7 SCHEDULE OF CHARGES

7.1 BACKGROUND

In line with the MERC (Electricity Supply Code and Other Conditions of Supply) Regulations, 2005, TPC-D has sought approval for revision of certain components of "Schedule of Charges" (SoC) for the various services provided to the consumers.

The various approvals for TPC-D's Schedule of Charges are summarised as under:

a) Order dated 22 Decemer, 2007 in Case No 30 of 2006
b) Order dated 28 December 2012 in Case No. 47 of 2012;
c) Order dated 25 July, 2014 in Case No. 83 of 2014 - Actual cost involved for shifting of Service at the request of the consumer;
d) Order dated 26 June 2015 in Case No. 18 of 2015 - MTR for 2nd MYT Control Period - Revision of Service Connection Charges for three-phase LT Supply with motive power up to 27 HP, or other loads up to 20 kW, to Rs. 3000 per consumer;
e) Order dated 9 February, 2018 in Case No. 82 of 2017 – Revision in Service Connection Charges;
f) Order dated 12 September 2018 in Case No. 69 of 2018 - Revision in charges for testing of meters and charges for Open Access consumers.

This Chapter details the proposal of TPC-D for revision of Schedule of Charges and Commission's Analysis and ruling in this regard.

7.2 NEW SCHEDULE OF CHARGES PROPOSED FOR THE CONTROL PERIOD

7.2.1 SoC for services towards "Know Your Energy Consumption" (Optional) for single part consumers including Residential category

TPC-D's Submission

TPC-D has designed a "value-added" service named "Know your Electricity Consumption" (KYEC), wherein a consumer can be provided with details of his / her energy consumption of previous day through a web portal. Many consumers have appreciated this service since the consumer can control his / her future consumption based on this input so that monthly bill is within his/her budget, specifically when there is a change in the slab. The Distribution Licensee is also benefited by getting the load pattern and more data points, which can be

used with analytical tools for Demand forecasting and estimates. Further, it helps and promotes energy conservation and energy efficiency.

Hence, it is proposed that as an option to the consumer, under KYEC scheme, AMR system can be made available to the consumers at a cost. Under the proposed scheme, a modem will be installed to read the meter remotely and associated infrastructure will be created at the backend to capture and store the data. The estimated expenditure for providing this service is as follows:

Table 7-1: Charges for KYEC as submitted by TPC-D

Particulars	Charges (Rs.)
One-time Charges for KYEC	
Modem Installation Charges	300
KYEC configuration charges/ Post configuration site visit charges	200
Total One-time Charges for KYEC	**500**
Monthly Charges for KYEC	
Cost of Modem @Rs.5000 recovered over a period of 3 years	140
Communication charges per month	75
Data management and maintenance charge per month	60
Total Monthly Charges for KYEC	**275**

Accordingly, TPC-D requested the Commission to approve the following Service Charges for providing KYEC to LT single part consumers including Residential consumers. TPC-D reiterated that these charges are optional depending on the consumers who wishes to avail this service.

Table 7-2: Service Charges for KYEC as submitted by TPC-D

Particulars	Charges (Rs.)
Application Charges	500
Monthly Charges	275

Commission's Analysis and Ruling

The Commission appreciates “Know your Electricity Consumption” scheme proposed by TPC-D. The Commission notes that by installing AMR enabled meter and supporting communication system, it is fetching meter data for processing and presenting to the consumer through Web based tool. In the process, TPC-D is collecting meter reading and would saving cost on taking monthly meter reading, further such data would be useful for TPC-D for projecting its demand. Further, it seems that TPC-D is proposing such

investment through Capex model and then recovering cost from specific consumers. Instead if TPC-D opts for opex model wherein service provider by using IoT devices can provide such data to TPC-D on payment of monthly charges. Such charges would be very low if TPC-D opts for large scale implementation and it would substantially reduce meter reading cost of TPC-D. Hence, instead of charging specific consumer, TPC-D should rollout this scheme for large number of consumer and expenses for the same can be recovered through ARR. TPC-D may study feasibility of implementing this scheme through Opex model and accordingly submit proposal for approval of the Commission. Accordingly, the Commission is not approving any charges to be recovered from consumer opting for KYEC scheme.

7.2.2 SoC for processing Reverse Changeover request

TPC-D's Submission

Consumers submit reverse changeover application to the other Distribution Licensee; i.e. the consumer is a changeover consumer of TPC-D and wishes to go back to the other Distribution Licensee. Accordingly, he submits an application to the other Distribution Licensee. Post the receipt of such application, the other Distribution Licensee, as part of the process laid down, forwards the same to TPC-D for further processing. TPC-D has to carry out a number of internal checks such as Vigilance, Revenue Recovery, Billing, etc., before clearance is given for reverse changeover. This involves deployment of resources to process the application for giving clearance.

