

APPENDIX

REVIEW OF COMPLIANCE OF COMMISSION'S DIRECTIVES

The Commission, in its Tariff Order dated 14th May 2018, and in its earlier Tariff Orders, has 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 14.05.2018 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.

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 3rd Saturday at every sub-division office compulsorily along with Lok- Adalat. The process was started from 3rd Saturday of July 2017. Since then, regular meetings are being conducted at sub-division offices on every 3rd Saturday. Awareness is also being created to enable the public / consumers to participate in the consumer grievance meetings. Further, paper notifications were issued regarding CIMs in the daily local newspapers for information of the consumers.

The details of the consumer interaction meetings conducted during FY18 are as detailed below:

SL No.	Name of the Circle	No. of Sub - Divisions Existing	No of CIM conducted	No. of Complaints Received	No. of Complaints Disposed	CB	No. of Consumers Attended
1	2	3	4	5	6	7	8
1	Hubballi	17	186	632	418	257	296
2	Haveri	8	80	796	660	277	333
3	Sirsi	11	111	637	528	260	429
4	Belagavi	12	154	1022	778	370	555
5	Chikkodi	8	81	797	498	226	417
6	Bagalkote	11	124	657	471	308	334
7	Vijayapur	12	164	578	413	215	330
Total		79	900	5119	3766	1913	2694

The details of the consumer interaction meetings conducted during FY19, till September, 2018 are as detailed below:

SL No.	Name of the Circle	No. of Sub - Divisions Existing	No of CIM conducted	No. of Complaints Received	No. of Complaints Disposed	CB	No. of Consumers Attended
1	2	3	4	5	6	7	8
1	Hubballi	18	108	131	127	4	234
2	Haveri	9	53	242	242	0	207
3	Sirsi	11	66	195	142	53	327
4	Belagavi	12	72	390	390	0	524
5	Chikkodi	9	52	188	194	0	325
6	Bagalkote	11	61	124	126	3	220
7	Vijayapur	13	77	249	248	1	488
Total		83	489	1519	1469	61	2325

The Consumer Interaction Meetings are conducted regularly at the respective sub-divisions. Status of the complaints registered are submitted to the office of the respective Executive Engineer (EI) and Superintending Engineer (EI) for further needful action.

Commission's Views:

The HESCOM has submitted the details of consumer interaction meetings conducted in its jurisdiction during FY18 and 1st and 2nd quarter of FY19.

The Commission in the KPTCL and ESCOMs' Review Meeting held on 16.11.2018, had reiterated its directions to 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 on a single day i.e., on 3rd Saturday of every month in its entire area covering all the sub-divisions. Also it is observed that the CIM's are conducted along with the Lok-Adalat. In the preliminary observations, the Commission had raised a concern that, if such meetings are conducted on only one day of the month in its entire area covering all sub-divisions, it is not clear as to how the SEE or EE could attend and chair all such meetings, as directed by the Commission. The Commission had directed HESCOM to clarify this by furnishing the details, indicating the dates on which the meetings were conducted. HESCOM has not furnished the details as desired by the Commission, instead, has furnished the details in the form of the summary, in its replies. Also, HESCOM submits that the CIMs are conducted along with the Adalats, as per the directions of the then Energy Minister, in the MMR meeting held on 01.07.2017.

As per the abstract of CIMs furnished in the replies, for the period 1st and 2nd quarter of FY19, it could be seen that, in Hubli O&M Circle, there are 18 number of sub-divisions. As per the directions of the Commission, if one CIM in each of the sub-division was conducted, there would have been 36 CIMs. Instead, it is found that there are 108 CIMs conducted. The number of CIMs chaired by EEE

and SEE are only 16 (10+6). This is the state of affair with all the O&M Circles of HESCOM, as stated.

The Commission is of the view that the dates of such meetings in the sub-divisions should be staggered in a quarter, so that the senior officers such as the Superintending Engineer or the Executive Engineer can chair the meetings and are able to redress all the complaints relating to supply of electricity. Accordingly, the HESCOM is directed to conduct consumer interaction meetings at the sub-divisions on different designated dates. 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. 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 or the Executive Engineer, as the case may be, who fails to conduct such meetings.

The Commission also reiterates its directive to the HESCOM to conduct consumer interaction meetings chaired by either the jurisdictional Superintending Engineer or jurisdictional Executive Engineer once in a quarter, 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.

In addition to the quarterly meetings to be chaired by the jurisdictional SEE or the jurisdictional EE, the CIM being conducted by the Asst. Executive 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 below, along with a copy of the proceedings of each meetings.

Sl. No	Name of the Circle	No. of Sub-divisions existing	No. of Sub-divisions in which CIM is conducted	Name of the Sub-division	Date on which CIM conducted	Name & designation of the Officer Chairing the CIM	No. of Consumers attended	No of Complaints Received	No. of Complaints disposed	CB
1	2	3	4	5	6	7	8	9	10	11

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 has instructed all the officers to ensure preparation 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 35.36 MU is profit to the HESCOM due to billing done considering 15-minute time block during the period of FY18 and FY19 (up to September, 2018).

Energy in MU				
Sl. No.	Year	Scheduled units as per SLDC/IEX	Actual Open Access units	Profit units to HESCOM
1	April-17 to March-18	424.67	403.39	21.28
2	April-18 to Sept-18	152.36	138.28	14.08
Total		577.03	541.67	35.36

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 FY18 as well during FY19 till September 2018. 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.21.28 Crores to HESCOM during FY18, and Rs.14.08 Crores during FY19 till September 2018 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. HESCOM shall also note that the directive in this regard was made part of the Tariff Order 2017, considering that the Commission's earlier directions in the matter was not being followed, **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 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:

The HESCOM is 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. In this regard HESCOM issued directions to all CEE / SEE / EE. Also, HESCOM is constantly pursuing to submit the report for servicing the installations by ensuring the installation of energy efficient

equipment. Quarterly reports are regularly submitted to the Hon'ble Commission.

