 4.75 / kWh. The MMC shall be Rs. 235 / kW in such cases and no Fixed Charges, if applicable shall be levied.

The Commission observes that in line to the decision of Haryana Govt., the Discoms issued sales circular giving relief to the DS Consumers in the State by way of granting subsidy on

applicable tariff as determined by the Commission. The Tariff as determined by the Commission and effective tariff after Subsidy is re-produced below:-

| Existing Tariff (Rs. / kWh) | | Effective Tariff After Govt. Subsidy (Rs/kWh) | |
|-----------------------------------|--|---|------|
| Category I | | | |
| 0-50 Units / Month | 2.70 | 0-50 # | 2.00 |
| 51-100 Units / Month | 4.50 | - | - |
| Category II | | | |
| 0-150 Units / Month | 4.50 | 0-200 | 2.50 |
| 151-250 Units / Month | 5.25 | 201-250 | 5.25 |
| 251-500 Units / Month | 6.30 | 251-500 ** | 6.30 |
| 501-800 Units / Month | 7.10 | 501-800 | 7.10 |
| Category III | | | |
| Above 801 Units and above / Month | 7.10 (Flat Rate no lower slab rate benefits) | Above 800 | 7.10 |

The effective tariff(s), besides other terms and conditions mentioned in the Sales Circular No. U-16 / 2018, was subject to the following-

Only consumers having monthly consumption of 50 Units or less will get the benefit of subsidised tariff of Rs. 2 / kWh. If the monthly consumption exceeds 50 Units then the tariff for Category II will be applicable for first 50 Units also.

** *Only the consumers having monthly consumption of 500 Units or less will get the benefit of proposed subsidised tariff. If the monthly consumption exceeds 500 Units, the existing tariff will be applicable.*

The Commission observes, that the aforesaid relief on the tariff determined by the Commission u/s 62 of the Electricity Act, 2003, shall create a revenue gap between the revenue requirement (after allocating surplus available from the subsidising consumer categories) of DS Consumers and revenue realisation at the tariff determined by the Commission.

As per section 65 of the Electricity Act, 2003, **“65. Provision of subsidy by State Government** – If the State Government requires the grant of any subsidy to any consumer or class of consumers in the tariff determined by the State Commission under section 62 of the Act, the State Government shall, notwithstanding any direction which may be given under section 108, pay, in advance and in such manner as may be specified, the amount to compensate the person affected by the grant of subsidy in the manner the State Commission may direct ...”.

In view of the ibid statute, the Commission, for the FY 2020-21 and after taking into account the revised DS Supply Tariff, has quantified the subsidy required for the DS Consumer category in the FY 2020-21, being the difference between the revenue realised at the revised DS tariff and the subsidised tariff (Supra). The Commission observes that there are about 55 lakh DS Consumers in Haryana. The average revenue realisation from the DS Consumer after HERC revised tariff of the DS Consumers falling is estimated at Rs. 4.66 / kWh. Due to the relief granted by the Discoms / Haryana Government, the average revenue realisation works out to Rs. 4.24 / kWh i.e. a reduction of Rs. 0.42 / kWh. Resultantly, there is a revenue gap of Rs. 4654.02 Million for the FY 2020-21. The DS Subsidy is tentative estimates only as the exact sales figures in different slabs, as adopted by the Discoms for working out subsidy eligibility could not be established. Hence, the subsidy estimated is subject to true-up on availability of slab wise actual figures.

| Consumer Category | HERC Approved Sales (MU) | Revenue (Rs Million) | Average Revenue Realisation (Rs/kWh) | Estimated Subsidised Rates (Rs/kWh) | Revised Revenue Realisation at Subsidised Tariff (Rs. Million)) |
|--------------------|--------------------------|----------------------|--------------------------------------|-------------------------------------|---|
| 0 - 50 | 2,105 | 4211 | 2.00 | 2.00 | 4211 |
| 51-100 | 1,884 | 4709 | 2.50 | 2.50 | 4709 |
| 0-150 | 1,108 | 4986 | 4.50 | 2.50 | 2770 |
| 151-200 | 886 | 4645 | 5.24 | 2.50 | 2215 |
| 201-250 | 776 | 4080 | 5.26 | 5.26 | 4080 |
| 251-400 | 1,108 | 6981 | 6.30 | 6.30 | 6981 |
| 401-500 | 443 | 2797 | 6.31 | 6.31 | 2797 |
| 501-800 | 1,330 | 8976 | 6.75 | 6.75 | 8976 |
| 801 Unit and above | 1441 | 10231 | 7.10 | 7.10 | 10,231 |
| Total | 11,081 | 51616 | 4.66 | 4.24 | 46970 |

