

## APPENDIX

### REVIEW OF COMPLIANCE OF COMMISSION'S DIRECTIVES

The Commission, in its Tariff Order dated 14<sup>th</sup> May 2018, and in its earlier Tariff Orders, had issued several Directives. The Commission has been reviewing the compliance thereof, on a regular basis. In the present proceedings also, the Commission has reviewed the compliance to the Directives. The Commission besides reviewing the existing directives decides to elaborate and clarify them for continued compliance. The same are discussed below:

**1) Directive on conducting Consumers' Interaction Meetings (CIMs) in the O & M Sub-Divisions for redressal of consumer complaints:**

The Commission in its Tariff Order dated 30.05.2019 and the earlier Tariff Orders had directed that the HESCOM shall ensure that Consumer Interaction Meetings (CIM) chaired by the Superintending Engineers, are conducted in each of its O&M Sub-Divisions according to a pre-published schedule, at least once in every three months. Further, the consumers were to be invited to such meetings giving advance notice through emails, letters, HESCOM's website, local newspapers etc., to facilitate participation of maximum number of consumers in such meetings. **The HESCOM was required to ensure that the proceedings of such meetings are recorded and uploaded on its website, for the information of consumers.** Compliance in this regard was to be reported once in three months to the Commission, indicating the dates of meetings, the number of consumers attending such meetings and the status of redressal of their complaints.

Considering the practical difficulty in the Superintending Engineer (EI) covering all the Sub-Divisions in a quarter to preside over the Consumer Inter-action Meeting (CIMs), the Commission had decided that such meetings could also be presided over by the respective Executive Engineers of the O & M Divisions.

**It was declared that, if HESCOM were to fail to ensure the conduct of the Consumer Interaction Meetings as directed, the Commission would consider imposing a penalty of up to Rupees One lakh per O&M Sub-Division per quarter for each instance of non-compliance as per Section 142 and 146 of the Electricity Act 2003, and also direct that such penalty shall be recovered from the concerned Superintending Engineer who fails to conduct such meetings.**

**Compliance by the HESCOM:**

Consumer interaction meetings in HESCOM were conducted at the sub-Divisional level on every 3<sup>rd</sup> Saturday at every Sub-Division office compulsorily along with Lok - Adalats. As per the directions of the Hon'ble Commission, strict instructions vide this Office Letter No CYS 1334 dated 01.07.2019 has been issued to all Superintending Engineer (EI) / Executive Engineer (EI) of the O & M Circles and Divisions to conduct the consumer interaction meeting once in a quarter in all sub Divisions and to ensure that Consumer Interaction Meetings (CIM conducted in each of its O&M Sub-Division) is chaired by the Superintending Engineers or Divisional Executive Engineers failing which penalty will levied by the Commission as stated in the directive. Further, awareness is also being created under DSM activities to enable the public / consumers to participate in the consumer grievance meetings.

HESCOM has furnished the details of the CIMs conducted in the 1<sup>st</sup> and 2<sup>nd</sup> Quarters of FY20.

The complaints are attended and resolved in the meeting, but certain complaints of the consumers are of the nature which requires preparation of estimates / company procedures / regulations / to be followed to redress them. Such, complaints are being attended subsequently. Further, details are being submitted to the Commission on a quarterly basis for review.

**Commission's Views:**

The HESCOM has submitted the details of Consumer Interaction Meetings conducted in its jurisdiction 1<sup>st</sup> and 2<sup>nd</sup> quarter of FY20 and has not submitted the data in the prescribed format for the period of FY19.

The Commission had directed the ESCOMs to conduct the Consumer Interaction Meetings in the Sub-Divisions chaired by either the jurisdictional Superintending Engineer or the jurisdictional Executive Engineer to effectively redress the consumer grievances. The Commission notes the submission made by HESCOM that, such meetings are being conducted every Quarter in its entire area covering all Sub-Divisions. In the preliminary observations, the Commission had raised the concern on, non-submission of the data every quarter in the prescribed format as directed by the Commission. The Commission had directed HESCOM to furnish the details, indicating the dates on which the meetings were conducted. HESCOM furnished the details in its replies. From the data it is observed that the CIMs were not conducted in few of the Sub-Divisions of Belagavi Circle with the reasons mentioning "code of conduct". But, HESCOM has failed to report any reasons for non-conduct of CIMs in spite of subtle time available during the quarter beyond the code of conduct. As per the data furnished by HESCOM in its replies to preliminary observations, it is also observed that, neither the Superintending Engineers nor the jurisdictional Executive Engineers have chaired the CIMs in Belagavi Circle.

In an overall, HESCOM has not submitted the data of CIMs conducted in its jurisdiction in an appropriate manner, as per the format given by the Commission in the previous Tariff Order. **HESCOM is directed to submit the consolidated details of CIMs conducted in its jurisdiction during FY19 and FY20 in a proper manner within 2 months from the date of this order without fail.**

Though, HESCOM is claiming that the reports are being sent to the Commission, the reports are not been received in the Commission's office

at the end of each quarter in the format prescribed for reporting the conduct of CIMs.

Further, **the Commission desires that, such meetings are strictly chaired by either the jurisdictional Superintending Engineer or the jurisdictional Executive Engineer and no other officer of the lower rank. The Commission also declares that, if the Consumer Interaction Meetings are conducted in the Sub-Divisions without the participation of the Superintending Engineer or the Executive Engineer, then it will be considered as non-compliance of the Commission's Directives and the Commission would consider imposing a penalty of up to Rs. One lakh per O&M Sub-Division per quarter for each instance of non-compliance and also direct that such penalty shall be recovered from the concerned Superintending Engineer, as the case may be, who fails to conduct such meetings.**

**The Commission, therefore reiterates its directive to the HESCOM to conduct Consumer Interaction Meetings (CIM) chaired by either the jurisdictional Superintending Engineer or jurisdictional Executive Engineer once in a quarter, in each of the O&M Sub-Divisions, to redress the consumer grievances relating to supply of electricity. Advance notices shall be sent to the stakeholders by email / website and through SMS (by maintaining / updating the consumer database) well in advance. Information on the schedule of the Consumer Interaction Meeting, date, time, venue etc., shall be published in the form of news item in the leading local / regional newspapers, at least 3 days prior to the conduct of the meeting, to ensure that more number of consumers take part in such meetings.** Proceeding of conduct of such meetings shall be uploaded in the website of the HESCOM for reference of the needy consumers and a report in the prescribed format shall be sent to the Commission after the end of each quarter.

In addition to the quarterly meetings to be chaired by the jurisdictional Superintending Engineer (EI) [SEE] or the jurisdictional Executive Engineer (EI) [EE], the CIM being conducted by the Assistant Executive Engineer (EI)

at the Sub-Division level on third Saturday of every month, may be continued, so as to attend to the grievance of the consumers.

A compliance report (Quarterly) shall be submitted to the Commission regularly in the format given in the previous Tariff Order, along with a copy of the proceedings of each meetings.

**2) Directive on preparation of energy bills on monthly basis by considering 15 minute's time block period in respect of EHT / HT consumers importing power through power exchange under Open Access.**

The Commission had noted that due to implementation of billing based on 15 minutes' time block, there is a fair increase in the revenue to the HESCOM from the HT consumers, who are drawing energy through open access and directed the HESCOM to continue the efforts effectively.

The Commission had directed the HESCOM to ensure preparation of energy bills on monthly basis by considering the 15-minute's time block period in respect of EHT / HT consumers importing power through power exchange under Open Access. That, the HESCOM shall implement the directive forthwith and the compliance regarding the same shall be submitted monthly to the Commission, regularly. The Commission also directed the HESCOM to quantify the billing and report.

**Compliance by the HESCOM:**

The HESCOM is preparing of energy bills on monthly basis by considering the 15 minute's time block period in respect of EHT / HT consumer importing power through power exchange under Open Access. The table given below shows the consumption recorded under 15 minute's block, it is observed that 10.20 MU in FY-19 and 6.39 MU in FY-20 (up to Sept-19) is profit to the HESCOM due to billing done considering 15-minute time block.

**Commission's Views:**

The Commission notes that the HESCOM has complied with the directive by initiating preparation of energy bills on monthly basis considering the 15 minute's time block period in respect of EHT / HT consumers importing power through power exchange under Open Access. It is seen that the introduction of 15 minute's billing has resulted in significant quantum of energy saving during FY19 as well during FY20 till September 2019. The stand taken by the Commission in directing the HESCOM to prepare monthly EHT / HT consumer bills on 15 minute's time block period has prevented a revenue loss of Rs.7.344 (10.2MU x 7.20) Crores to HESCOM during FY19, and Rs.4.6 Crores during FY20 till September 2019 by consumers who took advantage of its laxity in enforcing correct billing. The HESCOM is required to adhere to the directive and submit regularly month wise details of number of open access consumers, open access units scheduled / consumed and illegally banked energy, if any, along with the details of revenue gain.

HESCOM shall ensure that the scheme of 15 minutes' time block billing is enforced on all applicable EHT / HT consumers from the month from which the necessary infrastructure was available.

**The Commission reiterates its directive that the HESCOM shall continue to prepare the energy bills on monthly basis considering the 15 minute's time block period in respect of all EHT / HT consumers importing power through power exchanges under open access and submit quarterly compliance thereon, regularly to the Commission.**

**3) Directive on Energy Conservation:**

The Commission had directed that, HESCOM has to service new installations only after ensuring that the equipment installed in the consumer's premises are BEE \*\*\*\*\* (Bureau of Energy Efficiency five-star rating) rated viz., Air Conditioners, Fans, Refrigerators, etc., are energy efficient.

On similar lines, HESCOM was directed to service all new streetlight / high mast installations including extensions made to the existing streetlight circuits, only after ensuring that LED lamps / energy efficient lamps like induction lamps are provided to the street light points.

Also, the Commission had directed the HESCOM to take up programmes to educate all the domestic, commercial and industrial consumers, through the media and by distributing pamphlets giving details on the benefits of using five star rated equipment certified by the Bureau of Energy Efficiency in reducing their monthly electricity bills and conservation of precious energy along with monthly bills.

#### **Compliance by the HESCOM:**

Energy Conservation – Use of Energy Efficient Equipment's.

