

**AGENDA NOTE  
FOR  
THE 21<sup>ST</sup> MEETING OF THE CO-ORDINATION FORUM**

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Date	26.09.2019
Time	11:30 AM
Venue	Conference Room, Office of the Gujarat Electricity Regulatory Commission, 6 <sup>th</sup> Floor, GIFT ONE, Road 5-C, GIFT City, Gandhinagar 382355, Gujarat India.

ITEM NO.	NOTES ON AGENDA
1.	Approval of the minutes of the 20 <sup>th</sup> Meeting of the Co-Ordination Forum held on 11 <sup>th</sup> July, 2018
2.	Action Taken Report on the minutes of the 20 <sup>th</sup> Meeting of the Co-Ordination Forum
3.	Status of RPO compliance by the obligated entities
4.	GSECL and TPL to explain the compliance of meeting of environmental norms at their old and new power station and action plan and budget for the same.
5.	Preparedness of SLDC for accurate demand forecasting including RE, Gas-based projects and compliance of DSM at new normative issue with handling large penetration of RE with conventional projects.
6.	Un-metered agriculture connection
7.	Replacement of faulty meters
8.	Power Quality Report
9.	Draft GERC (Multi-Year Tariff) Regulations, 2021
10.	Standard of Performance (SoP)
11.	Status of Transmission Projects – Presentation by GETCO
12.	Presentation on Power Sector Scenario by GUVNL.
13.	Any other Item with the permission of Chair.

**Agenda Item No. 1**

**Approval of the minutes of the 20<sup>th</sup> Meeting of the Co-Ordination Forum held on 11<sup>th</sup> July, 2018**

GERC vide its letter no GERC/TECH/4918/0413/1450 dated 18.08.2018 circulated minutes of the 20<sup>th</sup> Meeting of Co-ordination forum held on 11<sup>th</sup> July, 2018 at Conference Room, Office of the Commission, Gandhinagar. Since, no comments have been received from the members, Minutes of the 20<sup>th</sup> Meeting may be treated as approved.

**Agenda Item No. 2**

The Commission has taken serious note of the fact that Action Taken Reports from the Chief Electrical Inspector, Torrent Power Limited and Western Railways not received even after reminder sent vide letter dated 16.01.2019.

Action Taken Report on the minutes of the 20<sup>th</sup> Meeting of the Co-Ordination Forum:

- 2.1 Item No. 2.4:** In reference to discussions on development of web tool for monitoring of RPO compliance and action taken from GEDA in this regard, it was decided to have a further deliberation on the usage of web tool for RPO monitoring in the next meeting by the time the tool is updated.

**Action Taken Report of GEDA:**

GEDA has informed that necessary follow-up is being done at regular intervals with all Obligated Entities as well as the data of RPO compliance is scrutinized, compiled and submitted timely to the Commission in the prescribed formats. Further, as per the directives of the Commission, GEDA has incorporated new RPO targets set by the Commission into the web tool.

- 2.2 Agenda Item No. 2.2 and Agenda Item No. 9:** In reference to discussion on monitoring of the RPO compliance, staff of the Commission was asked to pursue the matter pending before division bench of Hon'ble High Court of Gujarat where order dated 12.03.2015 of Single Judge of Hon'ble High

Court has been challenged in regard to principle Regulations covering STOA and CPP consumers under obligated entities for compliance of RPO.

Further, In reference to discussion on use of web tool for RPO compliance by Distribution Licensees, the Commission insisted DISCOMs and TPL to use the said web tool and asked GEDA, DISCOMs and TPL to have a separate discussion for effective usage of web tool.

**Action Taken by Staff of the Commission:**

The matter challenging the Judgment dated 12.03.2015 passed by Ld. Single Judge of Gujarat High Court in SCA No. 171 of 2011 and allied matters before Division Bench of the Gujarat High Court is pending. The matter was adjourned when it was listed for hearing on 23.07.2019. The next date of hearing is not declared by the Hon'ble High Court.

**Action Taken by GEDA, DISCOMs and TPL:**

The Commission has received letter from GUVNL in this regard, where it is stated that GUVNL on behalf of its DISCOMs has already done registration on RPO web tool for submission of RPO compliance. However, GUVNL is facing certain technical difficulties in entering the details of Generators, contracts, etc. as the web tool is pre-dominantly designed for Open Access category and Captive category and is not user friendly to DISCOMs. GUVNL has persistently taken up the issues with GEDA and is step by step entering the requisite details on the web tool. Once the issues are resolved by GEDA, GUVNL shall upload the RPO compliance of FY 2018-19.

GEDA submitted that GUVNL has initiated the process of RPO compliance on the web toll and TPL has been informed to do so.

**2.3 Agenda Item No. 2.6:** In reference to discussions regarding pending applications of railway crossing, Distribution Utilities were asked to share the details of pending applications of railway crossing with representatives of Western Railway and insisted Western Railway to clear the said pending applications up to the year 2017. Accordingly, DGVCL, MGVCL and

PGVCL have shared list of pending applications of railway crossing which was annexed with Minutes of 20<sup>th</sup> meeting.

**Action Taken Report of DGVCL, MGVCL, PGVCL and Western Railway**

State owned DISCOMs have submitted details of pending applications for railway crossing with Western railways, as under;

DISCOM	No. of applications pending (A)	No. of applications pending out of A, where final estimate is awaited from Western Railways (B)	No. of applications pending out of A, where estimate is paid (C)
DGVCL	5	5	-
MGVCL	18	8	9
PGVCL	12	5	5
UGVCL	1	-	-

Western Railways have not sent Action taken Report in this regard.

**2.3 Agenda Item No. 6:** In reference to discussions held regarding Distribution Licensees not getting candidates for the appointment of Chairperson of CGRFs, staff of the Commission was requested to look into the matter and have deliberations with the Commission.

Four State Owned DISCOMs were also requested to explore possibilities of establishment of CGRFs at Banaskantha in UGVCL’s licence area, Dahod in MGVCL’s license area, Valsad in DGVCL’s license area and Junagadh in PGVCL’s license area.

**Action Taken Report from the staff of the Commission and four State Owned DISCOMs:**

Considering the need to amend the GERC (CGRF and Ombudsman) Regulations, 2011 to remove practical difficulties, the Commission came up

with Draft GERC (CGRF and Ombudsman) Regulations, 2019. Comments/suggestions were invited from Stakeholders and hearing on comments/suggestions was held on 20.07.2019 at the Office of the Commission. Deliberations are underway and, the new Regulations shall be notified soon.

DGVCL has submitted that CGRF hearing is scheduled at nearby locations such as Valsad, Ankleshwar, Bharuch, Bardoli, Navsari by clubbing the complaints.

MGVCL has submitted that complaints are addressed at Complaint redressal Committee being arranged regularly on 10<sup>th</sup> and 20<sup>th</sup> of every month as per SoP Regulations. Grievances are not being received regarding distance of travel to reach at CGRF. Only in exception case, consumer has to approach to Corporate office i.e. location of CGRF. However, MGVCL will establish CGRF at Dahod after due approval and procedure.

PGVCL has submitted that CGRF conducts hearing at district level and accordingly, under Junagadh district, hearing is conducted at Junagadh city. Further, 24 number of grievances were registered by consumers of Junagadh during FY 2016-17 and FY 2017-18 and therefore, establishment of CGRF for Junagadh is not justified considering quantum of work. However, to address the issue, Convener of CGRF has been informed to hold CGRF hearing at district head quarter of Gir-Somnath i.e. Veraval which is under jurisdiction of Junagadh circle and thus at two places under Junagadh circle i.e. Junagadh and Veraval. This will reduce travel time of consumers of farthest village of Junagadh circle i.e. Kanjotar village which is at a distance of 47 KM from Veraval.

UGVCL has submitted that looking at the number of cases being registered with CGRF and CGRF holding hearings at different locations depending on the number of cases, at present, one CGRF is enough to redress the grievances of entire area of UGVCL.

## **2.4 Agenda Item No. 7:**

- (A) In reference to discussion regarding non installation of ELCBs and bypassing of ELCBs where they are installed, CEI and Distribution Utilities were asked to have a joint discussion and submit the report to the Commission.

**Action Taken Report of CEI and four State Owned DISCOMs:**

DGVCL, PGVCL and UGVCL have not submitted any information on issue of non-installation of ELCBs and bypassing of ELBCs.