It is evident from the table above, that due to the relief extended to the DS Consumers up to monthly energy consumption of 500 Units per month, the loss of revenue to the Discoms works out to Rs. 465.402 Crore. The same needs to be bridged by way of Subsidy to be provided by the State Government in advance at the beginning of each quarter of the financial year in line with Section 65 of the Act. The Discoms, at the beginning of each quarter, shall seek subsidy from the State Government.

| | | | |
|---|---------|--|--|
| Average Rev Realised Rs. 4.66 / kWh @ HERC revised tariff | | Average Rev Subsidised Rs. 4.24 / kWh at subsidised tariff | |
| Difference | 0.42 | Rs. Per Unit | |
| Quantum | 11081 | MU | |
| | | | |
| Deficit / Subsidy Required | 4654.02 | Rs. Million | |

Agro Industries / FPO:

Keeping in view the above and the Cross – subsidy surcharge limits of the National Tariff Policy of +/- 20%, the tariff determined by the Commission for the NDS category as per the present Order is as under: -

| Non-Domestic Supply | Energy Charges (Rs/kWh/ kVAh) | Fixed Charges (Rs/kW/Month) | MMC (Rs/kW/Month of the Connected Load or part thereof) |
|----------------------------|-------------------------------|-----------------------------|---|
| Upto 5 kW (LT) | 6.35/kWh | Nil | Rs. 235 |
| Above 5 kW and Up to 20 kW | 7.05/kWh | Nil | Rs 235 |

The average revenue realisation from the NDS Consumers for both the Discoms (UH and DH) up to 20 kW taken together is estimated at Rs. 6.70 / kWh on a sale of 218.36 MUs (20 % of NDS sales up to 20 kW i.e. 1091.82 Million Units). Assuming further (in the absence of data) that 20% of sales i.e. 218.36 Million Units is accounted for by the Agro – Industries. The loss of revenue shall be Rs. 1.95 / kWh (6.70-4.75) i.e. Rs. 42.58 Crore (rounded off) in the FY 2020-21.

The Tariff and charges for all other Consumer Categories shall remain unchanged. The schedule of Tariff and Charges is attached at Annexure – A of the present Order.

CHAPTER 10

DIRECTIVES

1. Smart & Prepaid Meters

The Commission observes that in addition to installation of Smart Meters, the Discoms have also submitted a proposal for introduction of prepaid meters. The same has been approved by the Commission. The Commission directs that the Discoms shall ensure that work of installation of 10 Lakhs Smart Meters is completed at the earliest and not later than six months from the date of this Order. The facility of prepaid connection may also be provided to all consumers having smart meters within six months. DISCOMs are directed to expedite the Installation of Smart Meter with associated features and submit year-wise detailed plan of three years to replace conventional energy meters by prepaid smart meters.

2. Consultancy Service

The Commission has taken note that HPPC (a joint venture of UHBVNL and DHBVNL) has initiated the process of appointing Consultancy Firm with the broad objective of providing Consultancy Services for Long Terms Demand Forecasting, Optimum Power Availability Portfolio, Least Cost Power Procurement Strategy, Optimum Utilisation of Surplus Power etc. The Commission observes that transparency and efficiency in managing power purchase cost which comprises about 80% of the cost of power delivered to the electricity consumers as well as the trading function vis-à-vis surplus power is of crucial significance. Hence, the Commission directs that this exercise must be completed at the earliest in Public interest.