Considering the efforts and work involved, TPC-D proposed extension of the prevalent SoC for application processing of a new consumer to be made applicable to reverse changeover cases. TPC-D proposed to recover these charges through Final bill of the consumer opting for Reverse changeover. Accordingly, the SoC proposed for processing reverse changeover applications are as follows:

Table 7-3: SoC for processing Reverse Changeover application as submitted by TPC-D (In Rs.)

Particulars	Single Phase	Three Phase	CT Meter	MD/TOD/ HT
Reverse Changeover Application Charges	75	100	100	275

Commission's Analysis and Ruling

The Commission accepts TPC-D's proposal for extension of the prevalent SoC for Application processing of a new consumer to be made applicable to reverse changeover cases, since the time and effort involved is similar in both cases. As stated subsequently, TPC-D has proposed and the Commission has approved increased Application Charges for new connections. Accordingly, the SoC approved for processing reverse changeover applications are as follows:

Table 7-4: Approved SoC for processing Reverse Changeover application (In Rs.)

Particulars	Single Phase	Three Phase	CT Meter	MD/TOD/ HT
Reverse Changeover Application Charges	80	125	125	325

These charges shall be recovered through the Final Bill of the consumer opting for Reverse changeover.

7.3 REVISION IN EXISTING SCHEDULE OF CHARGES

7.3.1 Revision in Application Processing Charges

TPC-D's Submission

The Commission had approved Application Processing Charges for applications made by consumers towards various services required like new connection, change of name, load enhancement, address change, etc., in its Order in Case No. 47 of 2012 dated 28 December, 2012. These charges were approved in 2012. Considering the significant time elapsed and the inflation over the period of time, TPC-D proposed a revision in these SoC by applying CPI from FY 2012-13 onwards till FY 2019-20. Since CPI for entire FY 2019-20 is not available, TPC-D has used the CPI same as FY 2018-19 and arrived at the revised rates as follows:

Table 7-5: Proposed Charges for Application processing and Site visit as submitted by TPC-D (In Rs.)

Particulars	Single Phase	Three Phase	CT Meter	MD/TOD/ HT
Application Processing for new connection/ Load Enhancement/	80	125	125	325

Particulars	Single Phase	Three Phase	CT Meter	MD/TOD/ HT
Category change/ Demand change/ Address change				
Change of name	80	80	80	175
Special visit on consumer request (New Connection, meter reading for interim bill)	175	175	175	1500

Commission's Analysis and Ruling

The Commission accepts TPC-D's proposal for revised Application Processing fees and site visit, as shown in the Table below:

Table 7-6: Approved Charges for Application processing and Site visit (In Rs.)

Particulars	Single Phase	Three Phase	CT Meter	MD/TOD/ HT
Application Processing for new connection/ Load Enhancement/ Category change/ Demand change/ Address change	80	125	125	325
Change of name	80	80	80	175
Special visit on consumer request (New Connection, meter reading for interim bill)	175	175	175	1500

7.3.2 Revision in Application Processing Charges and Operating Charges for Open Access applications

TPC-D's Submission

Over a period of time, number of OA consumers of TPC-D have increased significantly. Majority of the consumers are short-term OA consumers. As the Distribution Licensee is the nodal agency for processing the OA applications for consumer connected to the Licensee, the role of Distribution Licensee has increased significantly with respect to processing the OA applications followed by billing.

For processing the OA applications, a Distribution Licensee has to carry out several activities like scrutinising the documents, validating the consumer eligibility documents

(like Application quantum, ABT meter, Pooling station, PPA and other requisite checks). Further, the Distribution Licensee being the nodal agency for its consumers, after scrutiny of the documents, documents are required to be forwarded to MSLDC, MSEDCL and MSETCL for getting concurrence. Interaction is necessary multiple times with MSLDC, MSEDCL and MSETCL for getting concurrence. Post concurrence, TPC-D re-checks the facts before issuing NOC for granting OA to consumers. Post grant of OA, Distribution Licensee performs several activities for billing the OA consumers either Firm or In-firm, like uploading reading schedules of ABT meter, tracking of schedules, cross verifications with MSLDC, processing of bill, etc. Considering quantum of various activities at site as well as at back end office, the Distribution Licensee needs to be appropriately reimbursed.