MGVCL has submitted that ELCBs are installed at every new connections with more than 2 kW contract demand and periodical reports are called from field offices. As on June 2018, 6821 no. of ELCBs are installed at new locations. Moreover, installations are checked by staff of the complaint centres whenever premises are visited by them to attend any fault.

- (B) Further, based on the observance about large number of faulty meters in case of DGVCL and PGVCL, Distribution Utilities were insisted on adhering provisions of GERC Supply Code Regulations, 2015 and GERC SoP Regulations, 2005 regarding time line for replacement of faulty meters.

The issue of faulty meters can be discussed with Agenda Item No. 7.

**Action Taken Report of CEI and four State Owned DISCOMs:**

DGVCL has also submitted status of defective meters pending for replacement for FY 2017-18 and planning to replace the said defective meters.

MGVCL has stated that faulty meter replacements are carried out immediately after receipt of meter reading report and as on 31.07.2018, only 1139 number of meters were found faulty which are of the corresponding billing cycles only.

UGVCL has stated that faulty meter replacement is continuous process and 2740 number of faulty meters were added during 2017-18 which is nominal. Further, steps towards replacement at the time of receipt of information are being taken and circle offices are directed to observe guidelines and replace faulty meters at the earliest.

PGVCL has submitted that at the end of June, 2018, total 35900 number of meters are pending for replacement against 53948 number of meters pending as on March 2018. PGVCL has planned to replace all faulty meters by the end of December, 2018.

**2.5 Agenda Item No. 7:** In reference to discussion on suggestion of creation of cell at the office of the Commission for interpretation of Rules and Regulations notified by the Commission, it was stated that the possibilities of implementation of the said suggestion would be explored considering legality in mind.

**Action Taken:**

Implementation of this suggestion requires deliberations considering legal aspects in mind and thus will require time.

**Agenda Item No. 3: Status report on compliance of RPO target.**

The Commission is monitoring the RPO compliance on quarterly basis as per the details submitted by the obligated licensees. As per the details submitted for the financial year 2018-19 the status of RPO compliance is as under:

<u>RPO Status Report of Obligated Entities for period of April 2018 to March 2019</u>								<u>Remarks</u>
<u>(Up to 4<sup>th</sup> Quarter of FY 2018-19)</u>								-
<u>GUVNL – Consumption of units during 2018-19 (Q4) – 88780 MUs (Estimated)</u>								<u>88780</u>
-	<u>RPO 2018-19 (%)</u>	<u>Required MUs</u>	<u>Actual RE Purchased</u>	<u>REC's purchased (MUs)</u>	<u>Total MUs up to</u>	<u>Shortfall / (Excess) in MUs</u>	<u>RPO Achieved (%)</u>	<u>Deficit of 0.66% against</u>

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			(MUs)		present quarter			12.70%.
<u>Solar</u>	<u>4.25%</u>	<u>3773</u>	<u>2455</u>	<u>0</u>	<u>2455</u>	<u>1318</u>	<u>2.77%</u>	
<u>Non-Solar</u>	<u>8.45%</u>	<u>7502</u>	<u>8234</u>	<u>0</u>	<u>8234</u>	<u>-732</u>	<u>9.27%</u>	
<u>Total</u>	<u>12.70%</u>	<u>11275</u>	<u>10689</u>	<u>0</u>	<u>10689</u>	<u>586</u>	<u>12.04%</u>	
<u>TPL (Ahmedabad + Surat) – Consumption of units during FY 2018-19 (Q4) – 11760.49 MUs (Actual)</u>								<u>11760.49</u>
<u>Solar</u>	<u>4.25%</u>	<u>499.82</u>	<u>331.28</u>	<u>100</u>	<u>431.28</u>	<u>68.54</u>	<u>3.67%</u>	<u>Deficit of 1.08% against 12.70%.</u>
<u>Non-Solar</u>	<u>8.45%</u>	<u>993.76</u>	<u>834.13</u>	<u>101.28</u>	<u>935.41</u>	<u>58.35</u>	<u>7.95%</u>	
<u>Total</u>	<u>12.70%</u>	<u>1493.58</u>	<u>1165.41</u>	<u>201.28</u>	<u>1366.69</u>	<u>126.89</u>	<u>11.62%</u>	
<u>TPL (Dahej) – Consumption of units during FY 2018-19 (Q4) - 441.09 MUs (Actual)</u>								<u>441.09</u>
<u>Solar</u>	<u>4.25%</u>	<u>18.75</u>	<u>10.28</u>	<u>0</u>	<u>10.28</u>	<u>8.47</u>	<u>2.33%</u>	<u>Deficit of 3.64% against 12.70%.</u>
<u>Non-Solar</u>	<u>8.45%</u>	<u>37.27</u>	<u>29.69</u>	<u>0</u>	<u>29.69</u>	<u>7.58</u>	<u>6.73%</u>	
<u>Total</u>	<u>12.70%</u>	<u>56.02</u>	<u>39.97</u>	<u>0.00</u>	<u>39.97</u>	<u>16.05</u>	<u>9.06%</u>	
<u>MPSEZ Utilities Pvt. Limited – Consumption of units during FY 2018-19 (Q4) – 310.34 MUs (Actual)</u>								<u>310.34</u>
<u>Solar</u>	<u>4.25%</u>	<u>13.19</u>	<u>4.60</u>	<u>7.78</u>	<u>12.38</u>	<u>0.81</u>	<u>3.99%</u>	<u>Surplus of 0.72% against 12.70%.</u>
<u>Non-Solar</u>	<u>8.45%</u>	<u>26.22</u>	<u>5.75</u>	<u>23.53</u>	<u>29.28</u>	<u>-3.06</u>	<u>9.43%</u>	
<u>Total</u>	<u>12.70%</u>	<u>39.41</u>	<u>10.35</u>	<u>31.31</u>	<u>41.66</u>	<u>-2.25</u>	<u>13.42%</u>	

From the aforesaid it seems that the licensees other than MPSEZ Utilities have not complied with the RPO percentage notified by the Commission for FY 2018-19. The obligated licensees may give reasons for non-compliance of RPO.

GEDA shall make a presentation about status of RPO compliance.



**Agenda Item No. 4: GSECL and TPL to explain the compliance of meeting of environmental norms at their old and new power station and action plan and budget for the same.**

The new norms for the environmental pollution declared by the Ministry of environment and forest needs to be fulfilled by the power projects within stipulated time by carrying out necessary changes by incorporating or installing the equipments at the generating stations. GSECL as well as Torrent Power Ltd. are having thermal power projects which were set up before many years when the environmental norms were quite liberal than the present environmental norms which need to be fulfilled by the various units of the aforesaid generating companies.

As it is mandated to reduce the pollution from the existing plant as per the notification of the Government of India, the above generating companies shall require to make necessary changes in its power plant by setting up the new equipments to reduce the pollution level prevailing prior to aforesaid notification. Moreover, it requires some times to set up the plant as well as also necessary to make expenses for procuring and installing the equipments. Therefore, the GSECL as well as Torrent Power Limited (generating company) shall submit their present status reports about the action taken by them consisting of the budgetary provision made and expenses made by them against aforesaid activities.

**Agenda Item No. 5: Preparedness of SLDC for accurate demand forecasting including RE, Gas-based projects and compliance of DSM at new normative issue with handling large penetration of RE with conventional projects.**

The grid management and operation in the state is carried out by the SLDC. It is the responsibility of the SLDC to manage efficient, economic grid operation with safety. The grid operation is consisting of the operations of the various entities connected with grid i.e. generating companies, captive generating plants and the distribution licensees supplying power to the consumers.

The grid operation which consists of the operation of the various generating plants of conventional fuel like coal, gas, etc. and renewable energy

generator like wind, solar, hydro, biomass etc. The generation of electricity and injection into the grid from the renewable energy like wind and solar are vary based on the natural climate conditions and variance in the quantum of energy generation and injection in to the grid is also substantial within short time. In such a situation the shortfall or increase in penetration of renewable energy generation either from wind or solar lead to ramp - up or ramp - down the existing operating plant of conventional power projects to maintain the frequency.

The grid operation of the State also required to verify and comply with the ABT orders issued by the Commission as well as various regulations notified by the CERC from time to time for maintain the grid frequency. Thus, the operation of the grid is regulated where the role of SLDC is crucial to maintain the grid frequency.