HESCOM issued direction to all the Chief Engineer (Elec) / Superintending Engineer (EI) / Executive Engineer (EI) & also constantly pursuing towards implementation of the Directive and for providing of LED lamps / energy efficient lamps while servicing of new streetlight / high mast installations including extensions made to the existing streetlight circuits also constantly pursuing of the report for serviced installations ensuring LED lamps / energy efficient lamps. Status of LED provided to Streetlight Installations as on end Sep-2019 is as below,

ESCOM	Total No of Streetlight Installations	No of Installations Provided with LED Lamps	Balance No of Streetlight Installations to be provided with LED Lamps
HESCOM	25119	6927	18192

About servicing all the new installations only after ensuring that the BEE\*\*\*\*\* (Bureau of Energy Efficiency Five-star rating) rated Air Conditioners, Fans, Refrigerators etc., are being installed in the applicant consumer's premises. In this regard HESCOM has issued direction to all Chief Engineer (Elec) / Superintending Engineer (EI) / Executive Engineer (EI). Also constantly pursuing of the report for serviced installations ensuring energy efficient equipment installed.

Even after constantly pursuing that all the new installations are to be serviced only after ensuring that the BEE \*\*\*\*\* (Bureau of Energy Efficiency Five - star rating) rated Air Conditioners, Fans, Refrigerators etc., are being installed in the applicant consumers' premises and also created awareness, practically it is difficult for HESCOM to implement this directive because while providing service to the installation especially domestic installation initially the applicants premises will not have any appliances connected. Therefore, it has been difficult ascertain the Five Star equipment's are installed at the time servicing. Hence, HESCOM prays before the Commission withdraw the said directive.

HESCOM has conducted following activities for creating consumer awareness.

1. The Ring Back Tune (RBT) is provided to all 2,970 Nos of connections of HESCOM CUG group. The caller tune includes promotion of replacement of conventional bulbs by LED bulbs, Energy Efficiency methods, using BEE 5 star rated equipment's, toll free number 1912 promotions and Energy conservation messages. RBT services is from 1st April 2019 to 31st March 2020.
2. "Two Days National Level Technical Festival – MELANZE – 2019" of Smt. Kamal & Shri. Venkappa M Agadi College of Engineering & Technology, Laxmeshwar on 26<sup>th</sup> and 27<sup>th</sup> April 2019 in the college campus for Created Awareness about Energy Saving, Energy efficiency methods, safety procedures, DSM tips etc. Distributed pamphlets- Regarding energy saving, safety, DSM tips, using BEE 5 star rated equipment's, replacement of conventional bulbs by LED bulbs, Energy Efficiency methods and providing timer switches and LED lamps to street lights a etc., Around 4,000 No of students participated in the event.
3. Vijayavani "Property Expo 2019" on May 03<sup>rd</sup> to 05<sup>th</sup> 2019 at Raikar Grounds, Hubballi. DSM Awareness activities carried out through 3m \* 3m, Stall opened for 3 days. Distributed pamphlets - Regarding



energy saving, safety, DSM tips, using BEE 5 star rated equipment's, replacement of conventional bulbs by LED bulbs, Energy Efficiency methods and providing timer switches and LED lamps to street lights a etc., Around 50,000 public visited the property Expo.

4. Distribution of pamphlets along with monthly bills as per Hon'ble Commission directive on Energy Conservation: 20,00,000 Nos of pamphlets are printed and distributed with monthly Electricity bills of June-2019 of domestic consumers of HESCOM. Regarding the benefits of using 5-star rated equipment certified by the Bureau of Energy Efficiency in reduction of monthly electricity bill of consumers, Energy Saving, safety procedures, DSM tips and HESCOM services, replacement of conventional bulbs by LED bulbs, servicing new street light with LED / EE Lamps and providing timer switches to street lights and servicing IP set installations with EE / Star Rated pumps, toll free number 1912 promotions, etc.,
5. Circular issued to all HESCOM Offices regarding using 5 star rated equipment's & LED bulbs only in all HESCOM offices. Details of Office where conventional Bulbs are replaced with LED Bulbs is enclosed in Annexure-1.
6. All India Radio: Awareness about Energy Saving, Bill payment, safety procedures and HESCOM services, Energy efficiency methods- using BEE 5 star rated equipment's, replacement of conventional bulbs by LED bulbs etc., through jingles and program in All India Radio (from 16.07.2019 to 31.03.2020).
7. HESCOM conducted the awareness programs to the consumers / public, for use of LED bulbs, energy efficient electrical equipment etc., in all the Sections of HESCOM by issuing circular No HCO-50/C-136/19-20 dated 18.07.2019 (Enclosed Annexure-2).
8. Awareness was created among consumer / public by conducting programs in public place (like functional halls, temples, auditorium

where 100-200 people can participate). Approval has been issued to incur up to Rs 10,000/- expenditure for each section.

Created awareness about Energy Saving, safety procedures, DSM tips and HESCOM services, Energy efficiency methods - using BEE 5 star rated equipment, replacement of conventional bulbs by LED bulbs, servicing new street light with LED / Energy Efficient Lamps and providing timer switches to street lights. Servicing IP installations with Energy Efficient / Star Rated pumps, toll free number 1912 promotions, etc.

9. Energy Peak load management program and load reduction by using LED Bulbs, LED Tube Lights and Efficient Fan (Energy Saved Calculation Sheet enclosed- Annexure-3).

Domestic Efficient Lighting Programme (DELP) scheme popularly known as Hosa Belaku scheme implemented in HESCOM from 04.02.2016. Up till September 2019, 22,24,543 Nos LED 9W bulbs, 30,645 Nos of LED 20W Tube lights and 6,476 Nos of Energy Efficient Fan are sold in HESCOM jurisdiction by M/s HESCOM has given full co-operation to M/s EESL to open the counters in HESCOM jurisdiction.

SI No.	LED Appliances	Commencement	Total No Sold till Sep-2019	Energy saved in MU
1	LED Bulbs	Feb-16	22,24,543	143.56
2	LED Tube Lights	Feb-17	30,645	1.525
3	Energy Efficient Fans	Apr-17	6,476	0.285

#### Commission's Views:

The Commission observes that, the HESCOM has not submitted the compliance regularly on implementation of the directive.

It is observed that the efforts of HESCOM in selling approximately 22 Lakh numbers of LED bulbs, compared to the previous year's figures and compared to the sales in that of other ESCOMs is very poor. The Commission notes that the HESCOM has not issued any Circulars towards

implementation of the directive. HESCOM has submitted the compliance in respect of energy savings by way of making provision for selling LED lamps / LED tube lights / energy efficient fans. But HESCOM has not submitted the energy savings while servicing of new streetlight / high mast installations including extensions made to the existing streetlight circuits.

On the whole, the Commission finds that the progress in implementation of this directive could have been much better. Therefore, the Commission directs HESCOM to focus on effective implementation of this directive by reviewing periodically the progress of implementation in the field and take necessary corrective steps.

This shows that the HESCOM has not implemented the directive in its letter and spirit, to take forward the initiative of conservation of energy. It is also observed that the HESCOM has issued instructions to all its officers to ensure use of BEE five-star rated Energy Efficient Appliances. However, HESCOM has not mentioned about effective steps being taken in the field to ensure that all new installations are serviced only when BEE five-star rated Air Conditioners, Fans, Refrigerators, etc., are installed in the consumers' premises. It has also noted that the HESCOM has implemented "Hosa Belaku" and "Pavan" programme under which it is distributing energy efficient lamps, fans, etc., to the consumers which appears to have had limited success. On the whole, the Commission finds that the progress in implementation of this directive could have been much better. Therefore, the Commission directs HESCOM to focus on effective implementation of this directive by reviewing periodically the progress of implementation in the field and take necessary corrective steps.

HESCOM has furnished the list of places where it has conducted the awareness programme. But has not mentioned the topics covered includes the energy conservation. Hence, the Commission directs HESCOM to conduct the awareness programs to the consumers / public, for use of LED bulbs, energy efficient electrical equipment etc., by making use of the fund reserved for customer relation / education program.

Also, HESCOM has furnished the list of offices where the existing lamps are replaced by energy efficient LEDs etc., But has not furnished the energy savings achieved out of this exercise. While appreciating the implementation of replacement of high power consuming lights by LED bulbs and LED tube lights in few of its offices, the Commission directs HESCOM to extend such work to all its offices in a phased manner in order to save more energy and to be a model, by depicting energy savings and their benefits to the general consumers.

The HESCOM in its Tariff Filing has expressed difficulty that, to service all the new installations only after ensuring that the BEE \*\*\*\*\* (Bureau of Energy Efficiency five-star rating) rated Air Conditioners, Fans, Refrigerators, etc., are being installed in the consumers' premises saying that "*the Consumer would not have installed appliances like air conditioners, refrigerators etc., in their premises at the time of service of new installation*".

**Looking into the practical difficulty, by partially modifying the directive, the Commission reiterates its directive with the directions to service all new streetlight / high mast installations including extensions made to the existing streetlight circuits, only after ensuring that the LED lamps / energy efficient lamps like induction lamps are provided to the street light points and the compliance thereon shall be submitted to the Commission once in a quarter on a regular basis. Inspection by jurisdictional Executive Engineers / Superintending Engineers of new installations, selected on random basis shall be undertaken to cross check adherence to the directive by the field offices.**

**4) Directive on implementation of Standards of Performance (SoP):**

The HESCOM had been directed to implement the specified Standards of Performance strictly, while rendering services related to supply of power as per the KERC (Licensees' Standards of Performance) Regulations, 2004. Further, the HESCOM was directed to display prominently, in both Kannada & English languages, the details of various critical services such as replacing the failed transformers, attending to fuse off call / line breakdown complaints, arranging new services, change of faulty meters,

reconnection of power supply, etc., rendered by it as per Schedule-1 of the KERC (Licensees' Standards of Performance) Regulations, 2004 and Annexure-1 of the KERC (Consumer Complaints Handling Procedure) Regulations, 2004, on the notice boards in all the offices of O & M Section and O & M Sub-Divisions, in its jurisdiction for the information of consumers as per the format given in the previous Tariff Order.

### **Compliance by the HESCOM:**

Strict instructions have been issued to the concerned officers to display the Standards of Performance (SOP) posters in all the O & M offices of HESCOM and any breach in rendering services of the SoP will be penalized as per the provision of SoP Regulations. The progress report on SoP is being submitted to the Commission every quarter and the same is hosted in the HESCOM's website [www.hescom.co.in](http://www.hescom.co.in). The HESCOM is making all efforts to strictly implement the specified SoP while rendering services related to supply of electricity.