3. Solar Power Availability

The Commission has noted with serious concern that the Discoms are lagging behind in achieving Solar RPO targets including the backlog. During the period 1.01.2019 to 31.12.2019 out of total supply of 53099 MUs the supply of solar power was an abysmal 206 MUs i.e. 0.39% The quantum of solar power projected to be available in the FY 2020-21 is only about 744 MU in a total power availability of 68520 MU projected by the Discoms. Given the National / State target for Solar Power and the likely escalation in the Solar RPO under the proposed amendment of the EA, 2003, the available quantum in the FY 2020-21 and the likely additional availability of about 1800 MUs in next two to three years, shall also fall short of the desired levels. The Commission directs the Discoms / HPPC to promote generation and purchase of solar power commensurate with the National Targets. It needs to be noted that the RPO prescribed by the Commission is the minimum benchmark only. Progress of solar power plants to be set up under KUSUM at the tariff determined by the Commission may also be intimated.

4. The relief extended to the electricity consumers due to COVID – 19, reproduced at Para 1.27 of the present Order is approved.
5. The Commission, for the purpose of the present Order and limited to the FY 2020-21 has pegged the distribution loss of the Discoms at 18.5% as against 21.50% and 18.73% proposed by UHBVNL and DHBVNL respectively. As far as the trajectory going forward is concerned the Commission shall re-visit the same after availability of actual data for the FY 2020-21. NMJ
6. **DMRC (Commercial Supply)**
Given the peculiar and commercially win-win situation for both DHBVNL and DMRC, the Commission considers it appropriate to relax anything to the contrary contained in the Single Point Supply Regulations, and directs that DMRC shall carry out metering, billing and revenue collection for the commercial consumers within its premises subject to installation of correct meters as per CEA norms duly tested and jointly sealed with Discoms. The difference between DMRC (Traction) Tariff and NDS Tariff as determined by the Commission shall be credited by the DMRC into the accounts of the Discom concerned as per the billing cycle.

7. AP Sales Third Party Authentication

The Commission notes with concern that despite issuance of directives to this effect in its previous orders a fact also pointed out by the Intervener, DHBVN did not engage a third party for analysing and authenticating its AP sales data for FY 2017-18.

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

8. Power Procurement Plan

while resorting to bidding or calling for expression of interest for power procurement the Discoms must ensure that the power under PPAs already approved by the Commission materialises and also the intra-State generator i.e. HPGCL's power plants are scheduled at least upto the critical minimum threshold before considering backing down.

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

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

9. Capex

There seems to be lack of proper planning and execution of the Capital works on the part of the licensee. The licensee needs to exercise proper monitoring of execution of capital works and control over the item wise expenditure approved by the Commission and also explain the deviations with proper justifications.

UHBVNL- The Commission observes that no expenditure has been indicated for scheme at Sr. No. 4, 14, 15, 16 & 18 for which an amount of Rs. 185.63 Cr. was approved by the Commission. The licensee (UHBVNL) is required to give reasons along with proper justification for no program against these works during FY 2019-20.

The Commission further observes that the proposed Capital Expenditure of Rs. 192 Cr. (at Sr. No. 3(e)) for smart metering appears to be an optimistic target. Keeping in view of the above facts, the Commission approves overall Capital Expenditure Plan of Rs. 980 Cr. for UHBVNL for FY 2020-21 which includes Rs. 225 Cr. for release of AP tube well connections

The Licensee is directed to revise its Capital expenditure plan accordingly and submit the scheme wise details of the proposed expenditure to the Commission within one month of the order.

DHBVNL - The expenditure of Rs. 9.91 Cr. incurred on system strengthening works under IBRD funded projects has been incurred without the approval of the commission which needs to be explained by the Licensee. The Licensee has not specified any reason for the deviations made from the approved CAPEX.

10. Business Plan

The Commission is of the considered view that in light of the lock down and reduction in demand by the Industrial and commercial consumers, the business plan for the MYT

period would require a relook. Accordingly, the licensee is directed to resubmit its business plan along with projected capital investment for the MYT period within 1 months of this order to enable the Commission to take a view in the matter.

11. Feeder Losses

The distribution Licensees are directed to reduce AT&C losses of all urban feeders below 25% and that of Rural feeders below 50% in FY 2020-21. DISCOMs shall submit detailed action plan to achieve the target within two months of issuance of orders.

12. Aggregate Technical & Commercial Loss

UHBVNL is directed to explain, within three months, from the date of this order, the reasons of under achievement and submit an action plan to achieve the target for the FY 2019-20 and FY 2020-21.