The Commission has notified Gujarat Electricity Regulatory Commission (Forecasting, Scheduling, Deviation Settlement and Related Matters of Solar and Wind Generation Sources) Regulations, 2019 and the same came in force for commercial operation from 1.08.2019 after completion of mock period specified in the said regulations. The SLDC must having the data with regard to the deviations made during the mock trail and energy accounting prepared by them. Further, they must have the data with regard to actual impact of commercial operation of the aforesaid regulations and found the effect of the deviations due to aforesaid renewable energy.

The sign change being regulated under DSM also notified by the CERC and its effect are also being monitored by the SLDC. The impact of sign change regulation in the state grid having the SLDC as the same had been implemented by the NLDC/RLDC from 1.01.2019.

The Government of Gujarat has framed various policies with regards to promote the distributed generation from renewable energy sources. Under the aforesaid policies there may be various generating station set up at different place in the State and they inject the energy into the grid which may be at variance as per the climate conditions of the relevant places.

The SLDC is availing the services of some of the agencies for forecasting with regard to available generation from the various sources. The aforesaid agencies must provide their services and utilized by the SLDC for grid operation and management. The result of the above agency needs to provide by the SLDC stating that what are the services obtained by the SLDC from such agency and what is the level of accuracy found of such forecasting and the benefits of such forecasting with regards to economic saving and efficient and secure operation of the grid.

Considering the aforesaid conditions which consists of various provisions of Act, Regulations framed under by the State Commission and Central Commission as well as the various orders of the Commission due to which the penetration of distributed generation from renewable energy increase substantially and it affect the grid operation and management. The SLDC provide its report with regards to the management of grid operation and impact of different operators which consists of the licensee, generators and captive generators and handling of such situation carried out by the SLDC. The SLDC also submit its report specifying the impact of various policies as well as regulations notified by the Commissions and the penetration of renewable energy generation in the State affecting the grid operations and actions taken by the SLDC to maintain efficient and economic grid operation in different conditions. The SLDC may also submit its report specifying the various options available for efficient grid operation and management like ancillary services so that the persons who are in variance with the various operational parameters of the grid parameters avail the services of such service provider and the burden of the default of particular person may not be passed on to the other consumers. The SLDC submit its detailed report consists of aforesaid aspects.

**Agenda Item No. 6: Un-metered agriculture connection**

The Commission is monitoring the activity of metering the un-metered agriculture connections through quarterly reports. Progress made by each Discom during FY 2018-19 is placed at Annexure 1. Discoms shall bring the updated figures and apprise the Forum during the meeting. The Commission fees that still there are large number of un-metered agriculture connections

pending to be metered and GUVNL should devise a plan to meter all these pending agriculture connections.

**Agenda Item No. 7: Replacement of faulty meters**

The Commission has been receiving communications from consumers in regard to large number of faulty meters pending for replacement. Distribution Licensees have said that replacement of faulty meters is continuous activities. As per the Standard of Performance Reports submitted for FY 2018-19, details of faulty meters replaced during FY 2018-19 are annexed herewith as Annexure 2. The Commission expects Discoms to adhere to time line specified in the GERC SoP Regulations, 2005 for faulty meter replacement.

**Agenda Item No. 8: Power Quality Report**

The Commission has always emphasized on delivery of quality power to the consumers. Forum of Regulators has also come up with Report on Power Quality of Electricity Supply to the Consumers including Model Regulations on Power Quality for State – Applicable for Distribution System. The report along with Model regulations were circulated amongst Distribution Licensees vide letter dated 28.08.2018 seeking comments. However, DISCOMs have not offered any suggestions on the same. DISCOMs will offer their views on the report and Model Regulations for the Commission to incorporate Power Quality norms in the SoP Regulations.

**Agenda Item No. 9: Draft GERC (Multi-Year Tariff) Regulations, 2021**

The Commission has been regulating tariffs since 1999. Multi-Year Tariff Regulations have been issued for the tariff periods 2008-11, 2011-15 and 2016-21 for determination of tariff of the generating stations within its jurisdiction and for intra-state transmission and distribution of electricity. During such Tariff Periods, the hybrid approach, consisting of actual cost of service and pre-specified normative parameters have been followed to induce efficiency in financial and operational performance.

The control period of the current GERC (MYT) Regulations, 2016 shall be completing by 31.03.2021. Therefore, the Commission proposes to initiate process for determining terms and conditions of regulations for the next Multi-Year Tariff (MYT) control period from 01.04.2021 to 31.03.2025.

In view of the above, the suggestions/ideas/views are solicited from the esteem members of this forum on Tariff Design, Components of Tariff, Norms, Mechanism for Incentive & Disincentive, Application for Tariff Determination & its processing and any other element related with terms and conditions of tariff regulations. The Commission values your views and firmly believes that your participation will be of immense assistance in arriving at a just and fair conclusion on different issues related with terms and conditions of Tariff Regulations.

### **Agenda Item No. 10: Standard of Performance Reports**

The Commission has received Standard of Performance Reports for FY 2018-19 from DISCOMs. Relevant SoP Reports which need discussions are annexed herewith as Annexure 3.

### **Agenda Item No. 11**

#### **Status of Transmission Projects**

GETCO shall make a presentation of status of Transmission Projects.

Further, during 25<sup>th</sup> Meeting of the State Advisory Committee, the Commission raised concern of grid integration with increasing renewable energy generation and ambitious targets set for RPO compliance, as 8000 MW to 10000 MW capacity of renewable will be installed in coming years and with varying nature of wind, grid integration would be a big issue. Accordingly GETCO was asked to carry out study of loading on transmission lines and planning to tackle the grid integration problem and submit a report in this regard. GETCO has submitted a report vide letter dated. 03.11.2018 which includes challenges and key issues in renewable energy integration and mitigation measures from planning as well as operational aspects taken by GETCO to deal with issues of high RE penetration.

GETCO shall make a presentation in this regard along with presentation on status of Transmission Projects during the meeting.

**Agenda Item No. 12**

Presentation on Power Sector Scenario by GUVNL.

Further, the RPO is one of the important aspect monitor by the Commission with consideration of the importance given by the Ministry of Power as well as Ministry of New and Renewable Energy, Govt. of India. It is necessary for the obligated licensees to comply the RPO specified by the Commission without fail. The licensees have an option to procure the renewable energy by following competitive bidding process which was already directed by the Commission by its letter during February, 2017. The obligated licensees may give their presentations and reports for the actions taken by them like following the competitive bidding process for compliance of RPO specified by the Commission in its regulations and also the price for procurement of such renewable such energy was already approved by the Commission in the MYT Orders for FY 2016 to 2021.

GUVNL shall also cover this aspect in the presentation.

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Any other Item with the permission of Chair.

Sd/-  
(D. R. Parmar)  
Director (A & A)  
Gujarat Electricity Regulatory Commission  
Gandhinagar

**Annexure 1**

**Progress on Metering of un-metered agriculture connections**

DISCOM	FY	Quarter	Total no. of Ag. connections at the start of the Qtr.	Total no. of <u>Metered</u> Ag. connections at the start of the Qtr.	Total no. of <u>Unmetered</u> Ag. connections at the start of the Qtr.	Total no. of Ag. connections <u>Metered out of total Unmetered</u> Ag. connections during the Qtr.	Total no. of <u>Unmetered</u> Ag. connections <u>pending</u> for Metering at the end of the Qtr.	PDC made during the Qtr.	Total no. of Ag. Metered connections at the end of the Qtr.	Remarks (New Metered Ag. Connections provided during the Qtr.)	% Agriculture Meter Connections out of Total Agriculture Connections
			A (B + C)	B	C	D	E = C - D	F	G = B + D + H - F	H	
DGVCL	2018-19	Q1	1,64,992	1,20,808	44,184	20	44,164	15	1,22,453	1,640	
		Q2	1,66,614	1,22,453	44,161	19	44,142	60	1,24,411	1,999	
		Q3	1,68,553	1,24,411	44,142	33	44,109	59	1,27,464	3,079	
		Q4	1,71,573	1,27,464	44,109	297	43,812	43	1,30,980	3,262	74.93%
MGVCL	2018-19	Q1	1,53,653	1,27,508	26,145	10	26,135	0	1,30,115	2,597	
		Q2	1,56,250	1,30,115	26,135	16	26,119	0	1,32,913	2,782	
		Q3	1,59,032	1,32,913	26,119	26	26,093	0	1,36,308	3,369	
		Q4	1,62,401	1,36,308	26,093	78	26,015	536	1,39,313	3,463	84.26%