The Commission has approved the charges of Rs. 3000 for TPC-D for OA application charges as well as for OA operating charges. Considering the activities involved, it is observed that expenditure incurred towards processing such applications is much higher than the approved charges. Since more and more consumers are opting for OA, difference in the charges collected and the expenditure incurred is borne by the consumers with the Distribution Licensee. Further, the charges approved for the same activities to MSEDCL, vide Order in Case No. 195 of 2017 dated 12 September, 2018, are significantly higher as compared to TPC-D, as shown below:

Table 7-7: MSEDCL's Application Processing Charges & Operating Charges for Open Access applications as submitted by TPC-D (In Rs.)

Load Requisitioned	Processing fee per application (Rs.)	Operating Charges per month (Rs.)
Upto 1 MW	14,500	14,500
More than 1 MW & upto 5 MW	22,000	
More than 5 MW & upto 20 MW	44,000	28,000
More than 20 MW & upto 50 MW	75,000	
More than 50 MW		

Considering the above, TPC-D requested the Commission to approve OA charges equal to that of existing / as revised for the Control Period for MSEDCL for TPC-D. In fact, the Commission may consider uniform applicability of these charges to all Distribution Licensees who deal with OA consumers.

Commission's Analysis and Ruling

The Commission accepts TPC-D's proposal in this regard, as the same are in line with the Charges approved for MSEDCL. The OA Application Processing Charges approved for TPC-D are as under:

Table 7-8: Application Processing Charges & Operating Charges for Open Access applications approved by the Commission (In Rs.)

Load Requisitioned	Processing fee per application (Rs.)	Operating Charges per month (Rs.)
Upto 1 MW	14,500	14,500
More than 1 MW & upto 5 MW	22,000	
More than 5 MW & upto 20 MW	44,000	28,000
More than 20 MW & upto 50 MW	75,000	
More than 50 MW		

7.3.3 Onsite Meter Testing Charges

TPC-D's Submission

While addressing high billing complaints, consumers prefers that the Distribution Licensee visits their premises to inspect and test the meter in their presence, although a laboratory testing facility is available with TPC-D for the consumers wherein the old meter is replaced with new meter and old meter is tested in the lab. To cater to this requirement, TPC-D has to conduct onsite meter testing at consumer premises on consumer request which is a cumbersome activity as compared to testing the meter at site. Such on site testing involves expenditure towards testing team cost, conveyance charges to consumer location, vehicle maintenance charges, Testing equipment & accessories cost, maintenance cost of testing equipment, Meter reading Instrument (MRI) cost & its maintenance cost, meter downloaded data processing. The current rates approved by the Commission are insufficient to cover this cost.

With a view to cover the cost of this activity and in the process cause a deterrent to the consumer as more and more consumers are insisting on onsite testing although meters can also be tested at the laboratory, TPC-D requested for the revision in the on-site meter testing charges as follows:

Table 7-9: Proposed On Site Meter Testing Charges as submitted by TPC-D (In Rs.)

Particulars	Single Phase	Three Phase	CT Meter	MD/TOD/ HT
On Site Meter Testing Charges	650	950	950	950

These charges have been arrived at after analysing the actual cost incurred. Further, these will be applicable only if the meter is found healthy at the time of on-site testing. The charges are not applicable to the consumers where the Meter fails or is not within the permissible limits.

Commission's Analysis and Ruling

The Commission asked TPC-D to submit details and back-up data for the actual costs incurred and claimed against on-site meter testing. TPC-D submitted that more and more consumers are insisting on Onsite Meter testing. In view of this, present charges are not sufficient and needs revision. TPC-D has computed the charges based on the actual activities involved in meter testing on site. The back-up calculations for the same is as given below:

Table 7-10: Cost for Single Phase Meter Testing as submitted by TPC-D (Rs.)

Component	Unit	Legend	Monthly Cost
Per month testing manpower, conveyance & vehicle maintenance charges Rs. 60,000. Total no. of days 26 in a month	Rs.	1	60000
Testing Device price Rs. 70,000, Life span is 5 years, so yearly cost Rs.14,000	Rs.	2	1167
Testing Device maintenance Rs. 7,000 per year	Rs.	3	583
CMRI device cost Rs. 35,000. Life span is 3 years, yearly charges Rs. 11,667	Rs.	4	972
Optical chord cost Rs. 1,800, Life span is 6 months, yearly cost Rs. 3,600	Rs.	5	300
Data processing by data entry operator, software usage	Rs.	6	2288
Total cost of Meter Testing	Rs.	**7= SUM of 1 to 6**	**65310**
Average no. of cases per month	No.	8	104
Cost per Single Phase Meter	**Rs/Meter**	**9=7/8**	**628**

Table 7-11: Cost for Single Phase Meter Testing as submitted by TPC-D (Rs.)