13. DT Damage Rate

The commission again directs the licensees to bring down the distribution transformer damage rate below the prescribed limits by FY 2020-21. Any slippage on account of the timeline shall lead to penalty as deemed fit and appropriate by the Commission as per various provisions of the Act and Regulations framed thereunder.

As per MYT Regulations the distribution licensee shall maintain a proper record of failure of the distribution transformers and submit the same in the quarterly report to the Commission. The DISCOMs are again directed to ensure that quarterly reports be submitted regularly without fail and to host the circle wise information on its website regularly.

14. Replacement of electro-mechanical Meters

Petitioners are again directed to replace all the electromechanical meters at least in urban area before filing of next year's ARR / Tariff Petition.

15. Renewable Purchase Obligation

The Commission is not imposing any penalty on the DISCOMs for non-compliance of its earlier orders regarding achievement of RPO targets/purchase of REC. Further, DISCOMs are allowed to carry forward the shortfall, if any, in the achievement of RPO targets for the FY 2020-21 to FY 2021-22. The DISCOMs are required to clear the carried forward backlog of the FY 2020-21, if any, along with the FY 2021-22 targets of

RPO by 31.03.2022 and no further carry forward beyond 31.03.2022 shall be allowed. The Discoms and other obligated entities are directed to provide requisite information to the State Agency on monthly basis by 10th of every month for the previous month to enable the State Agency to submit quarterly report to the Commission.

16. Performance Parameters

The Discoms are directed to publish their performance parameters so that the consumers know how their service provider fares in comparison to the peers.

17. Fully Solar Powered City

In view of the call given by the Hon'ble Prime Minister that every State should have at least one city (either the Capital City, in Haryana it could be Panchkula, or any other renowned tourist destination) which is fully solar powered using Rooftop Solar Generation. The Discoms are directed to coordinate with HAREDA to make this possible in at least one city of Haryana.

18. Prepaid meter

The Commission had notified "the Haryana Electricity Regulatory Commission (Prepaid Metering) Regulations, 2014 (Regulation No. HERC / 32 / 2014). Accordingly, as per regulation 8 of the ibid Regulations a rebate of 5% shall be allowed on the applicable tariff for the consumers availing supply through pre-paid meters subject to the terms and conditions of the said Regulations.

The Commission observes that a lot of dispute / litigations arise between the owner of the premises and tenants including due to the observations of the Auditors of the Discoms. Hence, the Commission directs that wherever facilities exists the Discoms shall issue pre-paid meter for new connections for such premises.

19. Additional Surcharge

The Discoms are directed to file complete data / details of the second half of FY 2019-20 and also place the same on its website for determination of Additional Surcharge to be levied in the first half of the FY 2020-21.

All the directives contained in the various chapters of the present Order shall be complied with by the Discoms within the time line specified for the purpose and all sales circulars/commercial circulars be issued by both the Distribution Licensees uniformly and in consonance with each other.

The Tariff and charges for Distribution & Retail Supply of electricity in Haryana by the distribution licensees i.e. UHBVNL & DHBVNL including CSS and Additional Surcharge as determined in the present Order shall be applicable from the date of this Order i.e. 1.06.2020.

The tariff & charges including CSS and Additional Surcharge shall remain effective until these are revised / amended by the Commission.

This order is signed, dated and issued by the Haryana Electricity Regulatory Commission on 1.06.2020.

Date: 01.06.2020

Place: Panchkula

Naresh Sardana

Member

Pravindra Singh Chauhan

Member

D.S. Dhesi

Chairman

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ANNEXURE -A
SCHEDULE OF TARIFF AND CHARGES