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DISCOM	FY	Quarter	Total no. of Ag. connections at the start of the Qtr.	Total no. of <u>Metered</u> Ag. connections at the start of the Qtr.	Total no. of <u>Unmetered</u> Ag. connections at the start of the Qtr.	Total no. of Ag. connections <u>Metered out</u> of total Unmetered Ag. connections during the Qtr.	Total no. of Unmetered Ag. connections <u>pending</u> for Metering at the end of the Qtr.	PDC made during the Qtr.	Total no. of Ag. Metered connections at the end of the Qtr.	Remarks (New Metered Ag. Connections provided during the Qtr.)	% Agriculture Meter Connections out of Total Agriculture Connections
			<b>A (B + C)</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E = C - D</b>	<b>F</b>	<b>G = B + D + H - F</b>	<b>H</b>	
PGVCL	2018-19	Q1	8,48,258	6,76,888	1,71,370	1,004	1,70,366	0	7,04,663	26,771	
		Q2	8,75,029	7,04,663	1,70,366	639	1,69,727	121	7,30,168	24,987	
		Q3	8,99,895	7,30,168	1,69,727	736	1,68,991	30	7,57,687	26,813	
		Q4	9,26,678	7,57,687	1,68,991	1,643	1,67,348	0	7,84,656	25,326	82.42%
UGVCL	2018-19	Q1	3,47,698	1,94,938	1,52,760	81	1,52,679	123	1,98,326	3,430	
		Q2	3,51,005	1,98,326	1,52,679	44	1,52,635	110	2,01,384	3,124	
		Q3	3,54,019	2,01,384	1,52,635	48	1,52,587	79	2,07,328	5,975	
		Q4	3,59,915	2,07,328	1,52,587	188	1,52,399	535	2,12,570	5,589	58.24%



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**Annexure 2**

**Details of no. of faulty meters replaced during FY 2018-19**

DISCOM	No. of faulty meters at the start of the year		No. of faulty meters added during the year		No. of faulty meters replaced during the year		No. of faulty meters pending for replacement at the end of the year	
	Single Phase	Three Phase	Single Phase	Three Phase	Single Phase	Three Phase	Single Phase	Three Phase
DGVCL	32863	10176	100907	31578	107389	33210	26381	8544
MGVCL	210	0	61698	8076	61699	8076	209	0
PGVCL	29108	24840	75761	34415	94445	51308	10424	7947
UGVCL	4001	3100	77547	19861	78238	20662	3310	2299
TPL (A)	0	0	31903	6193	31903	6193	0	0
TPL (S)	10	1	9770	2499	9737	2487	43	13

**Annexure 3**

**SoP 1: Electrical Accidents**

<b>DISCOM</b>	<b>FH</b>			<b>FA</b>			<b>NFH</b>			<b>Total</b>		
	<b>FY 2016- 17</b>	<b>FY 2017- 18</b>	<b>FY 2018- 19</b>	<b>FY 2016- 17</b>	<b>FY 2017- 18</b>	<b>FY 2018- 19</b>	<b>FY 2016- 17</b>	<b>FY 2017- 18</b>	<b>FY 2018- 19</b>	<b>FY 2016- 17</b>	<b>FY 2017- 18</b>	<b>FY 2018- 19</b>
<b>DGVCL</b>	71	73	55	89	72	100	88	69	75	248	214	230
<b>MGVCL</b>	44	45	47	53	72	60	18	37	18	115	154	125
<b>PGVCL</b>	102	98	112	220	249	187	89	71	81	411	418	380
<b>UGVCL</b>	87	84	81	84	88	54	34	35	37	205	207	172
<b>TPL A</b>	39	39	32	14	13	4	23	11	13	76	63	49
<b>TPL S</b>	7	7	6	0	0	0	4	3	2	11	10	8

**SoP 6: Distribution Transformer Failure**

DISCOM	No. of Transformers at the start of the year		No. of Transformers added during the year		Total No. of Transformers		No. of Transformers failed during the year		% failure rate	
	FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19
<b>DGVCL</b>	12837	142937	14560	16592	142937	159529	9310	7854	6.51	4.92
<b>MGVCL</b>	124443	133702	9259	9682	133702	143384	3813	4883	2.85	3.41
<b>PGVCL</b>	639702	751578	104193	104896	743895	856474	85637	73221	11.51	8.55
<b>UGVCL</b>	249459	267443	17984	24353	267443	291796	21192	16289	7.92	5.58
<b>TPL (A)</b>	7682	8067	385	438	8067	8505	59	45	0.73	0.53
<b>TPL (S)</b>	2435	2504	69	63	2504	2567	5	3	0.20	0.12

**It is observed that distribution transformer failure rate has decreased for all distribution licensees except MGVCL during FY 2018-19 compared to FY 2017-18.**

**Further, in case of PGVCL, total number of distribution transformer at the start of FY 2018-19 is different than total number of distribution transformer at the end of FY 2017-18.**

AGENDA NOTE FOR THE 21<sup>ST</sup> MEETING OF THE CO-RODINATION FORUM

**SoP 11 A: System Average Interruption Frequency Index (SAIFI)**

DGVCL								
Month	N <sub>i</sub> - Number of Customers for each sustained interruptions (in numbers)	N <sub>T</sub> - Total No of customers served (in Numbers)	CI=∑ Ni	SAIFI = ∑ Ni/N <sub>T</sub> (Monthly SAIFI)	Average of monthly SAIFI on quarter basis	Quarterly SAIFI on average basis	Yearly SAIFI on average basis	Average of quarterly SAIFI
Apr-18	3182550	3057284	15526869	5.08	7.10	7.11	6.37	6.39
May-18	3251135	3063132	17374534	5.67				
Jun-18	3386792	3088032	32588264	10.55				
Jul-18	8986970	3173928	31135090	10.01	8.10	7.92		
Aug-18	8720256	3186062	24642940	7.92				
Sep-18	8755890	3189638	19862963	6.39				
Oct-18	8846952	3208560	20757004	6.36	5.27	5.35		
Nov-18	8413643	3224864	14691120	4.49				
Dec-18	8458182	3233030	16302512	4.97				
Jan-19	3077041	3241630	19445884	5.92	5.10	5.16		
Feb-19	3008461	3246873	15108836	4.63				
Mar-19	2961878	3237122	15604811	4.75				
Total		3179180	243040827	6.36				

AGENDA NOTE FOR THE 21<sup>ST</sup> MEETING OF THE CO-RODINATION FORUM

<b>SoP 11 A: System Average Interruption Frequency Index (SAIFI)</b>								
<b>MGVCL</b>								
<b>Month</b>	<b>N<sub>i</sub> - Number of Customers for each sustained interruptions (in numbers)</b>	<b>N<sub>T</sub> - Total No of customers served (in Numbers)</b>	<b>CI=∑ N<sub>i</sub></b>	<b>SAIFI = ∑ N<sub>i</sub>/N<sub>T</sub> (Monthly SAIFI)</b>	<b>Average of monthly SAIFI on quarter basis</b>	<b>Quarterly SAIFI on average basis</b>	<b>Yearly SAIFI on average basis</b>	<b>Average of quarterly SAIFI</b>
Apr-18	2869835	3081671	7526424	2.44	3.92	3.92	3.53	3.54
May-18	2851641	3078264	8691870	2.82				
Jun-18	2970349	3088062	20078029	6.50				
Jul-18	2924360	3099197	19674136	6.35	5.27	5.26		
Aug-18	2912241	3112111	16488941	5.30				
Sep-18	2955423	3120167	12946747	4.15				
Oct-18	2881153	3128353	9310809	2.98	2.56	2.56		
Nov-18	2898292	3139768	6553669	2.09				
Dec-18	2929387	3147410	8246862	2.62				
Jan-19	3026775	3153067	8979202	2.85	2.39	2.39		
Feb-19	2926735	3156615	7558005	2.39				
Mar-19	2886514	3165728	6137805	1.94				
<b>Total</b>		37470413	132192499	3.53				