Grahakara Kaipidi is being regularly published and distributed the same being same among the HESCOMs staff, various other stake holders and Consumers. Further, any amendments to the regulations or any additional information to be updated is incorporated in the Grahakara Kaipidi and the same is hosted in HESCOM website.

The Form - A, to claim compensation for non-compliance of the SoP under KERC (CGRF and Ombudsman) Regulations, 2004 is displayed in the notice boards of all HESCOM Offices.

HESCOM is carrying out the awareness campaigns regarding the Standards of Performance through the DSM activities. The banner of the various services such as replacing the failed transformers, attending to fuse off call / line breakdown complaints, arranging new services, change of faulty meters, reconnection of power supply, etc., rendered by it as per Schedule-1 of the KERC (Licensee's Standards of Performance) Regulations, 2004 is displayed in the HESCOMs stall under the DSM activity to make the consumer aware regarding services.

### Commission's Views

Commission is of the view of the fact that the State has become surplus in power availability, so, the supply of quality and reliable power to consumers is of utmost priority. Hence the Standards of Performance (SoP) for Distribution Licensees specified by the Commission need to be implemented in letter and spirit.

The Commission while noting the compliance by HESCOM, reiterates that the HESCOM shall continue to adhere to the specified Standards of Performance in rendering various services to consumers in a time bound manner.

It has come to the notice of the Commission that the consumers are generally not aware of the SoP prescribed by the Commission and as a result, the consumers are still facing difficulty in getting prompt services. As per the submissions made by HESCOM in its Tariff Filing, in spite of the directives issued, the Commission has noted with displeasure that, it has not conducted awareness campaigns in the Hobli levels for educating consumers and not even conducted a single orientation program for its field staff.

Hence, the Commission while noting the HESCOMs compliance, **reiterates that the HESCOM shall continue to adhere to the directives on the specified Standards of Performance in rendering various services to consumers in a time bound manner.**

**Further, the Commission directs the HESCOM to carry out effective supervision over the functioning of field offices particularly in rendering of services to the consumers, relating to restoration of supply of electricity. The Commission also directs HESCOM to submit the details of number of violations of SoP by officers, Sub-Division-wise, month-wise, amount of penalty levied on the officers and the amount paid to the consumers for any delay in service.**

The Commission also directs the HESCOM to take action to display the SoP in the format mentioned in the previous Tariff Order in its official web site for information of the consumers.

SoP should be displayed in each of the Section Office and Sub-Division Office, in a conspicuous place, which can be viewed by all the visitors to the Office. At the end of SoP, it should be mentioned that, consumers can claim the compensation from the concerned officer by filing a complaint before the CGRF in the Form - A, available in the KERC (CGRF and Ombudsman) Regulations, 2004.

The Commission reiterates and directs HESCOM to conduct awareness campaign at the Hobli levels for educating the public about the Standards of Performance prescribed by the Commission. HESCOM shall conduct necessary orientation programme for all the field officers and the staff up to linemen to educate them on the SoP and the consequences of non-adherence to the SoP.

Further, the Commission directs HESCOM to publish and keep circulating the "HAND BOOK" (Kaipidi in Kannada) in Kannada on the SoP and arrange to distribute to all the staff and stake holders.

On any failure to implement this direction within 3 months of the issue of this order, the Commission would be constrained to initiate penal proceedings under Section 142 of the Electricity Act, 2003, against the HESCOM officials, for noncompliance of the Commission's Directives.

At the same time HESCOM shall consider and continue bringing in a system of recognizing the best performing Sub-Division / section in terms of adherence to SoP and publicize such recognition so as to incentivize better performance from the officers / personnel concerned.

The Commission reiterates that, the HESCOM shall continue to strictly implement the specified SoP while rendering services relating to supply of electricity as per the KERC (Licensees' Standards of Performance)

**Regulations, 2004. The compliance in this regard shall be submitted once in a quarter to the Commission regularly.**

**5) Directive on use of safety gear by linemen / Power men:**

With a view to reducing the electrical accidents to the linemen working in the field, the Commission had directed the HESCOM to ensure that all the linemen in its jurisdiction are provided with proper and adequate safety gear and also ensure that the linemen use such safety gear while working on the network. HESCOM was also directed to sensitise the linemen about the need for adoption of safety aspects in their work through suitably designed training and awareness programmes. The HESCOM was also directed to device suitable reporting system on the use of safety gear and mandate supervisory / higher officers to regularly cross check the compliance by the linemen and take disciplinary action on the concerned if violations are noticed. The Commission had desired that HESCOM shall implement this directive within one month from the date of this order and submit compliance report to the Commission.

**Compliance by the HESCOM:**

The HESCOM has furnished the details of the safety gear / equipment that have been procured & supplied during the year 2018-19 & 2019-20.

Further it is to inform that tender was already floated for procurement of safety shoes and during the process of finalization due change in the technical specification, tender has been cancelled and since e-procurement portal was not functioning properly, there was delay in processing the Tender for procurement of safety shoes with revised Technical specification. Tender will be processed and finalized at the earliest.

Strictly instructed to the work in-charge Officer / all Power men to wear safety gears at the time of work without failure in vide Circular No CYS 2548 dated 21.09.2019 and CYS 2893 dated 11.10.2019.



Many sessions on “electrical accidents and safety procedures to be followed to avoid accidents” is being conducted regularly for the line maintenance staff during trainings at Training Centre of HESCOM, Hubballi. A special training program exclusive on safety procedures to be followed to avoid accidents was provided to all the 2,649 Nos of Junior Power Men of HESCOM.

During the financial year 2018-19 and in FY 2019-20 up to Sept-19 trainings were conducted for the Pre-promotional / Pre-employment maintenance staff (173 employees were trained), and National Training Programs (169 employees were trained). In the month of Sept-19 a two days' training on Fire Prevention and Fire Fighting was given to 79 No. of employees by the Department of Fire and emergency services. HESCOM will continue its efforts to focus on safety aspects to reduce electrical accidents occurring in the distribution system. Further in coming months of FY20, ITC plans to train minimum of 450 employees regarding accidents & safety procedures.

**Commission's Views:**

**HESCOM is not submitting the quarterly compliance report to the Commission.**

It has been brought to the notice of the Commission by the consumers and also report of the CEIG on accidents that the safety gears / equipment are not being used by all the linemen at work in the field and hence the number of electrical accidents are increasing every year. The Commission considers that not providing appropriate safety gear / equipment to the staff at work place amounts to a serious violation of human rights by HESCOM.

**The long-time take by HESCOM to procure safety shoes, insulated tool kits etc., indicates the lack of seriousness on the part of HESCOM in the matter. Adequate quantities of all safety gears / equipment shall be procured periodically and sufficient inventory of these materials shall also be**

**maintained. HESCOM should take action to empanel suppliers of safety gear / equipment, so that the procurement is quicker.**

In the preliminary observations, HESCOM was directed to furnish the reasons for not providing safety equipment / safety gear to 2,499 number of linemen and 19 number of linemen on contract basis, as per the data furnished by HESCOM for the ESCOMs review meeting. **Instead of furnishing the reasons, HESCOM has repeated few paras of its Tariff Filing.** **The Commission makes a serious note of this and directs HESCOM to furnish the reasons and the action plan to provide safety gear to all the staff and employees working in the field with the detailed statistics, within 1 month from the date of this order.**

The Commission, while taking note of the HESCOM's compliance on the directive, stresses that the HESCOM should continue to give attention to safety aspects in order to reduce and prevent electrical accidents occurring due to negligence / non-adherence of safety procedures by the field staff while carrying out the work on the distribution network. It is noted that no details of any training being organized on safety aspects to the linemen, are furnished by HESCOM. The linemen and other field staff should be given appropriate training periodically on adherence to safety aspects / procedure, and such training modules should include case studies so that the training is current and relevant, so that, they carry out their work safely / effectively.

**The Commission reiterates its directive that the HESCOM shall ensure that, all the linemen and other field staff are provided with adequate and appropriate safety gear within 3 months from this order as per the undertaking and the linemen and other field staff use the same while carrying out the work in the field. The compliance in this regard shall be submitted once in a quarter to the Commission regularly. Protocols should be drawn on procedures to be adopted / roles and responsibilities fixed in respect of all those employees who are involved in working on live lines / installations for repairs etc., based on case studies.**

## 6) Directive on Providing Timer Switches to Streetlights by HESCOM

The Commission had directed the HESCOM to install timer switches using own funds to all the streetlight installations in its jurisdiction wherever the local bodies have not provided the same and later recover the cost from them. The HESCOM was also directed to take up periodical inspection of timer switches installed and ensure that they are in working conditions and shall undertake necessary repairs / replacement work, if required and later recover the cost from local bodies. The compliance regarding the progress of installation of timer switches to street light installations had to be reported to the Commission within three months of the issue of this Order.

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### Compliance by the HESCOM:

HESCOM issued direction to all Chief Engineer (Elec) / Superintending Engineer (EI) / Executive Engineer (EI) to ensure that all new streetlight / high mast installations including extensions made to the existing streetlight circuits shall be serviced only after providing with timer switches. The HESCOM is relentlessly pursuing local bodies for installing timer switches to avoid wastage of energy. HESCOM is spreading awareness about providing timer switches to Streetlights through newspaper and above said awareness programs.

Status of installation of Timer switches to Street light installations as on end of Sep-19 as below.

Total No of Streetlight Installations	No of Installations Provided with Timer switches	Balance No of Streetlight Installations to be provided with Timer switches
25119	5137	19982

### HESCOM Submission:

Even after HESCOM relentlessly pursuing with the local bodies for installing timer switches to avoid wastage of energy and also creating awareness about providing timer switches and LED Lamps to Streetlights through

newspaper and above said awareness programs it is practically difficult for HESCOM to implement the directive since Streetlight Installation / maintenance come under the purview of local bodies, Corporation / Panchayat. Hence, HESCOM prays before the Commission withdraw the said directive on installing of timer switches.

### **Commission's Views**

The Commission notes that the progress of providing timer switches to street lights is very poor. As per the statistics furnished in the tariff filing in November 2018, 19,203 SL installations were required to be provided with timer switches. Whereas, as per the information furnished in November 2019, 19,982 number of SL installations are to be provided with the timer switches.

This shows that, in spite of the directions of the Commission, HESCOM is servicing the SL installations without timer switches, thereby increasing the inventory of SL installations to be provided with timer switches.