Similarly, HESCOM issued direction to all CEE / SEE / EEE to ensure that all new streetlight / high mast installations including extensions made to the existing streetlight circuits shall be serviced only with LED lamps / energy efficient lamps like induction lamps etc.

As per the directions of the Commission, HESCOM has taken up programs to educate all the existing domestic, commercial and industrial consumers, through media and distribution of pamphlets along with monthly bills, in respect of the benefits of using 5-star rated equipment certified by the Bureau of Energy Efficiency in reduction of their monthly electricity bills and hence conservation of precious energy.

Following are the activities carried out by the Demand Side Management (DSM) Cell from April 2017 till October 2018:

- Provided corporate signature tune (RBT) for postpaid mobile CUG numbers of HESCOM.
- Ring back tune based on DSM theme:
 - Popularization of 1912 Help line.
 - Use of LED lights.
 - Use of 5 star electrical appliances.
 - Message of "save energy and participate in progress"
- HESCOM has taken up peak load management programs and reduction of load by using LED Bulbs, LED tube lights and efficient fan under HOSA BELAKU and PAVAN programmes in the HESCOM jurisdiction through M/s. EESL. Status of the LED bulbs, tube lights and fans sold along with the energy saving details are as indicated in the following Table:

Appliances	Total Nos.	Energy saved in units
LED bulb	20,04,932	9,17,16,541
LED tube light	28,339	6,11,524
Efficient fan	4,321	1,02,604

- Distribution of Pamphlets along with monthly bills as per Hon'ble Commission directive on Energy Conservation Tender opened and work is in progress.
- HESCOM has carried out DSM activities in collaboration with Deshpande Education Trust, Hubballi, for creating awareness, educating rural, semi urban and urban youths on Energy Conservation, Safety, etc.
- HESCOM conducted "Vidhyuth Ulitaya Samara – 2018" a quiz competition for ITI Electrical students.
- Created awareness by distributing 6-sheet and Single sheet calendar-2018 with the theme of DSM, Safety etc.

Commission's Views:

While appreciating the efforts of HESCOM in selling approximately 20 Lakh numbers of LED bulbs, the Commission notes that the HESCOM has not issued any Circulars towards implementation of the directive. HESCOM has not submitted the compliance in respect of ensuring and providing of LED lamps / energy efficient lamps while servicing of new streetlight / high mast installations including extensions made to the existing streetlight circuits. 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.

Further, 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. As undertaken during the review meeting, HESCOM shall use only energy efficient bulbs and appliances in some of its offices and demonstrate their benefits to the general consumers.

The Commission reiterates that the HESCOM shall continue 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, 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 (Licensee's 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 (Licensee's 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 following format:

Nature of Service	Standards of Performance (indicative minimum time limit for rendering services)	Primary responsibility centres for lodging complaints	Next higher Authority	Amount payable to affected consumer
1	2	3	4	5

Compliance by the HESCOM:

It is submitted by HESCOM that 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 has been hosted in the HESCOM's website www.hescom.co.in. The HESCOM is making all out efforts to strictly implement the specified SoP while rendering services related to supply of electricity.

The status of the SoP displayed in sub-division and section office:

ESCOM	Quarter	No. of sub divisions existing	No. of sub divisions where SoP is displayed	No. of O&M sections existing	No. of O&M sections where SoP is displayed
HESCOM	2nd Qtr	83	83	324	324

The EEs and SEEs are randomly visiting the Sub-Division and Section Offices to ensure that all the grievances redressed as per SoP standards.

Commission's Views:

The Commission while noting the HESCOM's compliance, 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 specified by the Commission and as a result, the consumers are still facing difficulty in getting prompt services. Hence, the Commission hereby 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 above 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 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 the linemen to educate them on the SoP and the consequences of non-adherence to the SoP. Further, the Commission directs HESCOM to publish the "HAND BOOK" (kaipidi) 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 non-compliance of the Commission's Directives. At the same time HESCOM shall consider 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 (Licensee's Standards of Performance) Regulations, 2004. The compliance on this 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:

All the officers are instructed to ensure that, all the power men in their jurisdiction are provided with proper and adequate safety gear and the power men use such safety gear provided to them while working on the network. The Chief Engineers are authorized to procure good quality tool kits and safety belts to be provided to power men coming under their jurisdiction. Further, 1050 pairs of gum boots for Malnad areas in HESCOM & 1500 pairs of rainwear have been procured during FY17 and were issued to the linemen.

Further, uniform cloths have been procured and issued to all linemen. Total 2,500 number of hickory rods have also been procured and allotted to all the divisions in HESCOM.

Similarly, 3,500 helmets and 1500 pairs of rubber hand gloves have been procured and issued to linemen. Further, an additional 375 pairs of rainwear and 375 pairs of rubber hand gloves are procured and issued to the employees of Karwar, Honnavar and Belagavi divisions.

Further, HESCOM has procured the following safety gears during 2018-19:

- 1500 sets of Tool Kit.
- 1000 numbers of Reflective Jackets.
- 500 numbers of Reflective Rainwear.
- PO issued on 09th October, 2018 for procurement of 1200 numbers of Safety Belts.
- PO issued on 12.10.2018 for Procurement of Uniform Cloth (2 Pairs for 2017-18 & 1 Pair for 2018-19).