| Sr. No. | Tariff for 2019-20 (W.E.F 01.11.2019) | | | | Tariff for 2020-21 (W.E.F. 01.06.2020) | | | |
|---------|---|--|--|--|--|---|--|--|
| | Category of consumers | Energy Charges (Paisa / kWh or/ kVAh) | Fixed Charge (Rs. per kW per month of the connected load / per kVA of sanctioned contract demand (in case supply is on HT) or as indicated | MMC (Rs. per kW per month of the connected load or part thereof) | Category of consumers | Energy Charges (Paisa / kWh or/ kVAh) | Fixed Charge (Rs. per kW per month of the connected load / per kVA of sanctioned contract demand (in case supply is on HT) or as indicated | MMC (Rs. per kW per month of the connected load or part thereof) |
| | | | | | | | | |
| 1 | Domestic Supply Category I: (Total consumption up to 100 units per month) | | | | Domestic Supply Category I: (Total consumption up to 100 units per month) | | | |
| | 0 - 50 units per month | 270/kWh | Nil | Rs. 115 up to 2 kW and Rs. 70 above 2 kW | 0 - 50 units per month | 200/kWh | Nil | Rs. 115 up to 2 kW and Rs. 70 above 2 kW |
| | 51-100 | 450/kWh | Nil | | 51-100 | 250/kWh | Nil | |
| | Category II: (Total consumption more than 100 units/month and up to 800 units/month) | | | | Category II: (Total consumption more than 100 units/month and up to 800 units/month) | | | |
| | 0-150 | 450/kWh | Nil | Rs 125 upto 2 kW and Rs.75 above 2 kW | 0-150 | 250/kWh | Nil | Rs 125 upto 2 kW and Rs.75 above 2 kW |
| | 151-250 | 525/kWh | Nil | | 151-250 | 525/kWh | Nil | |
| | 251-500 | 630/kWh | Nil | | 251-500 | 630/kWh | Nil | |
| | 501-800 | 710/kWh | Nil | | 501-800 | 710/kWh | Nil | |
| | Category III: | | | | Category III: | | | |
| | 801 Unit and above | 710/kWh (flat rate no telescopic benefits) | Nil | Rs. 125 up to 2 kW and Rs.75 above 2 kW | 801 Unit and above | 710/kWh (Flat rate no telescopic benefit) | Nil | Rs 125 upto 2 kW and Rs.75 above 2 kW |
| 2 | Non-Domestic (including Independent Hoarding / Decorative Lightning) / Decorative Lightning / Temporary Metered supply and others) | | | | Non-Domestic (including Independent Hoarding / Decorative Lightning / Decorative Lightning / Temporary Metered supply and others) | | | |
| | Upto 5 kW (LT) | 635/kWh | Nil | Rs. 235/kW | Upto 5 kW (LT) | 635/kWh | Nil | Rs. 235/kW |
| | Above 5 kW and Up to 20 kW | 705/kWh | Nil | | Above 5 kW and Up to 20 kW | 705/kWh | Nil | |
| | Above 20 kW and upto 50 KW (LT) | 660/kVAh | 160 / kW | Nil | Above 20 kW and upto 50 KW (LT) | 660/kVAh | 160 / kW | Nil |
| | Existing consumers above 50 kW upto 70 kW (LT) | 695/kVAh | 160 / kW | Nil | Existing consumers above 50 kW upto 70 kW (LT) | 695/kVAh | 160 / kW | Nil |
| | Consumers above 50 kW (HT) New | 675/kVAh | 160 / kW | Nil | Consumers above 50 kW (HT) New | 675/kVAh | 160 / kW | Nil |
| 3 | HT Industry (above 50 kW) | | | | HT Industry (above 50 kW) | | | |
| | Supply at 11 KV | 665/kVAh | 170/kVA | Nil | Supply at 11 KV | 665/kVAh | 170/kVA | Nil |
| | Supply at 33 KV | 655/kVAh | 170/kVA | Nil | Supply at 33 KV | 655/kVAh | 170/kVA | Nil |
| | Supply at 66 kV or higher | 645/kVAh | 170/kVA | Nil | Supply at 66 kV or higher | 645/kVAh | 170/kVA | Nil |
| | Supply at 220 kV | 635/kVAh | 170/kVA | Nil | Supply at 220 kV | 635/kVAh | 170/kVA | Nil |
| | Supply at 400 kV | 625/kVAh | 170/kVA | Nil | Supply at 400 kV | 625/kVAh | 170/kVA | Nil |
| | Arc furnaces/ Steel Rolling Mills also applicable to | 695 Paisa per kVAh if supply is at 11 | 170/kVA | Nil | Arc furnaces/ Steel Rolling Mills also | 695 Paisa per kVAh if supply is at 11 kV (See | 170/kVA | Nil |