**This shows that the HESCOM has not given adequate focus to this issue and has not coordinated with the concerned local authorities in installation of timer switches while servicing the new street light installations. Thus, the inaction and failure of the HESCOM has actually resulted in increase in the number street light installation requiring timer switches. Failure to remedy this situation would not only result in wastage of electricity, but also shorter life of the installations and resultant avoidable expenditure on their replacement. Hence, HESCOM should seriously pursue this matter with the concerned local authorities strictly ensure fixing of timer switches while servicing the new installations and also repairs of faulty timer switches.**

Thus, the inaction by the HESCOM has actually resulted in increase of number of street light installations requiring timer switches. This is a continuous action, and if timely action is not initiated, it results in wastage of electricity and the energy conservation is defeated.

Hence, **HESCOM should seriously pursue this matter with the concerned local authorities, strictly ensure fixing of timer switches while servicing the new installations.** Therefore, going by the progress, the Commission is of the view that the HESCOM is not serious in installing the timer switches.

**It is the inbound duty of the Distribution Licensee to service the new installations by following the directions of the Commission. The Commission has noted the fact that, providing the timer switches to the street light installations fall under the purview of the BBMP / Municipal Administration. At the same time, it is the duty of the Distribution Licensee to adhere to the directives of the Commission while servicing the new or the extended circuit of the street light installations by getting the timers switches installed. This shows utter negligence by HESCOM in following the directives of the Commission.**

Therefore, the Commission with a **partial modification to the directive, reiterates that the HESCOM shall ensure that, the new streetlight installations and any extension / modification to be carried out to the existing streetlight installations shall be serviced only with timer switches. The compliance in this regard shall be submitted once in a quarter, regularly, to the Commission.**

**7) Directive on load shedding:**

In respect of Load Shedding, the Commission had directed that:

- i) Load shedding required for planned maintenance of transmission / distribution networks should be notified in daily newspapers at least 24 hours in advance for the information of consumers.
- ii) The ESCOMs shall, on a daily basis estimate the hourly requirement of power for each sub-station in their jurisdiction based on the seasonal conditions and other factors affecting demand.
- iii) Any likelihood of shortfall in the availability during the course of the day should be anticipated and the quantum of load shedding should be estimated in advance. Specific sub-stations and feeders

should be identified for load shedding for the minimum required period with due intimation to the concerned Sub-Divisions and sub-stations.

- iv) The likelihood of interruption in power supply with time and duration of such interruptions may be intimated to consumers through SMS and other means.
- v) Where load shedding has to be resorted due to unforeseen reduction in the availability of power, or for other reasons, consumers may be informed of the likely time of restoration of supply through SMS and other means.
- vi) Load shedding should be carried out in different sub-stations / feeders to avoid frequent load shedding affecting the same sub-stations / feeders.
- vii) The ESCOMs should review the availability of power with respect to the projected demand for every month in the last week of the previous month and forecast any unavoidable load shedding after consulting other ESCOMs in the State about the possibility of inter-ESCOM load adjustment during the month.
- viii) The ESCOMs shall submit to the KERC their projections of availability and demand for power and any unavoidable load shedding for every succeeding month in the last week of the preceding month for approval.
- ix) The ESCOMs shall also propose specific measures for minimizing load shedding by spot purchase of power in the power exchanges or bridging the gap by other means.
- x) The ESCOMs shall submit to the Commission sub-station-wise and feeder wise data on interruptions in power supply every month before the 5<sup>th</sup> day of the succeeding month.

The Commission had directed that the ESCOMs shall make every effort to minimize inconvenience to consumers by strictly complying with the above directions. The Commission had indicated that it would review the compliance of directions on a monthly basis for appropriate orders.

**Compliance by the HESCOM:**

HESCOM has taken up various extensive improvement works in order to enhance reliability and power quality. The action plan are as follows:

Construction of 11 KV link lines to reduce the load on the existing feeders, bifurcation of 11 KV lines and replacement of higher capacity conductor is being carried out with a sufficient capital budget provision for such works.

New 33 KV stations and lines are added in Uttar Kannada / Vijayapur / Bagalkot / Belagavi and Dharwad District to reduce the load on the existing overloaded feeders and to improve the low voltage problems.

Replacement of deteriorated and lower capacitor conductor by higher capacity conductor both in LT and HT lines.

Providing UG cables in 11 KV distribution network for Belagavi, Gokak and Hubballi – Dharwad cities.

Also, it is instructed to carry out of maintenance work on all 11 KV feeders regularly to minimize power supply interruptions and ensure 24X7 power supply.

In this regard, an OM for nominating nodal officers for monitoring of pre monsoon maintenance work as well as maintenance work during monsoon on 11 KV HT / LT lines and Distribution Transformer Centers in HESCOM to minimize power supply interruptions was placed and is being followed.

HESCOMs is submitting to KERC its projections of availability and demand for power and any unavoidable load shedding for every succeeding month in the last week of the preceding month for approval regularly.

HESCOM is notifying the details of load shedding in respect of planned maintenance of transmission / distribution networks in advance in local daily newspaper for the information of consumers.

HESCOM is furnishing on a daily basis the hourly requirement of power in its jurisdiction based on the seasonal conditions and other factors affecting demand to SLDC by e-mail.

In HESCOM, in case of any shortfall in the availability during the course of the day, anticipating the quantum of load shedding is being estimated in advance. Further, specific feeders are identified for load shedding for the minimum required period with due intimation to the concerned Sub-Divisions and sub-stations.

The REC has developed a web-based application, "Urjamitra" and HESCOM has uploaded the data relating to all 11 KV feeders. The likelihood of interruption in power supply with time and duration of such interruptions are being uploaded in the web-based application since from October, 2018.

Outage information for both scheduled and unscheduled load shedding is being triggered to relevant consumers through SMS's in predefined format, by the concerned AEE, O & M Sub-Divisions.

HESCOM has uploaded the details of 27.54 lakhs of consumers in the database of Urjamitra out of 44.35 lakhs of consumers of its area. 1.61 crores of SMS's are triggered using the platform for 6,612 numbers of scheduled outages and 862 numbers of unscheduled outages, which can be seen in [www.urjamitra.com](http://www.urjamitra.com).

Where load shedding has to be resorted due to unforeseen reduction in the availability of power, or for other reasons, action will be taken to inform consumers, the likely time of restoration of supply through SMS by the concerned AEE, O & M Sub-Divisions through Urjamitra.

In HESCOM, the Load shedding is carried out on rotation basis in different sub-stations / feeders to avoid frequent load shedding affecting the same sub-stations / feeders.



HESCOM will review the availability of power with respect to the projected demand for every month in the last week of the previous month and forecast any unavoidable load shedding after consulting other ESCOM's in the state about the possibility of inter ESCOM's load adjustment during the month.

For minimizing load shedding, HESCOM is purchasing spot purchase of power in the power exchanges on a day head basis or by short term power purchase whenever needed.

Number of consumers existing in HESCOM Jurisdiction - 44.35 Lakhs (live installations). 37.73 Lakhs consumers' details are uploaded in URJA MITRA. 85.07% of consumer's details are available in the URJA MITRA Portal. HESCOM has directed to all O&M Divisions to submit 100% consumer data of corresponding Divisions for uploading it in URJA MITRA Portal. Updation of balance number of consumer details is in progress. Updation of 100% of consumer data in URJA MITRA Portal will be achieved by April 2020.

### **Commission's Views**

The Commission takes note of the submission of the HESCOM that it has taken action to provide information to the consumers through SMS about the time and duration of interruptions in power supply due to various reasons.

The Commission also notes that, HESCOM is making use of the URJA Mitra App developed by RECTPCL for emanating messages to provide the information of scheduled and unscheduled power outages, emergency outages, restoration time, power outage extension time, etc., due to reasons such as system constraints, breakdowns of lines / equipment, maintenance etc., to the consumers through SMS. HESCOM has to take further steps and speed up to update the database with the entire consumer strength of the Company to make the App effective.

**HESCOM shall extensively use the URJA Mitra mobile application, which can be used as a link between HESCOM field staff and citizens for**

**facilitation of outage dissemination information to all consumers through SMS. The application can also be integrated with any other system. This would significantly address the “consumers’ dissatisfaction” on this issue and prevent inconvenience / disruption caused to the consumers especially the industrial consumers. HESCOM can also save money required for development of similar software.**

Further, the Commission has noted with concern that, the number as well as the duration of interruptions are increasing, causing inconvenience to the consumers. The Commission notes that, even though the power availability has improved resulting in surplus power situation, the distribution network reliability has not similarly improved, causing frequent disruptions in power supply, which causes hardship to the consumers and also revenue loss to the HESCOM. The Commission directs HESCOM to take remedial measures to minimize power supply interruptions and ensure 24 x 7 power supply. HESCOM shall submit the action plan in this regard to the Commission within 3-months of this Order.

Further, the Commission considers that one of the main reason for power disruption is the failure of the Distribution Transformers. As per the SoP the (Indicative Maximum time limit for rendering service), notified by the Commission, the HESCOM is required to restore power supply affected due to DTC failure within 24 Hours in City and Town areas and within 72 Hours in Rural areas. However, during the public hearing the consumers have complained that the HESCOM is not adhering to the SoP fixed by the Commission and that the field officers are not attending to minor faults and are taking longer time for restoring power supply. It is further noted that, lack of regular maintenance and poor quality of repairs also have contributed to the increase in number of failures of Distribution Transformers. Hence, the Commission directs HESCOM to conduct orientation programmes / workshops to the field staff to equip and motivate them to attend to the minor faults at site itself wherever possible and restore power supply as quickly as possible. HESCOM is also directed to take action for effective monitoring and supervision by periodical

maintenance and repairs of transformers and fix personal responsibility on the erring staff / officer in case of poor maintenance and poor quality of repairs.

HESCOM has not mentioned anything on the conduct of orientation program / workshops to the field staff to equip and motivate them to attend to the minor faults at site itself wherever possible and restore power supply as early as possible. Hence, the Commission directs the HESCOM to conduct orientation programmes to the field staff towards motivating them to attend to the minor faults in the field itself and restore the power supply as early as possible. HESCOM is also directed to take up strict supervision over repairs to the transformers and ensure good quality repairs and fix personal responsibility on the erring staff / officer.

Further, the Commission directs, the HESCOM to submit projections of availability and demand for power and any unavoidable load shedding for every succeeding month in the last week of the preceding month to the Commission regularly, without fail.