AGENDA NOTE FOR THE 21<sup>ST</sup> MEETING OF THE CO-RODINATION FORUM

<b>SoP 11 A: System Average Interruption Frequency Index (SAIFI)</b>								
<b>PGVCL</b>								
<b>Month</b>	<b>N<sub>i</sub> - Number of Customers for each sustained interruptions (in numbers)</b>	<b>N<sub>T</sub> - Total No of customers served (in Numbers)</b>	<b>CI=∑ N<sub>i</sub></b>	<b>SAIFI = ∑ N<sub>i</sub>/N<sub>T</sub> (Monthly SAIFI)</b>	<b>Average of monthly SAIFI on quarter basis</b>	<b>Quarterly SAIFI on average basis</b>	<b>Yearly SAIFI on average basis</b>	<b>Average of quarterly SAIFI</b>
Apr-18	4219565.00	5077283.00	23486879.00	4.63	5.90	5.90	6.15	6.17
May-18	4414207.00	5082138.00	26944913.00	5.30				
Jun-18	4609568.00	5097200.00	39541551.00	7.76				
Jul-18	4649409.00	5111678.00	55586634.00	10.87	8.84	8.84		
Aug-18	4486973.00	5131618.00	45527855.00	8.87				
Sep-18	4346497.00	5161523.00	34996222.00	6.78				
Oct-18	4423761.00	5284324.00	31467081.00	5.95	5.40	5.40		
Nov-18	4135269.00	5294156.00	23640589.00	4.47				
Dec-18	4524384.00	5303064.00	30636157.00	5.78				
Jan-19	4630680.00	5312894.00	29721916.00	5.59	4.56	4.56		
Feb-19	4456768.00	5338702.00	22445779.00	4.20				
Mar-19	4176687.00	5337335.00	20766617.00	3.89				
<b>Total</b>		5337335.00	384762193.00	72.09				

AGENDA NOTE FOR THE 21<sup>ST</sup> MEETING OF THE CO-RODINATION FORUM

<b>SoP 11 A: System Average Interruption Frequency Index (SAIFI)</b>								
<b>UGVCL</b>								
<b>Month</b>	<b>N<sub>i</sub> - Number of Customers for each sustained interruptions (in numbers)</b>	<b>N<sub>T</sub> - Total No of customers served (in Numbers)</b>	<b>CI=∑ N<sub>i</sub></b>	<b>SAIFI = ∑ N<sub>i</sub>/N<sub>T</sub> (Monthly SAIFI)</b>	<b>Average of monthly SAIFI on quarter basis</b>	<b>Quarterly SAIFI on average basis</b>	<b>Yearly SAIFI on average basis</b>	<b>Average of quarterly SAIFI</b>
Apr-18	2285282.00	3356702.00	6433396.00	1.92	2.51	2.51	2.12	2.12
May-18	2444432.00	3403890.00	7075944.00	2.08				
Jun-18	2974679.00	3433041.00	12086832.00	3.52				
Jul-18	3215987.00	3464953.00	10478004.00	3.02	2.68	2.68		
Aug-18	3278696.00	3479392.00	9982959.00	2.87				
Sep-18	3132692.00	3512641.00	7549330.00	2.15				
Oct-18	3125481.00	3522286.00	6322128.00	1.79	1.69	1.69		
Nov-18	3103703.00	3534682.00	5459923.00	1.54				
Dec-18	3188968.00	3544083.00	6094318.00	1.72				
Jan-19	2438860.00	3557266.00	6930621.00	1.95	1.62	1.62		
Feb-19	2396554.00	3559929.00	5689852.00	1.60				
Mar-19	2066036.00	3578568.00	4727340.00	1.32				

AGENDA NOTE FOR THE 21<sup>ST</sup> MEETING OF THE CO-RODINATION FORUM

<b>SoP 11 A: System Average Interruption Frequency Index (SAIFI)</b>								
<b>TPL (A)</b>								
<b>Month</b>	<b>N<sub>i</sub> - Number of Customers for each sustained interruptions (in numbers)</b>	<b>N<sub>T</sub> - Total No of customers served (in Numbers)</b>	<b>CI=∑ Ni</b>	<b>SAIFI = ∑ Ni/Nt (Monthly SAIFI)</b>	<b>Average of monthly SAIFI on quarter basis</b>	<b>Quarterly SAIFI on average basis</b>	<b>Yearly SAIFI on average basis</b>	<b>Average of quarterly SAIFI</b>
Apr-18	268218.00	1903107.00	329702.00	0.173	0.19	0.19	0.15	0.15
May-18	389949.00	1906779.00	480658.00	0.252				
Jun-18	286867.00	1910877.00	301017.00	0.158				
Jul-18	239628.00	1914212.00	266551.00	0.139	0.12	0.12		
Aug-18	160547.00	1919133.00	170580.00	0.089				
Sep-18	207172.00	1922263.00	225167.00	0.117				
Oct-18	288677.00	1925393.00	339984.00	0.177	0.14	0.14		
Nov-18	149413.00	1928433.00	154884.00	0.080				
Dec-18	251197.00	1930863.00	293676.00	0.152				
Jan-19	244107.00	1933124.00	267413.00	0.138	0.15	0.15		
Feb-19	286010.00	1936657.00	325845.00	0.168				
Mar-19	229493.00	1941036.00	293987.00	0.151				
<b>Total</b>		1922656.00	3449464	1.794				



AGENDA NOTE FOR THE 21<sup>ST</sup> MEETING OF THE CO-RODINATION FORUM

<b>SoP 11 A: System Average Interruption Frequency Index (SAIFI)</b>								
<b>TPL (S)</b>								
<b>Month</b>	<b>N<sub>i</sub> - Number of Customers for each sustained interruptions (in numbers)</b>	<b>N<sub>T</sub> - Total No of customers served (in Numbers)</b>	<b>CI=∑ Ni</b>	<b>SAIFI = ∑ Ni/Nt (Monthly SAIFI)</b>	<b>Average of monthly SAIFI on quarter basis</b>	<b>Quarterly SAIFI on average basis</b>	<b>Yearly SAIFI on average basis</b>	<b>Average of quarterly SAIFI</b>
Apr-18	37020.00	605744.00	37020.00	0.061	0.05	0.05	0.03	0.03
May-18	26248.00	606410.00	30495.00	0.050				
Jun-18	18819.00	607007.00	18819.00	0.031				
Jul-18	6995.00	607542.00	11722.00	0.019	0.02	0.02		
Aug-18	9190.00	607664.00	9190.00	0.015				
Sep-18	10841.00	607947.00	10841.00	0.018				
Oct-18	12556.00	608064.00	12556.00	0.021	0.03	0.03		
Nov-18	12638.00	607549.00	12638.00	0.021				
Dec-18	21094.00	610204.00	21094.00	0.035				
Jan-19	24926.00	610608.00	30692.00	0.050	0.03	0.03		
Feb-19	13154.00	611066.00	13154.00	0.022				
Mar-19	17485.00	612428.00	17485.00	0.029				
<b>Total</b>		608519.00	225706.00	0.371				

From the reports on SAIFI, it has been observed that DISCOMs are adopting different method for calculation of yearly SAIFI, where DGVCL is considering average number of consumers, PGVCL is considering number of consumers at the end of the year, MGVCL is considering sum of number of consumers for the entire year. UGVCL is not submitting yearly SAIFI. Method of calculation of yearly SAIFI submitted by Distribution Licensees to be discussed.