Further, tendering is in process for procurement of safety materials such as rainwear, helmets, tool kit, safety belts and safety goggles.

A session on electrical accidents and safety procedures to be followed by the staff to avoid accidents, is being conducted for the newly recruited power men, at the Training Centre of HESCOM, Hubballi. Further, training for power men at respective Sub-Divisions, is being conducted for carrying out the works in a safe manner, using all safety devices. The HESCOM will continue its efforts to focus on safety aspects to reduce electrical accidents occurring in the distribution system.

Commission's Views:

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.

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 a month 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.

Compliance by the HESCOM:

- The HESCOM is relentlessly pursuing local bodies for installing timer switches to avoid wastage of energy.
- HESCOM has issued directions to all CEE / SEE / EEE, to service all new streetlight installations and extension / modification to be carried out for existing streetlight installations, only after ensuring installations of timer switches and energy efficient equipment and to submit the report of serviced installations to the Corporate Office. Quarterly reports in this regard is being regularly submitted to the Commission.
- Further, the HESCOM is spreading awareness about using energy efficient streetlights and timer switches to layout / campus / township via advertisement through Newspapers.
- Status of installation of Timer switches to Street light installations is as detailed below:

ESCOM	Total No. of Street light installations	No. of installations provided with timer switches	Balance No. of installations to be provided with timer switches
HESCOM	21971	2768	19203

Commission's Views:

The Commission notes that the progress of providing timer switches to street lights is very poor. As per the data furnished by HESCOM it is seen that, only 2,768 timer switches are provided, as against the existing 21,971 number of

streetlight installations. 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.

Further, it is observed that the HESCOM has not initiated any action to install timer switches at its cost and recover the cost from the concerned local bodies later, as directed by the Commission. Therefore, the Commission reiterates that the HESCOM shall install the timer switches at its cost initially and get it reimbursed from the local authorities apart from persuading the local bodies to install timer switches at their cost by availing the funds / grants received from the Government and other agencies for such energy conservation programmes. Persuading Corporates to fund this programme under their CSR activities should also be explored. HESCOM shall explore taking the services of EESL for effective implementation of this measure.

The Commission 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 5th 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:

- a) 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.
- b) 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.
- c) 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 estimates of loads of the HESCOM that may be shed, when required, in discrete blocks is as shown below:

Blocks	Quantum of load may be shed in MW	Category of 11 KV feeders to be shed
6.00 hrs. to 9.00 hrs.	100-200	1 hr. LS to NJY, Semi Urban and
		1 hr. LS to non - district head quarter feeders in 3 batches
		(6.00 hrs. -7.00 hrs. 7.00 hrs.- 8.00 hrs. 8.00 hrs. -9.00 hrs.)
	200-300	1 hr LS to NJY, semi urban and
		1 hr LS to non-district head quarter feeders and
		1 hr LS to district head quarter feeders in 3 batches (6.00 hrs-7.00 hrs, 7.00 hrs-8.00 hrs, 8.00 hrs-9.00 hrs)
9.00 hrs. to 18.00 hrs.	100-200	1 hr LS to EIP and rural feeders in 3 batches (9.00hrs-12.00 hrs, 12.00 hrs-15.00hrs, 15.00hrs -18.00hrs)
		1 hr LS to EIP and rural feeders in 3 batches
	200-300	1 hr LS to NJY, semi urban and
		1 hr LS to non-district head quarter feeders in 3 batches
		(9.00hrs-12.00 hrs., 12.00hrs-15.00hrs,15.00hrs - 18.00hrs)
		1 hr LS to NJY, semi urban,
18.00 hrs. to 22.00 hrs.	100-200	1 hr LS to non - district head quarter and
		1 hr LS to rural and EIP feeders in 2 batches (18.00hrs-20.00 hrs. 20.00hrs-22.00hrs)
		1 hr LS to NJY, Semi Urban,
	200-300	1 hr LS to non - district head quarter
		1 hr LS to rural and EIP feeders and

Blocks	Quantum of load may be shed in MW	Category of 11 KV feeders to be shed
		1 hr LS to district head quarter in 2 batches (18.00hrs-20.00 hrs. 20.00hrs-22.00hrs)
22.00 hrs. to 6.00 hrs.	100-200	1 hr LS to EIP and Rural feeders in 2 batches (22.00hrs-02.00 hrs. 02.00hrs-06.00hrs)
	200-300	2 hr LS to EIP and rural feeders in 2 batches (22.00hrs-02.00 hrs. 02.00hrs-06.00hrs)

- d) The REC has developed a web based application, "Urjamitra" and HESCOM has uploaded the data relating to all 11 KV feeders. Daily outages of such feeders 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 21.90 lakhs of consumers in the database of Urjamitra out of 44.35 lakhs of consumers of its area. 1.23 crores of SMS's are triggered using the platform for 4003 numbers of scheduled outages and 481 numbers of unscheduled outages, which can be seen in www.urjamitra.com.

- e) 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.
- f) 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 since May, 2016.
- g) HESCOM will submit to the Commission, sub-station wise and feeder wise data on interruptions in power supply every month.
- h) HESCOM has taken all necessary measures to minimize interruptions and inconvenience to consumers.

Commission's Views:

The Commission notes from the submission of the HESCOM that it is using the Urjmitra platform to provide information to the consumers through SMS about the time and duration of interruptions in power supply due to various reasons. However, the HESCOM needs to expedite the use of the application to the fullest extent by uploading 100% base data required by the application as the consumers have to be informed through SMS in addition to notification in newspaper media regarding load shedding due to reasons such as system constraints, breakdown of lines / equipment, maintenance etc.