**The Commission reiterates that the HESCOM shall comply with the directive on load shedding and submit monthly compliance reports thereon to the Commission regularly.**

**8) Directive on Establishing a 24x7 Fully Equipped Centralized Consumer Service Centre for Redressal of Consumer Complaints:**

The Commission had directed HESCOM to put in place a 24x7 fully equipped Centralized Consumer Service Centre at its Headquarters with a state of the art facility / system for receiving consumer complaints and monitoring their redressal so that electricity consumers in its area of supply are able to seek and obtain timely and efficient services in the matter of their grievances. Such a Service Centre shall have adequate desk operators in each shift so that the consumers across the jurisdiction of the HESCOM are able to lodge their complaints to this Centre.

HESCOM was also directed to ensure that every complaint, received through various modes in the centre shall be registered by the desk operator and the complaint register number shall be intimated to the Consumer through SMS. In turn, the complaints shall be transferred online to the concerned field staff for resolving the issue. The concerned O&M / local service station staff shall visit the complainant's premises at the earliest to attend to the complaints and then inform the Centralized Service Centre that the complaint is attended. Thereafter the desk operator shall call the complainant and confirm with him whether the complaint has been resolved. The complaint shall be closed only after confirmation by the consumer. Such a system should also generate daily reports indicating the number / nature of complaints received, complaints attended, complaints pending and reasons for not attending to the complaints along with the names of the officers responsible with remarks be placed before the Management on the following day for attention to review and take corrective action in case of any pendency / delay in attending to the complaints.

The HESCOM shall publish the details of complaint handling procedure / Mechanism with contact numbers in the local media or in any other form periodically for the information of the consumers.

The Commission directed the HESCOM to establish / strengthen 24x7 service stations, equipping them with separate vehicles & adequate line crew, safety kits and maintenance materials at all its Sub-Divisions including the rural areas for effective redressal of consumer complaints.

#### **Compliance by the HESCOM:**

In view of the increase in the population and consequently the consumers are increasing year on year therefore increase in no. of Complaints received, HESCOM has established Centralized Customer Care Centre (CCC) which was running round the clock with 21 Call Centre Executives (CCE) in 7 seater has been increased to 54 CCEs in 15 seater and 4 Team leads to carry out effective management of complaint handling

procedure. One Junior Engineer per shift monitored by Assistant Engineer are supervising the activities of CCC and as directed disciplinary actions will be taken for the erring official / executives.

HESCOM has provided necessary training in co-ordination with the firm to carry out the work in a polite and respectful manner. Disciplinary action will be initiated against the firm, if complaints are received against CCE about the negative (disrespectful) behavioural attitude of the staff.

HESCOM has submitted that the total No. of complaints received at CCC for the FY20 up to September 2019 under RAPDRP are 1,21,522 Nos and non-RAPDRP are 64,466 Nos and the complaints received other than central complaint are 137 Nos and 35 Nos respectively. The minimum time taken to attend complaints are 25 minutes to 10 days maximum, based on nature of complaints. Out of the total complaints received 1,86,160 complaints are attended under different categories.

HESCOM has envisaged a mechanism to recognize the best performing executive every month by collecting review / rating / information from Team leaders and shift in charge Junior Engineer, as the mechanism is still in initial stages of planning, the incentivizing / rewarding / appreciation decision is still under process.

Further, other than 1912 HESCOM consumers can also log complaints directly through HESCOM website ([www.hescom.co.in](http://www.hescom.co.in)) and also through email ID [customercare@hescom.co.in](mailto:customercare@hescom.co.in).

Awareness programs of the CCC toll free No1912 has been taken up under various activities of DSM such as Distributed pamphlets, Vijayavani "Property Expo 2019", Radio Programs etc., for the information of public and to ensure that all the complaints of consumers are registered only through the Centralized Consumer Service Centre. HESCOM will strive continuously to improve the services to consumer.

**Commission's Views:**

The Commission notes that the HESCOM has established necessary infrastructure for effective redressal of consumer complaints. While taking note of the efforts made by HESCOM, it is observed that, the number of complaints is increasing year on year.

It had come to the notice of the Commission that, complaints on the behavioural attitude of executives working in the CCC have. The Commission is not happy with the reply furnished by HESCOM in respect of imparting training to the executives working in CCC. However, HESCOM shall instruct the agency to impart suitable training and continue to impart such trainings to the executives, on public relations and behavioural aspects, human relations etc., The Commission directs HESCOM to deploy Senior Level Officers to supervise and to review all the activities of the CCC, and shall initiate disciplinary action against erring officials.

HESCOM shall put in place a system of recognizing the best performing customer care executive every week / fortnight / month and publicize such recognition so as to incentivize better performance from them. The Commission notes with displeasure that HESCOM has not yet put in place a system aimed at improving the activities / efficiency of the of CCC.

The Commission notes that the HESCOM has not furnished the detailed information on the average time taken to attend to a complaint as at present and the efforts made to reduce the downtime further in future.

The Commission directs HESCOM that it should continue its efforts to further improve the delivery of consumer services, especially to further reduce the time required for resolving consumer complaints regarding breakdowns of lines / equipment, failure of transformers etc., resulting in interruptions in power supply. These complaints should be given prompt and effective response. The Commission also directs HESCOM to analyse the nature of complaints registered and take action to minimize the number of complaints.

It is also imperative that necessary steps are taken to continuously sensitize the field-staff about efficient handling of consumer complaints apart from improving their general efficiency.

**The Commission reiterates its directive to the HESCOM to periodically publish the complaint handling procedures / contact number of the Centralized Consumer Service Centre in the local media, continue to host it on its website and also publish it through other modes, for the information of public and ensure that all the complaints of consumers are registered only through the Centralized Consumer Service Centre for proper monitoring and disposal of complaints registered. The compliance in this regard shall be furnished once in a quarter regularly, to the Commission.**

**9) Directive on Energy Audit:**

The Commission had directed the HESCOM to prepare a metering plan for energy audit to measure the energy received in each of the Interface Points and to account the energy sales. The Commission had also directed the HESCOM to conduct energy audit and chalk out an action plan to reduce distribution losses to a maximum of 15 percent in the towns / cities having a population of over 50,000, where it is above this level.

The Commission had earlier directed all the ESCOMs to complete installation of meters at the DTCs by 31<sup>st</sup> December, 2010. In this regard the ESCOMs were required to furnish to the Commission the following information on a monthly basis:

- a) Number of DTCs existing in the Company.
- b) Number of DTCs already metered.
- c) Number of DTCs yet to be metered.
- d) Time bound monthly programme for completion of the work.

**Compliance by the HESCOM:**

**Town Energy Audit**

HESCOM has furnished the data on energy audit and has stated that the Energy audit of 16 towns which have population of more than 50,000 is being carried out in HESCOM.

As per data submitted for FY19, out of 16 towns, the loss level in 10 towns is less than 10% and in 6 towns the loss level is between 10-15%. And in FY20 out of 16 towns the loss level in 7 towns is less than 10% and in 9 towns is between 10-15%. The various improvement works such as replacement of electromechanical meters by static meters and replacement of 10 years age old meters work have been carried out.

Further various improvement works such as, providing additional DTCs, bifurcation of overloaded feeders, reducing LT to HT Ratio and 100% inspection of LT-2 / LT-3 / LT-5 and HT- installations, have been taken up to bring down the loss less than 10%.

**DTC Energy Audit:**

HESCOM has furnished the summary of DTC energy audit for FY20 till August 2019.

**Feeder wise Energy Audit:**

There are 3268 Nos of 11kv feeders in the HESCOM Jurisdiction. All the feeders are monitored continuously by way of feeder-wise energy audit. And all the feeders are audited monthly and monitored with regards to Distribution loss. Further monthly meetings have been carried out to monitor feeder-wise energy audit and all the Circle / Divisional / Sub Divisional officers are directed to conduct meetings, at their level, to educate all the officers / officials regarding energy audit. Also, continuous effort is being made to draw up a loss reduction trajectory as directed by the Commission and other nodal agencies of Ministry of Power and Energy.

HESCOM has furnished the 11 kV feeder details (as on 30.9.2019) and the Audited feeder details in its tariff application.

**Action plan for reduction of high T&D and AT&C loss:**

HESCOM has submitted the following action plan:



- 1) There are 418 Nos of Urban feeders (as on Sep-19) in the HESCOM Jurisdiction. All the feeders are continuously monitored by way of conducting feeder-wise energy audit and corrective action is being taken.
- 2) T&D losses are mainly due to the age-old conductor with lesser current carrying capacity. Re-conductoring of HT and LT lines have been proposed wherever conductor capacity is less by replacing higher capacity conductor for FY20 target of 2,000 Kms, has been set.
- 3) Providing DTC metering to the remaining Non-R-APDRP towns & village DTCs will be taken up.
- 4) Providing additional distribution transformer centers, Aerial bunched cables, maintenance works of DTCs, etc., is being regularly carried out. As a result of taking up these works, lower AT&C losses is expected to be achieved.
- 5) Providing additional distribution transformer centers to Non-R-APDRP areas under NEF scheme. 2,577 Nos. of different capacity distribution transformer are proposed. Total Capital budget provision of Rs. 47.92 cores is made for the above work.
- 6) Providing UG cables / Aerial bunched cables in 11 KV distribution network for Belagavi, Hubli-Dharwad cities, under NEF Schemes is under progress. A budget provision of Rs.150 Cores is made works will minimize the 11 kV losses, to further lower value.
- 7) IPDS project will be implemented with an objective of further reducing losses to greater Extent. Capital budget of Rs.123.85 Crores.

**DTC Metering Works:**

1. HESCOM has taken up DTC Metering in two Phases (Phase-I & II) in all the Non-RAPDRP Town Areas and Rural Areas in all O & M Divisions.
2. As per the DWA, the scope of the work involves; Supply, Installation, Commissioning and Maintenance of Composite Thread through Type Meter.