AGENDA NOTE FOR THE 21<sup>ST</sup> MEETING OF THE CO-RODINATION FORUM

**SoP 11 B: System Average Interruption Duration Index (SAIDI)**

<b>DGVCL</b>						
<b>Sr. No</b>	<b>Month</b>	<b>Ri = Restoration Time for each sustained interruption event (in hours)</b>	<b>Ni - Number of interrupted Customers for each sustained interruption event (in numbers)</b>	<b>N<sub>T</sub> - Total No of customers served (in Numbers)</b>	<b>Customer Intt. Duration CMI = <math>\Sigma Ri * Ni</math></b>	<b>SAIDI = <math>\frac{\Sigma Ri * Ni}{N_t}</math> (Monthly SAIDI)</b>
1	Apr-18	11:49	2544284	3057284	23266916:50	07:36
2	May-18	13:17	2612818	3063132	29302165:21	09:33
3	Jun-18	13:58	2796269	3080447	43854187:48	14:14
4	Jul-18	09:57	3370417	3173928	34408783:04	10:50
5	Aug-18	09:55	3073370	3186062	29114203:08	09:08
6	Sep-18	10:11	3061117	3189638	25997920:19	08:09
7	Oct-18	10:47	3349742	3208560	28722731:28	08:57
8	Nov-18	09:30	3194353	3224864	19387131:24	06:00
9	Dec-18	09:41	3241204	3233030	25712306:29	07:57
10	Jan-19	10:53	3077041	3241630	27335689:46	08:19
11	Feb-19	11:10	3008461	3246873	22019759:43	06:45
12	Mar-19	10:43	2961878	3237122	24486353:00	07:27
	<b>Total</b>			3178548	13900339.52	08:44

**SoP 11 B: System Average Interruption Duration Index (SAIDI)**

AGENDA NOTE FOR THE 21<sup>ST</sup> MEETING OF THE CO-RODINATION FORUM

MGVCL						
Sr. No	Month	Ri = Restoration Time for each sustained interruption event (in hours)	Ni - Number of interrupted Customers for each sustained interruption event (in numbers)	N <sub>T</sub> - Total No of customers served (in Numbers)	Customer Intt. Duration CMI = $\Sigma Ri * Ni$	SAIDI = $\Sigma Ri * Ni / N_t$ (Monthly SAIDI)
1	Apr-18	496863.00	2869835.00	3081671.00	658283457.00	3:34
2	May-18	612683.00	2851641.00	3078264.00	894103850.00	4:50
3	Jun-18	1030922.00	2970349.00	3088062.00	1425795088.00	7:42
4	Jul-18	855957.00	2924360.00	3099197.00	1115001203.00	6.00
5	Aug-18	734135.00	2912241.00	3112111.00	985853350.00	5.17
6	Sep-18	669511.00	2955423.00	3120167.00	941171505.00	5.02
7	Oct-18	607035.00	2881153.00	3128353.00	827031249.00	4.24
8	Nov-18	407226.00	2898292.00	3139768.00	564517075.00	3.00
9	Dec-18	557797.00	2929387.00	3147410.00	778336522.00	4.07
10	Jan-19	516463.00	3026775.00	3153067.00	745794707.00	3.57
11	Feb-19	482386.00	2926735.00	3156615.00	710372117.00	3.45
12	Mar-19	327369.00	2886514.00	3165728.00	399462281.00	2.06
	<b>Total</b>			37470413.00	10045722404.00	4.28

AGENDA NOTE FOR THE 21<sup>ST</sup> MEETING OF THE CO-RODINATION FORUM

<b>SoP 11 B: System Average Interruption Duration Index (SAIDI)</b>						
<b>PGVCL</b>						
<b>Sr. No</b>	<b>Month</b>	<b>Ri = Restoration Time for each sustained interruption event (in hours)</b>	<b>Ni - Number of interrupted Customers for each sustained interruption event (in numbers)</b>	<b>N<sub>T</sub> - Total No of customers served (in Numbers)</b>	<b>Customer Intt. Duration CMI = <math>\Sigma Ri * Ni</math></b>	<b>SAIDI = <math>\Sigma Ri * Ni / N_t</math> (Monthly SAIDI)</b>
1	Apr-18	1:32	4219565.00	5077283.00	1506548.93	7:07
2	May-18	1:45	4414207.00	5082138.00	1885596.18	8:54
3	Jun-18	2:00	4609568.00	5097200.00	2812739.50	13:14
4	Jul-18	2:41	4649409.00	5111678.00	4153067.68	19:29
5	Aug-18	2:17	4486973.00	5131618.00	3218598.74	15:03
6	Sep-18	1:56	4346497.00	5161523.00	2242646.08	10:25
7	Oct-18	1:29	4423761.00	5284324.00	2032676.27	9:13
8	Nov-18	1:19	4135269.00	5294156.00	1297464.19	5:52
9	Dec-18	1:43	4524384.00	5303064.00	2004432.99	9:04
10	Jan-19	1:43	4630680.00	5312894.00	1955277.58	8:49
11	Feb-19	1:58	4456768.00	5338702.00	1540917.87	6:55
12	Mar-19	1:50	4176687.00	5337335.00	1169440.16	5:15
	<b>Total</b>			<b>5337335.00</b>	<b>25819406.16</b>	<b>116:06</b>

AGENDA NOTE FOR THE 21<sup>ST</sup> MEETING OF THE CO-RODINATION FORUM

<b>SoP 11 B: System Average Interruption Duration Index (SAIDI)</b>						
<b>UGVCL</b>						
<b>Sr. No</b>	<b>Month</b>	<b>Ri = Restoration Time for each sustained interruption event (in hours)</b>	<b>Ni - Number of interrupted Customers for each sustained interruption event (in numbers)</b>	<b>N<sub>T</sub> - Total No of customers served (in Numbers)</b>	<b>Customer Intt. Duration CMI = <math>\Sigma Ri * Ni</math></b>	<b>SAIDI = <math>\Sigma Ri * Ni / N_t</math> (Monthly SAIDI)</b>
1	Apr-18	14658:29	2285282	3356702	9541080:13	2:50
2	May-18	15222:38	2444432	3403890	10776129:49	3:09
3	Jun-18	21453:05	2974679	3433041	16464260:30	4:47
4	Jul-18	20519:47	3215987	3464953	13017126:51	3:45
5	Aug-18	19039:46	3278696	3479392	11790981:17	3:23
6	Sep-18	15890:06	3132692	3512641	9517686:16	2:42
7	Oct-18	12495:30	3125481	3522286	8552459:46	2:25
8	Nov-18	10968:20	3103703	3534682	7074820:14	2:00
9	Dec-18	14355:06	3188968	3544083	9272192:13	2:36
10	Jan-19	11277:44	2438860	3557266	8873285:01	2:29
11	Feb-19	11155:21	2396554	3559929	7771241:08	2:10
12	Mar-19	8649:16	2066036	3578568	5189541:40	1:27

AGENDA NOTE FOR THE 21<sup>ST</sup> MEETING OF THE CO-RODINATION FORUM

<b>SoP 11 B: System Average Interruption Duration Index (SAIDI)</b>						
<b>TPL (A)</b>						
<b>Sr. No</b>	<b>Month</b>	<b>Ri = Restoration Time for each sustained interruption event (in hours)</b>	<b>Ni - Number of interrupted Customers for each sustained interruption event (in numbers)</b>	<b>N<sub>T</sub> - Total No of customers served (in Numbers)</b>	<b>Customer Intt. Duration CMI = <math>\sum Ri * Ni</math></b>	<b>SAIDI = <math>\frac{\sum Ri * Ni}{N_t}</math> (Monthly SAIDI)</b>
1	Apr-18	00:45	268218.00	1903107.00	211012.00	00:07
2	May-18	00:49	389949.00	1906779.00	345766.00	00:11
3	Jun-18	00:52	286867.00	1910877.00	251228.00	00:08
4	Jul-18	00:38	239628.00	1914212.00	170503.00	00:05
5	Aug-18	00:37	160547.00	1919133.00	105979.00	00:03
6	Sep-18	00:40	207172.00	1922263.00	141607.00	00:04
7	Oct-18	00:41	288677.00	1925393.00	201351.00	00:06
8	Nov-18	00:34	149413.00	1928433.00	82937.00	00:03
9	Dec-18	00:49	251197.00	1930863.00	199359.00	00:06
10	Jan-19	00:32	244107.00	1933124.00	147447.00	00:05
11	Feb-19	00:45	286010.00	1936657.00	202335.00	00:06
12	Mar-19	00:35	229493.00	1941036.00	168282.00	00:05