| Sr. No. | Tariff for 2019-20 (W.E.F 01.11.2019) | | | | Tariff for 2020-21 (W.E.F. 01.06.2020) | | | | |
|---------|--|---------------------------------------|--|--|--|---------------------------------------|--|--|--|
| | Category of consumers | Energy Charges (Paisa / kWh or/ kVAh) | Fixed Charge (Rs. per kW per month of the connected load / per kVA of sanctioned contract demand (in case supply is on HT) or as indicated | MMC (Rs. per kW per month of the connected load or part thereof) | Category of consumers | Energy Charges (Paisa / kWh or/ kVAh) | Fixed Charge (Rs. per kW per month of the connected load / per kVA of sanctioned contract demand (in case supply is on HT) or as indicated | MMC (Rs. per kW per month of the connected load or part thereof) | |
| | Open Access | kV (See note 3 below) | | | applicable to Open Access | note 3 below) | | | |
| 4 | LT Industry - upto 50 kW | | | | LT Industry - upto 50 kW | | | | |
| | Upto 10 KW | 635/kVAh | Nil | Rs. 185/kW | Upto 10 KW | 635/kVAh | Nil | Rs. 185/kW | |
| | Above 10 KW & upto 20 kW | 665/kVAh | Nil | Rs. 185/kW | Above 10 KW & upto 20 kW | 665/kVAh | Nil | Rs. 185/kW | |
| | Above 20 KW and upto 50 KW | 640/kVAh | Rs 160 on 80% of CL | Nil | Above 20 KW and upto 50 KW | 640/kVAh | Rs 160 on 80% of CL | Nil | |
| | Existing consumers above 50 kW upto 70 kW (LT) | 665/kVAh | Rs 160 on 80% of CL | | Existing consumers above 50 kW upto 70 kW (LT) | 665/kVAh | Rs 160 on 80% of CL | Nil | |
| 5 | Agro Industries / FPO (New Category up to 20 kW | | | | 475 / kWh | | | | |
| 6 | Agriculture Tube-well Supply | | | | Agriculture Tube-well Supply | | | | |
| | Metered: (i) with motor upto 15 BHP | 10/kWh | Nil | Rs. 200 / BHP per year | Metered: (i) with motor upto 15 BHP | 10/kWh | Nil | Rs. 200 / BHP per year | |
| | (ii) with motor above 15 BHP | 8/kWh | Nil | | (ii) with motor above 15 BHP | 8/kWh | Nil | | |
| | Un-metered (Rs. / Per BHP / Month): (i) with motor upto 15 BHP | Nil | Rs. 15 / Per BHP / Month | Nil | Un-metered (Rs. / Per BHP / Month): (i) with motor upto 15 BHP | Nil | Rs. 15 / Per BHP / Month | Nil | |
| | (ii) with motor above 15 BHP | Nil | Rs. 12 / Per BHP / Month | Nil | (ii) with motor above 15 BHP | Nil | Rs. 12 / Per BHP / Month | Nil | |
| 7 | Public Water Works / Lift Irrigation / MITC / Street Light | 735/kWh | 180/kW or BHP except street Light | Nil | Public Water Works / Lift Irrigation / MITC / Street Light | 735/kWh | 180/kW or BHP except street Light | Nil | |
| 8 | Railway Traction | | | | Railway Traction | | | | |
| | Supply at 11 KV | 655/kVAh | 160/kVA | Nil | Supply at 11 KV | 655/kVAh | 160/kVA | Nil | |
| | Supply at 33 KV | 645/kVAh | 160/kVA | Nil | Supply at 33 KV | 645/kVAh | 160/kVA | Nil | |
| | Supply at 66 or 132 KV | 635/kVAh | 160/kVA | Nil | Supply at 66 or 132 KV | 635/kVAh | 160/kVA | Nil | |
| | Supply at | 625/kVAh | 160/kVA | Nil | Supply at | 625/kVAh | 160/kVA | Nil | |