3. Online transfer of Data from Thread through type meter (meter is having in-built Current Transformer (CT), Modem, SIM. Modem and SIM for online data transfer) to the centralized server by establishing communication.
4. The agency is maintaining server and has hosted web-based application. URL (address of the web application, 125.16.20.2/HESCOM), user login id and password have been given to the concerned HESCOM officials.
5. Metering of all the 40,793 Nos. of DTCs is completed under Phase I & II.
6. Agency has attended network and other issues and the Communication was established for 35,500 DTCs in the centralized server during the month of June-2019. But there was heavy rainfall in the month of July and August 2019, severe flood affected the northern districts of Karnataka state which comes under HESCOM Jurisdiction. Belagavi, Dharwad, Bagalkot, Haveri & Uttar Kannada districts are affected by Flood and several villages & towns DTCs are submerged. Due to which meters and lead wire of some the DTCs got damaged and also Modem of the some of the DTCs is damaged which affected the Network connectivity which will be addressed at the earliest.
7. Based on Data of Load, Consumption, Phase-wise Voltage and Currents available in web based application, the following action is being taken by the field officials;
  - a) Analysis of imbalance in load, Voltage and current on each phase of the DTC.
  - b) Shifting of LT load from one to another phase for balancing the load.
  - c) Providing additional DTCs / Augmentation of DTCs to avoid overloading of DTCs which has resulted in decrease in Failure of DTCs.
  - d) System improvement works such as Re-Conductoring of HT / LT lines.

8. Further, implementation of web based TRM software for Non-RAPDRP areas of HESCOM is awarded to M/s N-Soft (India) Services Pvt. Ltd., Bengaluru.
9. Both the agencies have to integrate the solutions i.e. M/s. AFTL will transfer DTC meter consumption to M/s. N-Soft for DTC-wise energy auditing.
10. The following are the remedial measures initiated to reduce losses in those DTCs wherever the loss levels are high:
  - i. All the field officials are directed to check the mapping of DTCs to Feeders and installations to DTCs and rectify the same.
  - ii. With regard Negative and High Loss DTCs, It is directed to match the reading of DTCs and installation mapped on the respective DTCs to make sure readings are carried out on same day
  - iii. Calibration of Meters, Replacement of MNR, and Burnt out Meters.
  - iv. HESCOM has taken up the work of replacement the existing Electro-mechanical /High Precision Meters by static Meters under DDUGJY and IPDS schemes.
  - v. Energy Report of DTCs with higher loss levels are shared with HESCOM MT and Vigilance staff to check any authorized connections and correctness of the Meter.
11. Due to software issues while integrating the data and mismatch in DTC Code, Energy Audit of the some of the Metered DTCs is not being done. Issue will be resolved by the HESCOM in coordination with M/s. Asian Fab Tech and the System Provider viz., M/s. N-soft service private Ltd at the earliest.
12. Energy Audit of approximately 27,120 Nos of DTCs is carried out during month of October- 2019 (Enclosed Annexure-26). The following are the remedial measures initiated to reduce losses in those DTCs wherever the loss levels are at higher levels;
  - a) Circulars are issued detailing the guidelines to carry out the Feeder-wise Energy Audit of Distribution Transformers.

- b) All the field officials are directed to check the mapping of DTCs to Feeders and installations to DTCs and rectify the same.
  - c) With regard to negative and high Loss DTCs, it is directed to match the reading of DTCs and installation mapped on the respective DTCs to make sure readings is carried out on same day.
  - d) Calibration of Meters, Replacement of MNR, and Burnt out Meters.
  - e) HESCOM has taken up the work of replacement the existing Electro-mechanical / High Precision Meters by static Meters under DDUGJY and IPDS schemes.
  - f) Energy Report of DTCs wherever the loss levels are at higher levels are shared with HESCOM MT and Vigilance staff to check any authorized connections on the DTCs and correctness of the Meter.
13. Further, Notices are served to agency M/s. Asian Fab Tech to provide network connection immediately for the balance DTCs to be communicated.

**Commission's Views:**

The Commission had directed HESCOM to submit the monthly energy audit reports of cities / towns with detailed analysis regularly, to the Commission. Commission notes with displeasure that HESCOM has not submitted the monthly energy audit reports with detailed analysis regularly to the Commission. The HESCOM needs to conduct energy audit of identified cities / towns and on the basis of energy audit results, initiate necessary action to reduce the distribution losses and improve collection efficiency so as to achieve the targeted AT & C loss of less than 15 per cent in all towns. The HESCOM is directed to conduct such energy audit and submit compliance thereon every month, regularly to the Commission.

As regards energy audit of DTCs, the Commission notes that, the HESCOM has not submitted the abstract of details of total number of DTCs existing, number of DTCs metered and the action plan for metering the remaining DTCs, energy audit not conducted, reasons for not conducting the metered DTCs etc.,

As per the data furnished in the tariff filing, despite completion of metering of 64,241 number of DTCs in the area of HESCOM, the HESCOM is furnishing the analysis for only around 19,000 DTCs (29%). Whereas, HESCOM has furnished the analysis of energy audit of 25,179 DTCs. HESCOM has failed to furnish the energy audit reports for the remaining 71% of DTC's metered in its area, which are mostly provided with Automatic Metering Infrastructure (AMI). HESCOM has failed to furnish the similar analysis for RAPDRP towns. HESCOM is stressing on the problems with communication, lead wire burnt out, MNR etc., towards non-conducting of energy audit. Similarly, HESCOM has not furnished the information on the energy audit of all the 11 kV lines operating in its jurisdiction.

It is observed that, HESCOM is mechanically repeating its claim of resolving the issues relating to communication and software from the last few years by way of issuing notices to the concerned agencies, integration issues etc., It is evident that the HESCOM is not serious about conducting energy audit of 11 kV lines and DTC level energy audit and run its business on commercial principles. HESCOM has not acted promptly in quickly resolving the issues relating to tagging of consumers if any / communication / software integration and in adopting accounting / auditing of energy as its core function, in spite of spending huge money on RAPDRP project, the TRM, DTC metering and many other software. The stakeholders have also questioned during public hearing, the rationale of incurring huge expenditure on DTC metering without any benefit to the system or the consumers. **The action taken by the HESCOM in the matter, so far, has not been satisfactory and the Commission views with displeasure the delay in completing the tagging of consumer installations, integration of various software, inaction of the agencies in resolving communication etc., and taking up energy audit of all the feeders and metered DTCs.**

The HESCOM is directed to address all the outstanding issues relating to energy audit of all the 11 kV feeders, DTCs, and take up the energy audit therein besides attending to the energy audit of major Cities / Towns and

take remedial measures for reducing energy losses in the high loss-making distribution areas. The compliance in respect of energy audit conducted, with the details of analysis and the remedial action initiated to reduce loss levels shall be regularly submitted to the Commission **on a quarterly basis.**

Though, the Commission has directed HESCOM to conduct workshops at the Division level, for educating the officers of all cadres on the importance of conducting the energy audit, feeder-wise, DTC-wise etc., and motivating them to take action to reduce the losses in their areas, address issues relating to consumer tagging, recognise the importance of energy metering and maintaining them in good condition, strictly servicing all the installations by providing appropriate energy meters, providing and maintaining energy meters to the DTC's, Metering of Streetlight installations, Replacement of electro-mechanical meters etc., HESCOM has failed to report compliance of the direction and intimate the action initiated, either in the Tariff filing or through other modes. **An action plan on conducting such workshops shall be submitted by HESCOM within 60 days from the date of this order.**

The feeder-wise and DTC-wise energy audits shall be reviewed in the review meetings at the Circle level every month. Copy of the proceedings of such meetings shall be submitted to the Commission, for information and further review.

**The Commission does not find the reasons submitted by HESCOM for not conducting the energy audit in respect of 11 kV lines, DTC's and LT lines, justifiable and directs HESCOM to submit a consolidated energy audit report for the FY20 before 30<sup>th</sup> June, 2020, as per the formats prescribed by the Commission.**

**10) Directive on Niranthara Jyothi – Feeder Separation:**

The ESCOMs were directed to furnish the programme of implementing 11 KV taluk-wise feeders' segregation with the following details, to the Commission:

- a) Number of 11 KV feeders considered for segregation.
- b) Month-wise time schedule for completion of envisaged work.
- c) Improvement achieved in supply after segregation of feeders.

**Compliance by the HESCOM:**

Niranthara Jyothi Yojane is a prestigious project of Government of Karnataka and is being implemented in to bifurcate the feeders into Agricultural loads and non-Agricultural loads to provide 24 Hrs quality power supply to rural Non-Agricultural loads and to provide quality power supply to IP set consumers during a specified period based on the availability of power.

During 2009, the GoK had issued directions to implement Niranthara Jyothi Yojane in line with the Jyothi Gram Yojane implemented in the State of Gujarat. As per the Government Order dated 20-10-2010, it was directed to implement NJY in two phases in BESCO, CESC, GESCOM and HESCOM. Further, regarding the financial assistance, it was decided to take up the project with 40% GoK equity and 60% loan from financial institutions.

In HESCOM jurisdiction at the time of execution of NJY Ph-1 and 2 there were 48 Talukas, out of which 11 Taluks in Uttara- Kannada Districts are excluded from NJY as are already provided with 24 Hrs power supply. Pilot Project has been implemented in three Talukas namely Bailhongal in Belgaum District, Shiggaon & Savanur Taluks in Haveri District. In the remaining 34 Taluks, it was proposed to implement NJY works in 2 - phases as hereunder.

- Phase-I; 242 number of feeders covering 20 Talukas.
- Phase-2; 202 number of feeders covering 14 Talukas.

Further 100% of the work is completed under Phase-I & II by the end of July, 2017.

M/s. CPRI Bangalore is appointed as third-party independent evaluating agency and has been awarded with the work of inspection of 50% of

feeders with detailed inventory and evaluation of NJY works with consequent benefits achieved after implementation. M/s. CPRI have opined that, NJY is more helpful in arranging quality power for 24 Hrs to rural areas and development of rural areas with socio economic changes. There is reduction in peak load on the system.

M/S CPRI Bengaluru was entrusted with the work of analysis of NJY works post implementation. The benefits derived from Niranthara Jyothi Yojana are as follows:

- Consumers of villages especially students and small scale industries are much happier, since HESCOM is able to supply continuous uninterrupted quality power supply for longer duration during morning and evening peak hours.
- The metered energy consumption has increased by 26.67% after implementation of NJY.
- There is an increase in revenue after implementing NJY and still there is scope for increasing the metered consumption.
- The total energy sent out has increased in case of NJY feeders. This is due to increased hours of continuous power supply and increased load growth since implementation of NJY.
- It is observed that the transformer failure rate has reduced.
- The IP sets are given three phase supply for limited hours during off peak hours. Thereby it has been observed that there is substantial decrease in the evening peak load.
- The voltage regulation which was in the range of 13% to 18% in most cases is reduced to a range of 6% to 9% which is well within the permissible limit.
- NJY has enabled the HESCOM to have better control over the agricultural loads. The farmers are happy with this arrangement since they can get assured number of hours of un-interrupted three phase power supply.
- As per the feedback obtained from various consumers such as household, commercial, educational, industrial sectors, it is



observed that the consumers are happy about more number of hours of reliable, quality power supply.