AGENDA NOTE FOR THE 21<sup>ST</sup> MEETING OF THE CO-RODINATION FORUM

<b>SoP 11 B: System Average Interruption Duration Index (SAIDI)</b>						
<b>TPL (S)</b>						
<b>Sr. No</b>	<b>Month</b>	<b>R<sub>i</sub> = Restoration Time for each sustained interruption event (in hours)</b>	<b>N<sub>i</sub> - Number of interrupted Customers for each sustained interruption event (in numbers)</b>	<b>N<sub>T</sub> - Total No of customers served (in Numbers)</b>	<b>Customer Intt. Duration CMI = ΣR<sub>i</sub>*N<sub>i</sub></b>	<b>SAIDI = ΣR<sub>i</sub>*N<sub>i</sub>/N<sub>T</sub> (Monthly SAIDI)</b>
1	Apr-18	00:32	37020	605744	17060.00	00:02
2	May-18	00:37	26248	606410	17455.00	00:02
3	Jun-18	00:30	18819	607007	9157.00	00:01
4	Jul-18	00:28	6995	607542	5432.00	00:01
5	Aug-18	00:31	9190	607664	5544.00	00:01
6	Sep-18	00:36	10841	607947	7814.00	00:01
7	Oct-18	00:32	12556	608064	9060.00	00:01
8	Nov-18	00:33	12638	607549	7166.00	00:01
9	Dec-18	00:33	21094	610204	10560.00	00:02
10	Jan-19	00:55	24926	610608	30381.00	00:03
11	Feb-19	00:38	13154	611066	8744.00	00:01
12	Mar-19	01:48	17485	612428	16373.00	00:02

From the reports on SAIDI, it has been observed that DISCOMs are adopting different method for calculation of yearly SAIDI, where DGVCL is considering average number of consumers, PGVCL is considering number of consumers at the end of the year, MGVCL is considering sum of number of consumers for the entire year. UGVCL and TPL are not submitting yearly SAIFI. Further, restoration time is to be submitted in hours, however, in case of MGVCL, restoration time is submitted in number.

Method of calculation of yearly SAIDI submitted by Distribution Licensees to be discussed.

AGENDA NOTE FOR THE 21<sup>ST</sup> MEETING OF THE CO-RODINATION FORUM

**SoP 11 C: Momentary Average Interruption Frequency Index (MAIFI)**

DGVCL						
Sr. No	Month	IMi = Number of Momentary interruptions for the month (in numbers)	Nmi = Total no of customers for each momentary interruptions (in numbers)	Nt - Total no of customers served (in numbers)	Customer Intt. $\Sigma$ Imi*Nmi	MAIFI= $\Sigma$ Imi*Nmi/Nt
1	Apr-18	20667.00	2558140.00	3057284.00	36744272.00	12.02
2	May-18	23381.00	2738921.00	3063132.00	41479850.00	13.54
3	Jun-18	33912.00	2784947.00	3077916.00	65652051.00	21.33
4	Jul-18	27660.00	2918409.00	3173928.00	59227876.00	18.66
5	Aug-18	25553.00	2668387.00	3186062.00	52574346.00	16.50
6	Sep-18	24070.00	2672188.00	3189638.00	43925665.00	13.77
7	Oct-18	23057.00	2858048.00	3208560.00	41281685.00	12.87
8	Nov-18	18182.00	2599570.00	3224864.00	32828971.00	10.18
9	Dec-18	16324.00	2631306.00	3233030.00	30371788.00	9.39
10	Jan-19	17765.00	2796351.00	3241630.00	36368799.00	11.07
11	Feb-19	14384.00	2490993.00	3246873.00	25486378.00	7.82
12	Mar-19	16469.00	2574239.00	3237122.00	29934697.00	9.11
13	Yearly Data	261424.00	32291499.00	3178336.58	495876378.00	13.02



AGENDA NOTE FOR THE 21<sup>ST</sup> MEETING OF THE CO-RODINATION FORUM

<b>SoP 11 C: Momentary Average Interruption Frequency Index (MAIFI)</b>						
<b>MGVCL</b>						
<b>Sr. No</b>	<b>Month</b>	<b>IMi = Number of Momentary interruptions for the month (in numbers)</b>	<b>Nmi = Total no of customers for each momentary interruptions (in numbers)</b>	<b>Nt - Total no of customers served (in numbers)</b>	<b>Customer Intt. ΣImi*Nmi</b>	<b>MAIFI=ΣImi*Nmi/Nt</b>
1	Apr-18	18808.00	2761828.00	3081671.00	35391994.00	11.48
2	May-18	17962.00	2717381.00	3078264.00	32510171.00	10.56
3	Jun-18	28343.00	2843648.00	3088062.00	51375255.00	16.63
4	Jul-18	28325.00	2813098.00	3100752.00	51192593.00	16.51
5	Aug-18	25259.00	2796910.00	3113676.00	45172712.00	14.51
6	Sep-18	22342.00	2784140.00	3121734.00	39227465.00	12.57
7	Oct-18	22384.00	2775008.00	3128353.00	38298876.00	12.24
8	Nov-18	18468.00	2792722.00	3139768.00	32306580.00	10.28
9	Dec-18	17719.00	2813709.00	3147410.00	31948606.00	10.15
10	Jan-19	19374.00	2964035.00	3154656.00	39605130.00	12.55
11	Feb-19	15395.00	2729908.00	3158218.00	27146934.00	8.60
12	Mar-19	19241.00	2751055.00	3167343.00	35024114.00	11.06
13	Yearly Data			37479907.00	459200430.00	12.25

AGENDA NOTE FOR THE 21<sup>ST</sup> MEETING OF THE CO-RODINATION FORUM

<b>SoP 11 C: Momentary Average Interruption Frequency Index (MAIFI)</b>						
<b>PGVCL</b>						
<b>Sr. No</b>	<b>Month</b>	<b>IMi = Number of Momentary interruptions for the month (in numbers)</b>	<b>Nmi = Total no of customers for each momentary interruptions (in numbers)</b>	<b>Nt - Total no of customers served (in numbers)</b>	<b>Customer Intt. ΣImi*Nmi</b>	<b>MAIFI=ΣImi*Nmi/Nt</b>
1	Apr-18	49492.00	4356082.00	5077283.00	35344916.00	6.96
2	May-18	51752.00	4419103.00	5082138.00	36607076.00	7.20
3	Jun-18	73820.00	4589393.00	5097200.00	52446318.00	10.29
4	Jul-18	89668.00	4745234.00	5111678.00	64222039.00	12.56
5	Aug-18	78593.00	4576647.00	5131618.00	53507194.00	10.43
6	Sep-18	63288.00	4545154.00	5161523.00	42212612.00	8.18
7	Oct-18	59049.00	4558586.00	5284324.00	41823646.00	7.91
8	Nov-18	58483.00	4708581.00	5294156.00	42353287.00	8.00
9	Dec-18	49460.00	4812950.00	5303064.00	37847191.00	7.14
10	Jan-19	43610.00	4771664.00	5312894.00	39159799.00	7.37
11	Feb-19	38274.00	4677479.00	5338702.00	27998408.00	5.24
12	Mar-19	44408.00	4734675.00	5337335.00	33822494.00	6.34
13	Yearly Data	699897.00	55495548.00	5337335.00	507344980.00	95.06

AGENDA NOTE FOR THE 21<sup>ST</sup> MEETING OF THE CO-RODINATION FORUM

<b>SoP 11 C: Momentary Average Interruption Frequency Index (MAIFI)</b>						
<b>UGVCL</b>						
<b>Sr. No</b>	<b>Month</b>	<b>IMi = Number of Momentary interruptions for the month (in numbers)</b>	<b>Nmi = Total no of customers for each momentary interruptions (in numbers)</b>	<b>Nt - Total no of customers served (in numbers)</b>	<b>Customer Intt. ΣImi*Nmi</b>	<b>MAIFI=ΣImi*Nmi/Nt</b>
1	Apr-18	14516.00	3030777.00	3356702.00	13165581.00	3.92
2	May-18	14195.00	3073142.00	3403890.00	12431071.00	3.65
3	Jun-18	17339.00	3266748.00	3433041.00	16887310.00	4.92
4	Jul-18	17736.00	3215987.00	3464953.00	16288707.00	4.70
5	Aug-18	17065.00	3278696.00	3479392.00	15290385.00	4.39
6	Sep-18	15188.00	3132692.00	3512641.00	13653149.00	3.89
7	Oct-18	13813.00	2682830.00	3522286.00	12651291.00	3.59
8	Nov-18	12972.00	2515967.00	3534682.00	11938633.00	3.38
9	Dec-18	12987.00	2662444.00	3544083.00	12487804.00	3.52
10	Jan-19	12593.00	3250208.00	3557266.00	13594008.00	3.82
11	Feb-19	10924.00	3117369.00	3559929.00	10157046.00	2.85
12	Mar-19	12680.00	3122366.00	3578568.00	11447997.00	3.20