The Commission notes that HESCOM is making use of "URJA MITRA", the mobile based and web based application, developed and deployed by the RECTPCL under the initiative of Ministry of Power for the benefit of all ESCOMs across the Country. If the base data required by the application is updated in the database of the application, it would equip HESCOM 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. 'Urjmitra' mobile application can be used as a link between HESCOM field staff and citizens for facilitation of outage dissemination information to all consumers through SMS. The cost involved for dissemination of SMS is also borne by the RECTPCL for the time being. 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 (Indicative Maximum time limit for rendering service) set 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 early 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.

Further, the Commission observes that despite directions to do so, the HESCOM is not submitting 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 to the Commission regularly. The HESCOM is directed to submit the same regularly to the Commission 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 HESCOM was directed 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 center 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 complaints 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:

It is submitted that the Customer Call Center (CCC) was established under RAPDRP Part-A projects at Corporate Office, HESCOM, Hubballi. The CCC is operational in HESCOM for proper monitoring of Customer Care Activity such as registration of consumer complaints and speedy redressal of consumer grievances. The helpline executives are working round the clock. The helpline Number is 1912. Publicity is being given continuously and will be continued in future to give publicity through paper notification in all leading newspapers, printed at the back side of consumer electricity bills for consumer's information, and also published HESCOM website regarding helpline number 1912.

HESCOM has taken up action to increase the number of lines and the executives to take care of call congestion. The HESCOM is taking all necessary steps to increase the reach to consumers by providing other social media platforms like Facebook, WhatsApp etc., for better interaction with consumers and timely follow up of complaints till closure, through dedicated executives sitting in customer care centers.

The average time required for attending the complaints during FY17 is 24.03 hours and is 20.65 hours during FY18.

Commission's Views

The Commission notes that the HESCOM has established the 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 are increasing year on year. Also, it has come to the notice of the Commission that, the executives working in the Centralized Customer Care Centre(CCC), round the clock are deployed through outsourcing Agency. Several complaints were received in during the public hearings about the negative (disrespectful) behavioral attitude of such executives working in the CCC. HESCOM shall instruct the outsourcing agency employing and deploying such executives to impart suitable training on public relations and behavioral attitude, interpersonal relations etc., HESCOM shall bring in 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 directs HESCOM to deploy a Senior Level Officers to supervise and review all the activities of the CCC, and shall take disciplinary action against erring officials / executives.

The Commission directs HESCOM to continue its efforts in further improving the delivery of consumer services especially in reducing time required for resolving consumer complaints relating to breakdowns of lines / equipment, failure of transformers etc.,

The HESCOM is also directed to analyze the nature of complaints registered and take action to minimize the number of complaints by taking preventive / corrective action. It is also imperative that necessary steps are taken to continuously sensitize field-staff about prompt and effective handling 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, 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 31st December, 2010. In this regard the ESCOMs were required to furnish to the Commission the following information on a monthly basis:

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

Compliance by the HESCOM:

The Energy audit of 16 towns which have population of more than 50,000 is being carried out in HESCOM. The below mentioned matrix shows average energy losses recorded during FY18 & FY19 in these 16 towns:

Year	No. of towns Monitoring	No. of Town/ Cities loss under				
		<10 %	>10, <=15	>15, <=20	>20, <=25	>25
FY-18	16	4	12	-	-	-
FY -19 (up to Aug-18)	16	8	7	1	--	--

Year	No. of Town/ Cities loss under	
	Below 15%	>15%<=20%
FY-18	Hubballi, Dharwad, Sirsi, Karwar, Dandeli, Gadag, Haveri, Ranebennur, Bealgavi, Nippani, Ilkal, Gokak, Bagalkote, Bijapur, RabkaviBanahatti, Jamakhandi,	--
FY -19 (up to Aug-18)	Hubballi, Dharwad, Sirsi, Karwar, Dandeli, Gadag, Haveri, Ranebennur, Bealgavi, Nippani, Ilkal, Gokak, Bagalkote, Bijapur, RabkaviBanahatti	Jamakhandi

It can be seen from above that, for FY18, out of 16 towns the loss level in 16 towns is less than 15%. And in FY19 (Up to August, 2018) out of 16 towns the loss level in 15 towns are less than 15% and in 1 town, it is more than 15%. The various improvement works such as replacement of electromechanical meters by static meters and replacement of old meters which are older than 10-years are taken up, 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, to bring down the loss less than 15%.

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

- 1) There are 397 number of Urban feeders in the HESCOM Jurisdiction. All the feeders are continuously monitored by way of conducting feeder-wise energy audit and by taking action for corrective measures to rectify any problems arising in the process of conducting audit respect monthly.
- 2) One of the reasons for high T&D losses is use of undersized conductor. Re-conductoring of HT and LT lines have been proposed with the target set for FY19 - 1491.48 Kms.
- 3) Replacement of Weasel conductor by Rabbit conductor in 129 feeders of selected 73 towns is taken up in phased manner.
- 4) Providing meters to DTCs in Non R-APDRP towns for energy audit, is under progress. DTC-wise energy audit will be taken up once the meters are provided to all the DTC.
- 5) Reduction in AT&C losses in 29 RAPDRP towns are noticed after commissioning additional distribution transformer centers, Arial Bunched Cables, maintenance works of DTCS, etc.
- 6) IPDS project is implementing in phased manner, for reducing losses to greater Extent.
- 7) Action has been taken to replace MNR meters at the earliest. All efforts are being made to ensure that DC or MNR installations are within 1%.
- 8) Efforts are being made for installation of HT metering Cubicle for boundary meters in Gadag division on pilot basis for more accurate energy audit.
- 9) Raids are being conducted by vigilance squads to detect and curb theft of electricity.
- 10) Regular rating of HT and LT installations are being conducted to maintain the metering system in good condition.
- 11) All the 545 interface points between KPTCL & HESCOM are metered and the energy received at all these points are measured and recorded.