**NJY Phase-III:**

Initially a decision was taken to take up NJY works under phase-I & II covering 34 Talukas excluding the areas covered under RLMS. Later on it was felt necessary to take up NJY works in the areas covered under RLMS also. Hence DPRs were prepared to take up NJY works under Phase-III involving estimated cost of Rs.117.03 Crores and accordingly M/s REC have sanctioned loan to the tune of Rs.101.76 Crores. Till date Rs.78.50 Crores expenditure has been booked against NJY works under Phase-III. The details of works proposed are as hereunder;

No. of feeders proposed: 92

No. of villages to be covered: 575

Estimated cost in Rs Crores: 117.03

As on 31.07.2019, 92 numbers of feeders are commissioned as against the proposal of 92 feeders.

**IP Set Consumption:**

As per directions of the Commission, in its Tariff Order dated 30<sup>th</sup> May 2019, HESCOM has submitted the consumption of IP Sets based on the readings from the meters provided to 11 kV agricultural feeders at the sub-stations duly deducting the 11 kV and LT distribution system losses. The month-wise Sub- Division-wise, feeder-wise details of consumption of all the agricultural feeders segregated under NJY scheme from April-2018 to March-19 are mailed on 30.10.2019 and also hard copies of the feeder-wise month-wise details have been submitted vide Letter dated 13.09.2019 for information of the Commission. Further exclusive IP set feeder-wise energy details from April-19 to Aug-19 have been mailed on 18.11.2019 for your information. The hard copies of the same will be submitted shortly.

**Commission's Views:**

The Commission notes that the HESCOM has commissioned all the feeders taken up under NJY scheme phases. Therefore, the HESCOM is directed to carry out the feeder-wise analysis to ensure that the objectives set out in the DPR are accomplished.

Further, the HESCOM shall ensure that, any illegal tapping of NJY feeders by the farmers for running their IP-sets should be stopped. Failure to stop this illegal activity will defeat the very purpose of feeder segregation works undertaken at huge cost and therefore, the HESCOM needs to take stern action on such offenders. Further, the field officers / officials who fail to curb illegal tapping shall be personally held responsible for these irregularities.

**The Commission has observed an increase in IP set consumption in FY19. The HESCOM should strictly monitor the implementation of the regulated power supply scheme to IP feeders and take necessary corrective action if the same is faulty.**

**In view of the fact that HESCOM has segregated substantial number of feeders under different phases of NJY and other schemes / routine works, the Commission directs the HESCOM to continue to report every month, the specific consumption and the overall IP set consumption, only on the basis of the data from energy meters installed to the agricultural feeders, in the prescribed formats. Any data furnished based on other assumptions, will not be accepted by the Commission.**

**The Commission reiterates its directive to the HESCOM to continue to furnish feeder-wise IP set consumption based on data from the energy meters installed to the segregated agriculture feeders under NJY, to the Commission every month.**

**11) Directive on Demand Side Management in Agriculture:**

In view of the urgent need for conserving energy for the benefit of the consumers in the State, the Commission had directed the HESCOM to take

up replacement of inefficient Irrigation Pumps with energy efficient Pumps approved by the Bureau of Energy Efficiency, at least in one Sub-Division, in its jurisdiction and report compliance thereon.

**Compliance by the HESCOM:**

HESCOM has taken up this project with Energy Efficiency Services Limited, New-Delhi (EESL) as a pilot project and completed 590 Nos of replacement of old Pump Sets by Energy Efficient Pump Sets (i.e., in Byadgi - 390 Nos and in Nippani - 200 Nos). As per the direction of Hon'ble Commission, Demand Side Management in Agriculture will be taken up in other parts of jurisdiction of HESCOM and proposal will be submitted shortly.

**Commission's Views:**

The Commission notes that there is an undue delay in implementation of DSM scheme in Byadagi and Nippani areas of HESCOM. It was submitted in the previous tariff proceedings that the pros and cons were submitted to the Additional Chief Secretary, Energy Department, GoK, but did not submit any report to the Commission for review.

Further, the HESCOM has not taken any action to further implement DSM measures in the other parts of HESCOM, so as to conserve energy and also precious water, for the benefit of farmers. The HESCOM needs to expedite implementation of DSM measures in other parts of its jurisdiction without any further delay. There is a huge potential for energy saving in the agricultural sector which needs to be tapped as early as possible to derive the benefits of the same on completion of the project. The HESCOM should lay strong emphasis for implementation of DSM measures with a view to conserve energy and also precious water for the greatest benefit of farmers. **Therefore, the HESCOM should take up DSM initiatives in other parts of its jurisdiction also and submit suitable proposals under DSM Regulations to the Commission for approval.**

**12) Directive on Lifeline Supply to Un-Electrified households:**

The Commission had directed the ESCOMs to prepare a detailed and time bound action plan to provide electricity to all the un-electrified villages, hamlets and habitations in every taluk and to every household therein. The action plan was required to spell out the details of additional requirement of power, infrastructure and manpower along with the shortest possible time frame (not exceeding three years) for achieving the target in every taluk and district. The Commission had directed that the data of un-electrified households could be obtained from the concerned Gram Panchayats and the action plan be prepared based on the data of un-electrified households.

**Compliance by the HESCOM:**

There are 1,98,692 Nos. of households to be provided with electricity which is inclusive of both APL & BPL houses. Out of which a total of 1,75,844 are electrified and the no. of balance to be electrified as on 15.10.2019 is 22,848. . The electrification of BPL households is covered under RGGVY Scheme 12<sup>th</sup> Plan, DDUGJY & SAUBHAGYA.

As per the survey conducted by our field officers, there are 1,98,692 Nos of un-electrified households identified. Out of these, electrification of 1,06,928 Nos of BPL households are covered under DDUGJY & RGGVY 12<sup>th</sup> Plan scheme for which the works are under progress. Balance 91,764 Nos of BPL households are proposed under SAUBHAGYA with the proposed DPR cost of Rs. 102.87 Crores.

HESCOM has furnished the scheme-wise details to provide electricity to these households under various schemes viz., RGGVY 12<sup>th</sup> plan, DDUGJY, SAUBHAGYA etc.

**DDUGJY:**

- An amount of Rs.48.34 Crores has been sanctioned to HESCOM vide dated 09.09.2015 for providing access to Electricity to Rural Households under DDUGJY scheme.

- An amount of Rs.9.90 Crores has been sanctioned for Sansad Adarsh Gram Yojana under DDUGJY.
- Tender for all 7 districts of HESCOM are invited and awarded on 01.04.2017 and the works are under progress with a completion period of 24 months (i.e. up to March-2019).
- HESCOM has requested the REC to extend the time for completion of the project under DDUGJY up to 31.12.2019, in view of the code of conduct declared in the month of March-2019 and was in force up to May-2019, in in connection with Parliamentary elections. Further due to heavy rains and flood, four districts of HESCOM were affected viz; Uttar Kannada, Belagavi, Bagalkot & Vijayapura which hampered the physical progress of DDUGJY. Hence time extension is requested to REC to complete all the works related to DDUGJY by 31.12.2019.

**SAUBHAGYA SCHEME:**

- Tenders are invited for 48 blocks in 48 packages and awarded to the executing agencies in the month of December-2018.
- Target for completing electrification of Un-electrified households is by 31.03.2019.
- Since infrastructure is also involved in electrification of households, the completion period of the SAUBHAGYA scheme is extend up to 31.12.2019 vide Ministry of Power letter dated: 27.08.2019.

**Commission's Views:**

The Commission notes that the progress achieved in electrification of un-electrified households under DDUGJY and SAUBHAGYA schemes as on October 2019 is poor and is not satisfactory. It is further noted that the electrification of households has not progressed as envisaged, resulting in very large number of households remaining without electricity. As can be seen from the HESCOM's compliance that, there are 22,848 numbers of un-electrified households are yet to be electrified under various schemes. It is extremely important that the HESCOM needs to fast pace the progress of electrification of un-electrified households for early completion. The

HESCOM needs to hasten up the progress of electrification of un-electrified households for timely completion of the project.

Further, the Commission notes with concern, the slow pace of progress of electrification of un-electrified households. In its previous Tariff Orders, the Commission had directed the HESCOM to complete electrification within the time frame as stipulated by the project sanctioning / monitoring authority. However, it is observed that the progress achieved in electrification of households so far by the HESCOM is very disappointing. Therefore, the HESCOM should fast pace the works to complete them within in a definite timeframe.

If the work is not completed as per the target, it results in a substantial number of households remaining without electricity. The HESCOM should speed up the electrification work of un-electrified households and implement this programme with more vigour by obtaining appropriate approvals, wherever necessary, to complete the task within the timeframe, in order to ensure that the people are provided with the basic need of electricity.

**The HESCOM is therefore, directed to expedite the task of providing electricity to all the un-electrified households within the targeted time and report compliance to the Commission giving the details.**

### **13) Directive on Implementation of Financial Management Framework**

The present organizational set up of the ESCOMs at the field level appears to be mainly oriented towards supply and maintenance of power without a corresponding emphasis on realization of revenue. This has resulted in a serious mismatch between the energy supplied, expenditure incurred and the revenue realized in many cases. The continued inability of the ESCOMs to effectively account the input energy and its sale in different Sub-Divisions of the ESCOM in line with the revenue realization rate fixed by the Commission, urgently calls for a change of approach by the ESCOMs, so that the field level functionaries are made accountable for

ensuring realization of revenues vis-à-vis the input energy supplied to the jurisdiction of Sub-Division / Division.

**The Commission had therefore directed the HESCOM to introduce a system of Cost-Revenue Centre Oriented Sub-Divisions at least in two Divisions, on a pilot basis, in its operational area and report the results of the experiment to the Commission.**

**Compliance by the HESCOM:**

HESCOM has identified two Divisions namely O & M Urban Division Belgaum comprising of Urban consumers only, and O & M Division Gadag comprising of mixed consumers of Urban and Rural areas for implementation of Financial Frame Work on the basis of models of CESC and BESCO. The targets were fixed accordingly as per Directive of the Commission and the 2nd Quarter (July-2019 to September-2019) report is submitted to the Commission.