Component	Unit	Legend	Monthly Cost
Per month testing manpower, conveyance & vehicle maintenance charges Rs. 88,000. Total no. of days 26 in a month	Rs.	1	88000
Testing Device price Rs. 1,40,000, Life span is 5 years, so yearly cost Rs.28,000	Rs.	2	2333
Testing Device maintenance Rs. 14,000 per year	Rs.	3	1167

Component	Unit	Legend	Monthly Cost
CMRI device cost Rs. 35,000. Life span is 3 years, yearly charges Rs. 11,667	Rs.	4	972
Optical cord cost Rs. 1,800, Life span is 6 months, yearly cost Rs. 3,600	Rs.	5	300
Data processing by data entry operator, software usage	Rs.	6	2288
Total cost of Meter Testing	Rs.	**7= SUM of 1 to 6**	**95060**
Average no. of cases per month	No.	8	104
Cost per Single Phase Meter	**Rs/Meter**	**9=7/8**	**914**

TPC-D submitted that based on the above calculations, it has proposed on site Meter Testing Charges. The Commission accepts the justification submitted by TPC-D in this regard. Therefore, the Commission accepts TPC-D's proposal for revision in the on-site meter testing charges as follows:

Table 7-12: Approved On Site Meter Testing Charges (In Rs.)

Particulars	Single Phase	Three Phase	CT Meter	MD/TOD/ HT
On Site Meter Testing Charges	650	950	950	950

These charges shall be applicable only if the Meter is found healthy at the time of on-site testing. The charges are not applicable to the consumers where the meter fails or is not within the permissible limits.

7.3.4 Revision in Roof-Top Solar PV System Net Metering Charges

TPC-D's Submission

The Maharashtra Electricity Regulatory Commission (Net Metering for Roof-top Solar Photo Voltaic Systems) Regulations, 2015 was notified on 10 September, 2015. According to these Regulations, the Distribution Licensee shall allow net metering to eligible consumers who have installed or intend to install a renewable generator connected to the Network of such Distribution Licensee. Since the notification of these Regulations, Tata Power-D has processed more than 350 applications.

It is evident that number of consumers opting for Net metering are increasing year on year. Net Metering Regulations provides for collection of Rs. 500/- upto 5 kW and Rs. 1000/- above 5 kW as registration fees from consumers opting for net metering. However, there

are a significant number of activities involved in providing connectivity under the Net Metering to a consumer. These activities can be broadly divided into two types: i) Application Processing and ii) Consumer Site related activities. The activities under these heads are listed below:

a) Application Processing:

- Verification of Net metering application and processing the same.
- Sending approval letter with all terms & Conditions
- Checking work completion report
- Preparing agreement
- Billing (Programming Changes in the billing system for specialised billing) as per Regulations.
- Co-ordination, documentation, portal development/modification etc. as per MNRE guidelines.

b) Consumer Site Related Activities for each application

- Site visit for checking technical feasibility
- Site visit for testing & commissioning (technical certification) of the roof-top solar PV system
- Site visit for installation of Net meter or Solar Meter and check meter
- Site visit to synchronize the Roof - top Solar PV system

Considering the manhours of engineers and technicians involved in the entire process, the expenditure incurred towards implementation of a net metering scheme works out to around Rs. 6,250/-. However, the Regulations provide for collection of only Rs. 500 and Rs 1000 per application for different sizes of plants. Due to this difference, the balance expenditure incurred gets levied to the rest of the consumers, although the Net Metering is a consumer specific activity.

Further, in August, 2019, MNRE published operational guidelines for implementation of Phase-II of grid connected solar rooftop programme. As per the guidelines, the Distribution Licensee is the centralised agency for implementation of Phase-II rooftop solar scheme and will coordinate with consumers, development partners (vendors) and MNRE for subsidy (CFA). The Distribution Licensee would be responsible to promote and implement the scheme, certify the installations and to release the subsidy to vendor after successful implementation. This will further increase the cost of processing of an application. Hence, TPC-D requested the Commission to allow a charge of Rs. 7,000/- per application as Processing fee for Net metering application.

Commission's Analysis and Ruling

The Commission has notified the Maharashtra Electricity Regulatory Commission (Grid Interactive Rooftop Renewable Energy Generating Systems) Regulations, 2019 on 27 December 2019. As per these Regulations, the Application Fees are specified as under:

Particulars	Registration Fee
Low Tension Consumer	Rs. 500 for consumer having Sanctioned Load or Contract Demand upto 20 kW and Rs 100 thereafter for every 20 kW or part thereof
High Tension Consumer	Rs 5,000/-

These Regulations further specify as under:

"9.2 All applications and payment of fees shall be compulsorily made through web-based processing system by electronic means only.

9.3 The Consumer shall compulsorily provide details of email address and mobile number, along with the application.

9.4 All correspondence by the Distribution Licensee with the Consumer shall be through email and mobile only…"