DTC Metering Work:

- 1) HESCOM has taken up DTC Metering in two Phases (Phase-I & II) comprising of Supply, Installation, Commissioning Maintenance of Composite Thread through Type Meter Box of accuracy class 1.0 with LT Electronic Tri-Vector Meter having AMR compliant with associated CT's, Modem and other materials for un-metered non-IP set DTCs in all the Non-RAPDRP Town Areas and Rural Areas in all O & M Divisions of HESCOM Jurisdiction.
- 2) Data from Thread-through type meter is transferred online to the centralized server by establishing communication. The agency is maintaining server and has hosted a web based application for fetching the meter read data.
- 3) Metering of all the 40,793 Nos of DTCs is completed under Phase I & II.
- 4) Out of the 40,793 Nos of Metered DTCs, communication is established for 31,667 DTCs. Data of, Consumption, Load, Phase-wise Voltage and Current is available in the web based application. While establishing communication in respect of the balance DTCs, HESCOM has noticed issues like Network Problem, Lead wire burnt and MNR etc., Action will be taken to address these issues at the earliest.
- 5) Based on Data of Load, Consumption, Phase-wise Voltage and Current available in web based application, has helped the field officials for analysis of imbalance in load, information on Voltage and current on each phase of the DTC etc.

ANNEXURE-1							
DTC METERING PROGRESS							
Sl. No	Division	As Per DWA			Work Completed		
		Phase 1	Phase 2	Total	Phase 1	Phase 2	Total
1	Hubli	1,171	166	1,337	1,171	166	1,337
2	Dharwad	1,199	286	1,485	1,199	410	1,609
3	Gadag	940	1,097	2,037	940	1,888	2,828
4	Ron						
5	Haveri	2,262	457	2,719	2,262	88	2,350
6	Ranebennur	503	1,050	1,553	503	1,050	1,553
7	Karwar	1,406	1,494	2,900	1,406	1,494	2,900
8	Honnawar						

ANNEXURE-1							
DTC METERING PROGRESS							
Sl. No	Division	As Per DWA			Work Completed		
		Phase 1	Phase 2	Total	Phase 1	Phase 2	Total
9	Sirsi	1,839	1,748	3,587	1,839	1,748	3,587
10	Belgaum	2,508	313	2,821	2,508	260	2,768
11	Ghataprabha	1,369	447	1,816	1,369	430	1,799
12	Bailhongal	974	625	1,599	974	643	1,617
13	Ramadurga						
14	Chikkodi	809	1,378	2,187	809	1,181	1,991
15	Athani	742	3,101	3,843	742	995	1,737
16	Raibag	680	3,692	4,372	680	5,861	6,540
17	Bagalkot	3,288	236	3,524	2,086	0	2,086
18	Jamkhandi	402	283	685	402	483	885
19	Mudhol	441	49	490	441	438	879
20	Bijapur	497	242	739	497	402	899
21	Indi	577	907	1,484	577	1,138	1,715
22	Basavana Bagewadi	1,086	529	1,615	1,086	627	1,713
Total		22,693	18,100	40,793	21,491	19,302	40,793

ANNEXURE-2				
Details of communication with Centralized Server				

Sl. No	Division	Erected	Communicated	Balance to be Communicated
1	Hubli	1337	1201	136
2	Dharwad	1609	1360	249
3	Gadag	2828	2246	582
4	Haveri	2350	2158	192
5	Ranebennur	1553	1398	155
6	Karwar	2900	1690	1210
7	Sirsi	3587	1587	2000
8	Belgaum	2768	2386	382
9	Ghataprabha	1799	1586	213
10	Bailhongal	1617	1412	205
11	Chikkodi	1991	1672	319
12	Athani	1737	1560	177
13	Raibag	6540	4384	2156
14	Bagalkot	2086	1850	236

Sl. No	Division	Erected	Communicated	Balance to be Communicated
15	Jamkhandi	885	760	125
16	Mudhol	879	762	117
17	Bijapur	899	740	159
18	Indi	1715	1486	229
19	B.Bagewadi	1713	1438	275
Total		40793	31676	9117

Statement showing the Division wise DTCs Metered & DTCs Energy Audit Conducted for the month of October-2018:

Sl. No.	Division	Total No. of DTCs for which meters fixed	No. of DTCs for which DTC wise Energy audit done	Total No. of DTCs with losses						
				Negative Loss	Up to 5%	5% to 10%	10% to 15%	15% to 20%	20% to 40%	Above 40%
1	2	3	4	5	6	7	8	9	10	11
1	Hubli	1337	891	298	391	22	14	17	36	113
2	Dharwad	1609	1283	191	671	32	31	27	74	257
3	Gadag & Ron	2828	1749	825	466	31	27	25	94	281
4	Haveri	2350	2134	695	856	33	42	37	105	366
5	Ranebennur	1553	1291	465	421	23	21	23	69	269
6	Karwar	2900	1206	328	338	67	56	44	102	271
7	Sirsi	3587	1427	510	689	27	7	9	33	152
8	Belgaum	2768	1976	712	680	62	61	37	131	293
9	Ghataprabha	1799	1425	492	423	69	25	68	163	185
10	Bailhongal	1617	813	219	312	36	25	23	66	132
11	Chikkodi	1991	1298	388	538	69	55	37	58	153
12	Athani	1737	1216	433	320	68	80	50	101	164
13	Raibag	6540	2503	1315	570	54	36	39	124	365
14	Bagalkot	2086	1625	507	695	36	40	31	80	236
15	Jamkhandi	885	558	112	220	14	14	10	34	154
16	Mudhol	879	723	205	258	15	21	12	37	175
17	Bijapur	899	477	161	208	6	3	4	21	74
18	Indi	1715	1246	351	630	45	33	18	56	113
19	B.Bagewadi	1713	1338	428	428	26	15	18	56	367
		40793	25179	8635	9114	735	606	529	1440	4120

Commission's Views:

It is observed by the Commission that, HESCOM has not submitted the details of feeder-wise, DTC-wise, month-wise energy audit reports.

It is also observed by the Commission that, the HESCOM has not submitted the monthly energy audit reports of cities / towns 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 details of total number of DTCs existing, number of DTCs metered and the action plan for metering the remaining DTCs.

As per the data furnished in the tariff filing, despite completion of metering of 40,793 number of DTCs in non-RAPDRP area of HESCOM, the HESCOM is furnishing the analysis for only around 25,179 DTCs. HESCOM has failed to furnish the energy audit reports for the balance 15,614 number of DTC's metered in non-RAPDRP area which are provided with Automatic Metering Infrastructure (AMI). HESCOM has failed to furnish the similar quantities in 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. 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 and taking up energy audit of all the feeders and metered DTCs.**

The HESCOM is directed to take up energy audit of all the 11 kV feeders, DTCs, and 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.

The Commission directs HESCOM to conduct workshops at the Division level, for educating the officers of all cadre 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., 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 sent 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, as justifiable and directs HESCOM to submit the consolidated energy audit report for the FY19 before 31st May 2019, as per the formats prescribed by the Commission, vide its letter No. KERC/D/137/14/91 dated 20.04.2015.

10) Directive on Implementation of HVDS:

In view of the obvious benefits in the introduction of HVDS in reducing distribution losses, the Commission had directed the HESCOM to implement High Voltage Distribution System (HVDS) in at least one O&M division in a rural area in its jurisdiction, by utilizing the capex provision allowed in the ARR for the year.

HESCOM has not submitted any proposals till date.

However, the Commission based on the report of the expert committee and in the wake of the suggestions by Sri B.S. Hanumanthappa, a member of the State Advisory Committee that implementation of the HVDS in the ESCOMs is not beneficial to the distribution system, was of the view that the HVDS should be implemented by following the guidelines issued by the Commission, only wherever it is techno economically viable.

The Commission had therefore issued directions to HESCOM, not to take up or not to submit any further proposals of HVDS until further orders.

Now taking these developments into consideration, the Commission withdraws its directive on implementation of HVDS and directs HESCOM not to take up any such works, until further orders.

11) Directive on Nirantara Jyothi – Feeder Separation:

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

- 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**NJY Phase-I & II:**

Nirantara Jyothi Yojane is a prestigious project of Government of Karnataka and is being implemented in HESCOM with an intension to bifurcate feeders

into Agricultural loads and non-Agricultural loads to provide 24Hrs 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 No EN166; EMC 2010; BENGALURU Dt. 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, there are 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.

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 24Hrs to rural areas and development of rural areas with socio economic changes. There is reduction in peak load on the system.

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

NJY Phase-III:

DPRs were prepared to take up NJY works under Phase-III involving estimated cost of Rs. 113.06 Crores and accordingly M/s REC have sanctioned loan to the tune of Rs. 101.76 Crores.

As on 22.10.2018, 80 numbers of feeders are commissioned as against the proposal of 92 feeders. HESCOM foresees to complete the commissioning of the balance 12 feeders by December 2018.

Status of NJY works is as detailed below:

NJY taluka wise feeders considered for segregation and its progress:					
SI No	Name of the District	Name of the Taluk	No. of Awarded NJY feeders	Feeders commissioned	Remarks
Pilot					
1	Belagavi	Bailhongal	16	16	
2	Haveri	Shiggoan	3	3	
3		Savanur	3	3	
Total			22	22	
Phase-I					
1	Bagalkot	Bilagi	10	10	
2	Bijapur	Muddebihal	12	12	
3		B. Bagewadi	20	20	
4		Indi	22	22	
SI No	Name of the District	Name of the Taluk	No. of Awarded NJY feeders	Feeders commissioned	Remarks
5		Sindagi	15	15	
6	Bagalkot	Hungund	14	14	
7		Badami	14	14	
8	Belgaum	Athani	24	24	
9		Gokak	14	14	
10		Soundatti	18	18	
11	Dharwad	Khalaghatagi	8	8	
12		Navalgund	2	2	
13	Gadag	Mundaragi	6	6	
14		Shirahatti	7	7	
15		Naragund	3	3	
16	Haveri	Hirekerur	9	9	
17		Ranebennur	8	8	
18		Byadagi	7	7	
19	Bagalkot	Jamakhandi	17	17	
20	Belgaum	Ramadurga	12	12	
Total			242	242	
Phase-II					
1	Bagalkot	Mudhol	16	16	
2		Bagalkot	11	11	
3	Bijapur	Bijapur	29	29	
4	Dharwad	Dharwad	12	12	