AGENDA NOTE FOR THE 21<sup>ST</sup> MEETING OF THE CO-RODINATION FORUM

<b>SoP 11 C: Momentary Average Interruption Frequency Index (MAIFI)</b>						
<b>TPL (A)</b>						
<b>Sr. No</b>	<b>Month</b>	<b>IMi = Number of Momentary interruptions for the month (in numbers)</b>	<b>Nmi = Total no of customers for each momentary interruptions (in numbers)</b>	<b>Nt - Total no of customers served (in numbers)</b>	<b>Customer Intt. <math>\Sigma</math>Imi*Nmi</b>	<b>MAIFI=<math>\Sigma</math>Imi*Nmi/Nt</b>
1	Apr-18	1.00	14135.00	1903107.00	14135.00	0.007
2	May-18	3.00	6315.00	1906779.00	6315.00	0.003
3	Jun-18	3.00	3398.00	1910877.00	3398.00	0.002
4	Jul-18	2.00	3765.00	1914212.00	3765.00	0.002
5	Aug-18	1.00	88.00	1919133.00	88.00	0.000
6	Sep-18	3.00	11839.00	1922263.00	11839.00	0.006
7	Oct-18	1.00	5971.00	1925393.00	5971.00	0.003
8	Nov-18			1928433.00		
9	Dec-18	2.00	29458.00	1930863.00	29458.00	0.015
10	Jan-19			1933124.00		
11	Feb-19	2.00	2191.00	1936657.00	2191.00	0.001
12	Mar-19	2.00	4035.00	1941036.00	4035.00	0.002

AGENDA NOTE FOR THE 21<sup>st</sup> MEETING OF THE CO-RODINATION FORUM

<b>SoP 11 C: Momentary Average Interruption Frequency Index (MAIFI)</b>						
<b>TPL (S)</b>						
<b>Sr. No</b>	<b>Month</b>	<b>IMi = Number of Momentary interruptions for the month (in numbers)</b>	<b>Nmi = Total no of customers for each momentary interruptions (in numbers)</b>	<b>Nt - Total no of customers served (in numbers)</b>	<b>Customer Intt. <math>\Sigma</math>Imi*Nmi</b>	<b>MAIFI=<math>\Sigma</math>Imi*Nmi/Nt</b>
1	Apr-18			605744.00		
2	May-18			606410.00		
3	Jun-18			607007.00		
4	Jul-18			607542.00		
5	Aug-18			607664.00		
6	Sep-18			607947.00		
7	Oct-18			608064.00		
8	Nov-18			607549.00		
9	Dec-18			610204.00		
10	Jan-19			610608.00		
11	Feb-19			611066.00		
12	Mar-19			612428.00		

From the reports on MAIFI, it has been observed that DISCOMs are adopting different method for calculation of yearly MAIFI, where DGVCL is considering average number of consumers and average of monthly MAIFI, PGVCL is considering number of consumers at the end of the year, MGVCL is considering sum of number of consumers for the entire year. UGVCL and TPL are not submitting yearly MAIFI.

Method of calculation of yearly MAIFI submitted by Distribution Licensees to be discussed.

**SoP 13: Details of Faulty Meters**

DISCOM	No. of faulty meters at the start of the year				No. of faulty meters added during the year				No. of faulty meters replaced during the year				No. of faulty meters pending for replacement at the end of the year			
	Single Phase		Three Phase		Single Phase		Three Phase		Single Phase		Three Phase		Single Phase		Three Phase	
	FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19
DGVCL	32064	32863	7500	10176	86472	100907	19789	31578	85673	107389	17113	33210	32863	26381	10176	8544
MGVCL	1470	210	0	0	86019	61698	10937	8076	87279	61699	10937	8076	210	209	0	0
PGVCL	38521	29108	27386	24840	20969	75761	11549	34415	30382	94445	14095	51308	29108	10424	24840	7947
UGVCL	1405	4001	2324	3100	77968	77547	21959	19861	75372	78238	21183	20662	4001	3310	3100	2299
TPL (A)	0	0	0	0	30575	31903	5340	6193	30575	31903	5340	6193	0	0	0	0
TPL (S)	27	10	6	1	10268	9770	3127	2499	10285	9737	3132	2487	10	43	1	13

**It has been observed that though DISCOMs except MGVCL have made progress in replacing faulty meters during FY 2018-19 compared to FY 2017-18, number of faulty meters pending for replacement at the end of FY 2018-19 is still large.**

**MGVCL shall clarify reasons for less number of meters replaced during FY 2018-19 compared to FY 2017-18.**

AGENDA NOTE FOR THE 21<sup>ST</sup> MEETING OF THE CO-RODINATION FORUM

**SoP 14: Billing and Collection Efficiency and AT & C loss**

DISCOM	Units input (MUs)		Net units billed (MUs)		Billing Efficiency (%)		Revenue Billed (Rs. Cr)		Revenue Collected (Rs. Cr)		Collection Efficiency %		Business Efficiency	
	FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19
	<b>A</b>		<b>B</b>		<b>C=(B/A)*100</b>		<b>D</b>		<b>E</b>		<b>F=(E/D)*100</b>		<b>G=(C*F)/100</b>	
DGVCL	15987.54	23543.18	14860.63	21810.26	92.95	92.64	12203.61	17083.55	11727.32	16505.72	96.10	96.62	89.32	89.51
MGVCL	11636.17	12392.37	10518.66	11242.44	90.40	90.88	7377.69	7708.19	7381.55	7710.62	100.05	100.3	90.44	90.91
PGVCL	32731.30	36589.63	26877.07	29657.28	82.11	81.05	15298.52	16853.32	15211.66	16826.2	99.43	99.84	81.65	80.92
UGVCL	23056.82	25927.77	21268.43	23327.3	92.24	89.97	9583.70	10522.62	11658.87	13340.47	126.78	126.42	92.24	89.97
TPL (A)	7963.00	8301.00	7461.00	7835.00	93.69	94.39	5808.52	6459.81	5764.28	6511.84	99.24	100.81	92.97	95.15
TPL (S)	3424.00	3392.00	3301.00	3276.00	96.41	96.57	2439.30	2601.77	2413.67	2598.34	98.95	99.87	95.40	96.45

DISCOM	ATC Loss%	
	FY 2017-18	FY 2018-19
	<b>H=100-G</b>	
DGVCL	10.68	10.49
MGVCL	9.56	9.09
PGVCL	18.35	19.08
UGVCL	7.76	10.03
TPL (A)	7.03	4.85
TPL (S)	4.60	3.55

Billing efficiency in case of PGVCL and UGVCL during FY 2018-19 was less than 90%. PGVCL and UGVCL to provide reasons for the less billing efficiency. Further, in case of PGVCL and UGVCL, AT & C losses have increased during FY 2018-19 compared to FY 2017-18. PGVCL and UGVCL to provide reasons for this increase in AT & C losses.

AGENDA NOTE FOR THE 21<sup>ST</sup> MEETING OF THE CO-RODINATION FORUM

**SoP 15: Release of new connections**

DISCOM	No. of consumers connected at the start of the year		No. of connections pending to be released at the start of the year		No. of new applications received during the year		No. of connections released during the year		No. of connections pending to be released at the end of the year		No. of consumers connected at the end of the year	
	FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19
DGVCL	2988183	3105829	50443	44901	112104	117596	117646	124631	44901	37527	3105829	3230460
MGVCL	2984771	3038953	1752	15760	59283	113047	53354	94720	15760	18545	3038953	3133614
PGVCL	4896808	5082177	49015	22711	166456	206506	185369	267045	49015	22577	5082177	5301193
UGVCL	3307434	3393388	40011	39338	85981	153828	86427	124893	39338	48570	3393388	3518281
TPL (A)	1850608	1898658	854	1104	63585	58114	57504	59720	1104	1004	1898658	1958378
TPL (S)	598996	606120	7	4	12763	11706	12436	11636	4	13	606120	617756

\* in case of TPL, number of pending applications exclude applications pending due to consumer compliance and RO permission

**DISCOMs have made progress in releasing number of connections during FY 2018-19 compared to FY 2017-18. However, there are still large number of new connections pending to be released.**

**SoP 16: Compensation for non performance of Standards**

**It is observed that no single case of compensation is registered during FY 2018-19. It is felt that due to lack of awareness amongst consumers about such compensation mechanism, consumers are not coming forward for compensation even in case of non-performance of standards by distribution licensees.**