| Sr. No. | Tariff for 2019-20 (W.E.F 01.11.2019) | | | | Tariff for 2020-21 (W.E.F. 01.06.2020) | | | |
|---------|--|---------------------------------------|--|--|--|---------------------------------------|--|--|
| | Category of consumers | Energy Charges (Paisa / kWh or/ kVAh) | Fixed Charge (Rs. per kW per month of the connected load / per kVA of sanctioned contract demand (in case supply is on HT) or as indicated | MMC (Rs. per kW per month of the connected load or part thereof) | Category of consumers | Energy Charges (Paisa / kWh or/ kVAh) | Fixed Charge (Rs. per kW per month of the connected load / per kVA of sanctioned contract demand (in case supply is on HT) or as indicated | MMC (Rs. per kW per month of the connected load or part thereof) |
| | 220 kV | | | | 220 kV | | | |
| 9 | DMRC | | | | DMRC | | | |
| | Supply at 66 kV or 132 kV | 625/kVAh | 160/kVA | Nil | Supply at 66 kV or 132 kV | 625/kVAh | 160/kVA | Nil |
| 10 | Bulk Supply | | | | Bulk Supply | | | |
| | Supply at LT | 650/kVAh | 160/kW or Rs. 160/kVA as applicable (see note 5) | Nil | Supply at LT | 650/kVAh | 160/kW or Rs. 160/kVA as applicable (see note 5) | Nil |
| | Supply at 11 kV | 640/kVAh | | Nil | Supply at 11 kV | 640/kVAh | | Nil |
| | Supply at 33 kV | 630/kVAh | | Nil | Supply at 33 kV | 630/kVAh | | Nil |
| | Supply at 66 or 132 kV | 620/kVAh | | Nil | Supply at 66 or 132 kV | 620/kVAh | | Nil |
| | Supply at 220 kV | 615/kVAh | | Nil | Supply at 220 kV | 615/kVAh | | Nil |
| 11 | Bulk Supply (Domestic) | | | | Bulk Supply (Domestic) | | | |
| | For total consumption in a month not exceeding 800 units/ flat/dwelling unit (DU). | 525 /kWh | Rs. 100 /kW of the recorded demand | Nil | For total consumption in a month not exceeding 800 units/ flat/dwelling unit (DU). | 525 /kWh | Rs. 100 /kW of the recorded demand | Nil |
| | For total consumption in a month exceeding 800 units/flat/ DU. | 620 /kWh | Rs. 100 /kW of the recorded demand | Nil | For total consumption in a month exceeding 800 units/flat/ DU. | 620 /kWh | Rs. 100 /kW of the recorded demand | Nil |

Notes:

1. The incentive on installation of rooftop solar system as per HAREDA guidelines, shall be Rs. 1/- per unit only for all DS consumers/Bulk supply (domestic) consumers, installing solar system. In case the solar system is accompanied by battery storage system of the equivalent capacity, additional incentive of Rs. 1/- per unit shall also be provided, for Bulk Supply (Domestic) consumers only.
2. Energy charges in case of Domestic consumers are telescopic in nature up to the consumption of 800 Units / month. In case of consumption more than 800 units/month, no slab benefit shall be admissible and tariff applicable will be 710 paisa/kWh for total consumption.