NJY taluka wise feeders considered for segregation and its progress:					
SI No	Name of the District	Name of the Taluk	No. of Awarded NJY feeders	Feeders commissioned	Remarks
5	Gadag	Rona	11	11	
6		Gadag	5	5	
7	Dharwad	Hubli	8	8	
8		Kundgol	1	1	
9	Haveri	Haveri	9	9	
10		Hanagal	10	10	
11	Belgaum	Raibag	19	19	
12		Chikkodi	40	40	
13		Belgaum	19	19	
14		Khanapur	12	12	
Total			202	202	
Phase-III progress as on 31.10.2018					
SI No	Name of the District	Name of the Taluk	No. of Awarded NJ feeders	Feeders commissioned	Balance feeders
1	Dharwad	Dharwad	8	6	2
2		Khalagatagi	4	1	3
3		Hubli	1	-	1
4		Kundagol	1	-	1
5		Navalagund	6	6	0
6	Belgavi	Bailhongal	4	4	0
7		Soudatti	2	2	0
8		Gokak	5	5	0
9		Athani	4	4	0
10	Gadag	Gadag	6	5	1
11		Shirahatti	5	3	2
12		Mundaragi	4	2	2
13	Haveri	Haveri	2	2	0
14		Hanagal	8	8	0
15		Shiggaon	8	8	0
16		Savanur	6	6	0
17		Ranebennur	8	8	0
18		Byadagi	4	4	0
19		Hirekerur	6	6	0
Total			92	80	12

Action plan for completion of balance work are as follows:

Month wise time schedule for completion of balance 19Nos. of NJY feeders under Phase-III			
SI. No	Month	Proposed No. of feeders to be commissioned	Remarks
2	November-18	7	
3	December-18	5	
Total		12	

M/S CPRI Bengaluru was entrusted with the work of analysis of NJY works post implementation. The benefits derived from Nirantara 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 the more number of hours of reliable, quality power supply.

Commission's Views:

The Commission notes that the HESCOM has commissioned all the feeders taken up under NJY scheme phase-1 & 2 and has achieved a considerable progress under phase-3 by commissioning 80 feeders out of 92 feeders taken up for implementation. However, there has been an inordinate delay in completion of the NJY works which has resulted in non-realization of envisaged benefits to the organization, as per the DPR.

Therefore, the HESCOM is directed to commission all the remaining feeders taken up under phase-3 as committed and thereafter 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 FY18. 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.

It is noted that the HESCOM has already segregated significant number of feeders under NJY phase1, 2 and 3 works and consequently the energy consumed by the IP sets could be more accurately measured at the 11 KV feeder levels at the sub-stations, duly considering the distribution losses in 11 kV lines, distribution transformers and LT lines. Therefore, 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, as per the prescribed formats. Any data furnished based on other assumption will not be considered by the Commission.

The Commission reiterates its directive to the HESCOM to continue to furnish feeder-wise IP set consumption based on energy meter data in respect of agriculture feeders segregated under NJY, to the Commission every month.

12) 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:

The HESCOM has taken up this project in Byadagi and Nippani areas, with Energy Efficiency Services Limited (EESL), as a pilot project. 590 numbers of old pump sets are replaced by new energy efficient pump sets. Vide letter No HESCOM/MD/PS/22492, dated 9.12.2015, pros and cons of the project were submitted to the Additional Chief Secretary, Energy Department, GoK, Bengaluru. Also, a detailed study is being carried out by the HESCOM regarding the same and based on the reports further works will be taken up as per the Commission's views.

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 submitted in the tariff filing 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 implement DSM measures in the other parts of HESCOM, so as to conserve energy and also precious water, for the benefit of farmers. **Therefore, the HESCOM should take up DSM initiatives in other parts of its jurisdiction also and submit suitable proposals to the Commission for approval.**

13) 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:

The status of electrification of un-electrified households as on 30.10.2018 is as detailed below:

SL No	PARTICULARS	NO'S	Remarks
1	Total No. of Rural Households existing as on 10.10.2017	21,13,603	
2	No of Rural Households electrified as on 10.10.2017	19,14,911	
3	Balance No. of Un-electrified Households to be electrified	1,98,692	
4	BPL Un-electrified Households Covered under RGGVY 12 th Plan	18,221	Completed in November-2017
5	BPL Un-electrified Households sanctioned under DDUGJY	88,707	Progress as on 30.10.18 is 48109 and Balance is 40598
6	Un-electrified Households proposed under SAUBHAGYA	91,764	
7	Total Proposed under RGGVY/DDUGJY/SAUBHAGYA	1,98,692	
8	Total Households yet to be electrified as on 30.10.2018	1,32,362	Target - 31.03.2019

As noted in above table, as per the details uploaded in GARV portal, there are 1,98,692 numbers both APL & BPL households to be provided with electricity. The electrification of BPL households is covered under RGGVY 12th Plan, DDUGJY & SAUBHAGYA.

As per the field survey conducted, 1,98,692 numbers of un-electrified BPL households are identified. Out of these, electrification of 1,06,928 numbers of BPL households are covered under DDUGJY & RGGVY 12th Plan and the related works are under progress. Balance 91,764 numbers of BPL households are proposed to be covered under SAUBHAGYA scheme.

The approximate cost for arranging electricity to the balance 91,764 Nos of BPL households is estimated as Rs.98.37 Crores. DPR for electrification these un-electrified households under SAUBHAGYA is submitted to REC for sanction.

30 un-electrified villages were existing in HESCOM area and 25 villages in Uttara Kannada & 05 in Belagavi districts are electrified on 31.12.2018 covering 860 households.