The same criterion will be adopted among all Divisions / Sub-Divisions of HESCOM by treating each Sub-Division as Cost Revenue Centers to achieve as per the Directives of Hon'ble Commission.

Earlier efforts have been made by the HESCOM to implement the Directive through outsourcing which was later on discontinued as per the directive of the Commission and the model adopted by CESC and BESCO is also taken into consideration for the speedy implementation of the Directive.

**Commission's Views:**

The Commission notes with displeasure that the HESCOM has not implemented the financial framework model with the letter and spirit and is submitting the same status as submitted in its previous tariff filing.

The Commission also notes that HESCOM has submitted the data in respect of only two Divisions without setting the targets on various parameters set out in the previous Tariff Order (in the Commission's views

part) and without making any analysis. Without setting the targets and making necessary analysis, HESCOM will not achieve the desired objective in the conduct of business on commercial principles. It is also observed that the strategies under the financial framework have not been extended to the entire circle after the implementation of the framework in two Sub-Divisions initially.

HESCOM has not implemented the model as desired by the Commission and has not submitted the compliance in respect of implementation of Financial Management Framework, on quarterly basis, to the Commission, as directed. It confirms that the HESCOM is not serious about implementing the model on Financial Management Framework in its jurisdiction, for bringing in accountability of its operations but continued to report that it will implement the directive shortly but has done nothing in reality.

**The Commission has been receiving concerns from the consumers and stake holders about the accumulation of revenue arrears and failure to recover the long - standing arrears is causing adverse financial impact on the HESCOM's cash flows. The Commission directs HESCOM to chalk out a stringent action plan to recover the long-standing accumulated arrears from all the categories of consumers including local bodies, statutory authorities etc.**

**The Commission disapproves the inaction of the HESCOM in the matter and directs it to review the performance of the Divisions & Sub-Divisions in terms of the energy received, sold, average revenue realization and average cost of supply using the Financial Management Framework Model developed by it.**

Further, the HESCOM is directed to continue to analyze the following parameters each month to monitor the performance of the Divisions / Sub-Divisions, at corporate level:

- a) Target losses fixed and the achievement at each stage.



- b) Target revenue to be billed and achievement against each tariff category of consumers.
- c) Target revenue to be collected and achievement under all tariff categories.
- d) Target revenue arrears to be collected.
- e) Targeted distribution loss reduction when compared to previous years' losses.
- f) Comparison of high-performing Divisions in Sales/ Revenue with low performing Divisions and implementing best practices followed in the best performing Divisions, in the low performing Divisions.
- g) Targeted achievement in performing the energy audit, feeder-wise, DTC- wise, and achieving the reduction in energy losses of feeders and DTCs by setting right the lacunae / issues viz., tagging of consumers RR No's with DTCs etc.,

Based on the analysis, the HESCOM needs to take corrective measures to ensure 100 per cent meter reading, billing, and collection, through identification of sub-normal consumption, replacement of non-recording meters etc.,

**Therefore, the Commission hereby reiterates its directive that the HESCOM shall implement the Financial Management Framework model in its jurisdiction, effectively, to bring in accountability in the performance of the Divisions / Sub-Divisions in the matter of the quantum of energy received, sold and its cost so as to conduct its business on commercial principles. Compliance in this regard shall be submitted to the Commission on a quarterly basis, regularly. HESCOM shall identify the Sub-Divisions and Divisions which are showing high distribution losses and not collecting the required rate of ARR, fix personal responsibility on the concerned and take remedial measures to ensure full recovery of revenue vis-à-vis the energy drawn by such Sub-Division and Divisions.**

#### **14) Directive on Prevention of Electrical Accidents**

On a review of the electrical accidents that have occurred in the State during the year 2018-19, it is seen that the major causes of the accidents

are due to snapping of LT / HT lines, accidental contact with live LT / HT / EHT lines / equipment in the streets, live wires hanging around the electric poles / transformers, violation / neglect of safety measures, lack of supervision, inadequate / lack of maintenance, etc., posing great danger to human lives.

Considering the above facts, the Commission had directed the HESCOM to prepare an action plan to effect improvements in its distribution network and implement safety measures to prevent electrical accidents. A detailed Division-wise action plan was required to be submitted by the HESCOM to the Commission.

**Compliance by the HESCOM:**

HESCOM has vast distribution network with 86,243 kms High Tension line, 1,35,000 kms Low Tension line and more than 2.2 lakhs of DTCs and apart from these HESCOM has 178 Nos of 33 / 11 kV MUSS to cater the needs of around 51.8 lakh consumers. Efforts are being made continuously to avoid electrical accidents and there is lack of knowledge among maintenance staff / public / consumer. Action has been taken to create awareness through various programmes to educate the field staff and public about the electrical safety measures.

HESCOM is continuously engaged in identification and rectification of all the hazardous locations / installation to prevent electrical accidents. HESCOM is striving hard to have continuous awareness campaigns through visual / print media on safety aspects among public. Along with all this the following measures have been taken for prevention of accidents to Employees / consumers / Public.

All the officers are instructed to ensure that all the linemen in their jurisdiction are provided with proper and adequate safety gear. The linemen have been instructed to compulsorily use such safety gears provided to them while working on the network.

The Chief Engineers of respective zone are authorized to procure good quality tool kits and safety belts to be provided to linemen coming under their jurisdiction. 4,600 pairs of rainwear, 4,200 sets of Tool kit, 3,300 Nos of Helmets are procured and issued to the working staff during 2019-20.

Reflective Jackets and LED torch have also been procured and allotted to all the Divisions in HESCOM, and it is strictly instructed to use them while working.

Safety manuals are circulated among all the Divisional / Sub-Divisional officers and instructed for implementation of safety rules in fields.

Further, tendering work is in process for procurement of safety materials such as safety belts and safety goggles, safety shoes and Rubber hand gloves.

Training Sessions are being conducted on electrical accidents and safety procedures to be followed to avoid accidents for the newly recruited lineman and to all maintenance staff, at Training Centre of HESCOM, Hubballi at regular intervals.

HESCOM will continue its efforts to educate its staff in this behalf regularly. In view of accident occurring in HESCOM, various Preventive Measures to reduce accidents has been taken up in all the Divisions of HESCOM. Among them a few are listed below:

- Providing intermediate poles in lengthy span – 5,635 Nos.
- Replacement of Broken / Detoriated poles – 3,117 Nos.
- Shifting of DTC Lines to safer place – 655.63 Kms.
- Replacement of deteriorated conductor -151.25 Kms.
- Shifting of HT / LT Lines – 143.43 Kms.
- DTC Earthing –195 Nos.
- Transformer maintenance work has been carried out to reduce the accident.
- LT reconductoring works for 716.08 Kms has been completed.
- HT reconductoring works for 415.09 Kms has been completed.

Action is being taken to educate the large sections of the public regarding safe use of equipment's, Consumer awareness programmes have been arranged at all the district Headquarters about electrical safety. Also, Circulars have been issued in this regard to all field offices in HESCOM jurisdiction for adopting safety rules. Monthly two meetings are being conducted at Corporate Office HESCOM Hubballi to review Identification and rectification of Hazardous locations. Further there are 17,663 Nos of Hazardous locations identified and 17,169 Nos rectified for the year 2019-20 till October-2019.

All efforts are being made to reduce the accidents in all the area coming under the jurisdiction of HESCOM on priority.

HESCOM has taken adequate measures to identify and rectify all the hazardous locations / installations existing in its distribution system. HESCOM had 48,444 nos. of hazardous locations at the beginning of the year. During the year 2019-20, it has identified 17663 nos. of hazardous installations and has rectified 17169 nos. and the balance to be rectified is 48938 nos.

#### **Commission's Views:**

The Commission takes note of the various remedial measures including rectification of hazardous installations in its distribution network taken by the HESCOM. It is observed that with a huge number of hazardous locations at the beginning of the year, it has done very little to clear the backlog instead it has added further to the pendency. This shows that HESCOM is not serious about clearing all the hazardous locations. As a result, despite HESCOMs claim of taking adequate measures, the rate of fatal electrical accidents involving human, animal and livestock is on an increase, which is a matter of serious concern to the Commission. The frequent occurrence of electrical accidents indicates that there is an urgent need for identification and rectification of all the hazardous locations, more systematically and regularly. Therefore, the HESCOM should continue to focus on identification and rectification of all the

hazardous installations/ locations including streetlight installations / other electrical works, under the control of local bodies to prevent electrical accidents. HESCOM should also take up continuous awareness campaigns through visual / print media on safety aspects relating to electricity among public.

The Commission is of the view that, HESCOM should carry out more effective periodical maintenance works, provide and install LT protection to distribution transformers, and also ensure use of safety tools & tackles by the field-staff, besides imparting necessary training to the field-staff at regular intervals.

The Commission is also of the view that the existence of hazardous locations / installations in the distribution network is evidently, because of the sub-standard works carried out by HESCOM without adhering to the best & standard practices in construction / expansion of the distribution network. The HESCOM needs to conduct regular safety audit of its distribution system and carryout preventive maintenance works as per schedule of the Safety Technical Manual issued by the Commission to keep the network equipment in healthy condition. HESCOM should also take up regular inspection of consumer installations especially Irrigation pump houses, cow sheds and buildings under construction to identify hazardous installations, educate the consumers of the likely hazard and persuade them to take up rectification.

The Commission further notes that the hazardous locations pending for rectification in the area of HESCOM is as huge as 48,938 as at the end of October 2019. As could be seen, HESCOM has given prominence to rectify the hazardous locations identified during the year and the hazardous locations as at the beginning are not at all rectified. HESCOM shall chart out a strategic action plan to rectify even the pending hazardous locations by setting monthly targets and submit the action plan to the Commission within 3 months of the date of this Order along with nullifying the hazardous locations in its area.

The Commission, reiterates its directive that the HESCOM shall continue to take adequate measures to identify and rectify all the hazardous locations / installations existing in its distribution system under an action plan to prevent and reduce the number of electrical accidents occurring in its distribution system. Further, it shall also focus on rectifying hazardous consumer installations. Any lapse on the part the concerned officers / officials should entail them to face disciplinary action.

HESCOM shall submit an action plan for reducing the accidents in HESCOM area within 3 months of the date of this Order. The compliance thereon shall be submitted to the Commission every quarter, regularly.