3. In case of Arc furnaces/ Steel Rolling Mills for supply at 33 kV and above, the HT Industrial tariff at the corresponding voltage level shall be applicable.
4. Fixed charges for HT Industrial supply and Bulk Supply category are in Rs./kVA of Contract Demand. For Railways and DMRC, the fixed charges are in Rs./kVA of the billable demand.
5. In case of Bulk Supply Consumers (other than Bulk Supply – DS), the fixed charges are in Rs./kW of the connected load where contract demand is not sanctioned and in Rs./kVA of contract demand where contract demand is sanctioned.
6. 80% of the connected load shall be taken into account for levying fixed charges where leviable in case of LT industrial Supply. In case of LT industry above 20 KW where MDI meter is installed the fixed charges shall be Rs. 160/kw/month of recorded demand if it is in kW or Rs. 144/kva/month of recorded demand if the same in in kVA.
7. Fixed charges for Bulk Supply Domestic are in Rs. / kW of the recorded demand.
8. The above tariff does not include Electricity Duty, Municipal Tax and FSA.
9. The consumers who will deposit advance payment online through RTGS/NEFT in the banks authorized by the Discoms equivalent to 120% of energy charges paid in the previous year, within two months of this Order, shall be given a discount of equivalent to Savings Bank rate till the time entire advance is adjusted.
10. Fixed charges for unmetered AP consumers, MITC and Lift Irrigation category are in Rs. / BHP / month. For MITC and Lift Irrigation, DISCOMs are directed to install smart meter as per DISCOMs norms, within three months from the date of this Order. In case the DISCOMs are unable to do so, it may authorize the consumers accordingly, under intimation to the Commission. This exercise be completed within a period of six months from the date of this Order, otherwise tariff equivalent to three times of the normal tariff shall be applicable. AP consumption shall also be metered by utilizing the meter replaced by smart meter. It should be ensured that no supply is un-metered.
11. Under Bulk Supply (Domestic) category no benefit of lower slab shall be admissible in the higher consumption slabs. Total consumption shall be charged at a single tariff depending upon the average consumption/flat/residential unit for that month.
12. Bulk Supply Tariff shall be applicable to orphanage, old-age home, kushtrog ashram and working women hostel. The tariff for Electric Charging Station shall be Rs. 6.20/kWh or Rs.

5.58/kVAh and Rs. 100/kW/month as fixed charges. The tariff for electric crematorium in Haryana shall be Rs. 5.80/kVAh. There shall not be any fixed charges.

13. Certain consumers, during public hearing and other-wise, have expressed the views that sometimes it is difficult to deposit additional consumer security deposit and additional demand charges on enhancement of load. The Commission Orders that in case of enhancement of load where the additional ACD is higher than Rs. 10,000/-, the existing consumer (Panchayat/Nagar Palika/any other social society installing electric crematorium with Smart Meter/Smart Grid as per DISCOMs norms, cremation ground, orphanage, old-age home, kushtrog ashram, working women hostel and E-Vehicle charging station) may be allowed to deposit ACD in 12 equal installments, without payment of any interest. However, facility of depositing additional demand charges/ connection charges in 12 installments along with interest at an appropriate rate not less than 12% p.a., may also be extended to the existing consumers with good payment record. Both the amount as above may form part of energy bills in the next 12 months.

14. In case of Single point supply connections, Bank Guarantee equal to 1.5 times as per the applicable Regulations shall be payable which may be recovered in maximum of 4 (four) phases spanning over a period of 5 (five) years. Such type of instalment facility shall be provided only to those consumers/developer which install Smart meter along-with Smart Grid technologies both internally as well as the main meter. Also consumers/developer should provide undertaking for installation of Roof top Solar as per HAREDA norms.

15. In addition to the tariff as above, the Discoms shall levy FSA as per HERC (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2012.

16. The surcharge of 45 paise/ per unit arc furnace/ steel rolling mills shall also be applicable on Open Access power.

17. Mobile/Telephone towers/Street light of Municipal Corporation be provided circle wise single bill.

18. The consumers of all categories may download their bills from Discoms website. The consumers shall be provided bills through SMS alerts and/ or e-mail without any charge, wherever AMR meter reading has been started. Urban domestic consumers above 10 KW, where AMR reading has started, opting for hard copy of the bill shall have to pay Rs. 20/- per

bill. All other consumers of the urban area, opting for hard copy of the bill, shall have to pay Rs. 100/- per bill. However, no charges on account of distribution of hard copy of the bill shall be levied on the consumers below 10 KW, AP consumers, BPL consumers and consumers in Rural area.

19. Transaction charges (MDR) for payment through payment gateway on the website of the Discoms by way of credit card, debit card, net banking and also the transaction charges for payment through POS machines at the Discoms counters and e-wallets etc. shall be borne by the Discoms subject to a maximum of Rs. 150 / -. Any amount exceeding Rs. 5000 / - shall not be accepted by cash. Payments up to Rs. 20,000 / can be made through cheque. The consumers of urban areas under Municipal Corporations/Municipal Committee shall pay their bills for amount exceeding Rs. 5000/- through above mode of payments including RTGS/NEFT and only through the banks authorized by the Discoms for the purpose.

Provided no benefit/concession provided in this Order shall be applicable to those consumers who are defaulters or whose bill is outstanding for more than two billing cycles.