Status of BPL Households proposed for electrification under Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) is as detailed below:

Sl. No.	Name of the District	No of BPL HHs proposed in SAGY	No of BPL HHs proposed in Connecting to Un connected HHs	Total	Progress as on 30.10.2018
1	Uttara Kannada	18	9654	9672	4079
2	Haveri	0	7627	7627	7213
3	Gadag	78	11399	11477	4394
4	Dharwad	0	3324	3324	1958
5	Bijapur	60	12699	12759	7450
6	Bagalkot	159	8352	8511	4068
7	Belgaum	269	35068	35337	19447
	Total	584	88,123	88,707	48,609

For providing access to Electricity to Rural Households under DDUGJY scheme **Rs. 48.34 Crores** is sanctioned to HESCOM vide letter No REC/BLR/DDUGJY/15-16/299 dated 09.09.2015 and Rs. 9.9 Cr is sanctioned for Sansad Adarsh Gram Yojana under DDUGJY. **Work is awarded on 01.04.2017 through tender process for all 7-districts of HESCOM and the works are under progress with a time completion period of 24 months (i.e., up to March, 2019).**

SAUGHAGYA Scheme:

The details of the DPR submitted under SAUBHAGYA is shown below:

SAUBHAGYA DPR								
Sl. No.	Name of District	RURAL				URBAN		
		Villages Covered	Habitation Covered	Households Covered	Cost	Towns Covered	Households Covered	Cost
		Nos	Nos	Nos	Rs in Crs	Nos	Nos	Rs in Crs
1	Belgaum	1090	1387	31115	25.03071	35	1074	0.74718
2	Bagalkot	544	568	12263	6.06161	15	1707	0.69191
3	Bijapur	591	750	5619	5.39925	13	461	0.57124
4	Gadag	304	424	7182	6.28613	9	269	0.40232
5	Dharwad	331	351	7942	5.79399	6	84	0.0297
6	Uttara Kannada	856	1420	9830	30.79365	12	332	0.35692
7	Haveri	562	575	12862	15.42797	9	1024	0.78352
	Total	4,278	5,475	86,813	94.79331	99	4,951	3.58279

Tender is invited for 48 blocks in 48 packages and evaluation of tender is under progress. Target for completing electrification of Un-electrified households is 3 Months from date of award.

Commission's Views:

The Commission notes that the progress achieved in electrification of un-electrified households under DDUGJY scheme as on October 2018 is less than 55% 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 is hardly any progress achieved in electrification of 1,98,692 numbers of un-electrified households identified as per field survey and taken up 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 has been directing the HESCOM to cover electrification of at least 5 per cent of the total identified un-electrified households every month. 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.

The HESCOM is therefore, directed to expedite the task of providing electricity to all the un-electrified households within the targeted period and report compliance to the Commission giving the details of the monthly progress achieved from March, 2019 onwards. The Commission, as already indicated in the earlier Tariff Orders, would be constrained to initiate penal proceedings under Section 142 of the Electricity Act, 2003, against HESCOM in the event of non-compliance of this directive.

14) 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 power 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 viz., O & M Urban Division, Belgaum comprising of Urban consumers only, and O & M Division, Gadag comprising of mixed consumers of Urban and Rural for implementation of Financial Management Frame Work on the basis models of CESC and BESCO and the targets were fixed accordingly as per Directive of the Commission already issued and the 2nd Quarterly (July, 2018 to September, 2018) report is submitted to Hon'ble KERC.

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

To Comply with the Directives of the Commission, the subject is being monitored at Circle / Zonal / Corporate level during monthly Revenue Review meetings.

Commission's Views:

As per the submissions made in the tariff filing, the Commission notes that the HESCOM has taken up the financial management framework model in only 2 Divisions on pilot basis. The analysis report, stated to have been submitted vide Annexure-17, is not satisfactory. The Commission directed HESCOM to implement financial management framework model in order to assess the performance of the divisions / sub-divisions which is linked to the quantum of energy received, sold and cost thereon and that they conduct their business purely on commercial principles. However, the 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 consumers and stake holders have raised concerns in the public hearing held by the Commission about the accumulation of revenue arrears and failure to recover the long standing arrears which is causing adverse impact on the HESCOM's Cash flows. The Commission directs HESCOM to chalk out a robust action plan to recover the long standing accumulated arrears from all category 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 performance divisions in sales with low performance divisions.
- g) Targeted achievement in performing the energy audit, feeder-wise, DTC wise, and the performance in achieving the reduction in energy losses of feeders, DTCs by setting right the lacuna's / issues viz., tagging of consumers properly 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.

The Commission reiterates its directive that the HESCOM shall implement the Financial Management Framework model in its jurisdiction at the earliest to bring in accountability on 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 not collecting the required rate of ARR and take remedial measures to ensure full recovery of revenue.

15) Directive on Prevention of Electrical Accidents:

On a review of the electrical accidents that have taken place in the State during the year 2017-18, 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 hereby directs 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 shall be submitted by the HESCOM to the Commission.

Compliance by the HESCOM:

HESCOM has a vast distribution network of HT line, LT line and DTCs. Efforts are being made relentlessly to avoid electrical accidents and there is lack of knowledge among maintenance staff / public / consumer. Hence, in this regard, following measures have been taken for prevention of accidents to Employees / consumers / Public:

- **Employees:** All the officers are instructed to ensure that, all the power men in their jurisdiction are provided with proper and adequate safety gear and the power men use such safety gear provided to them while working in the network.

The Chief Engineers of respective zone are authorized to procure good quality tool kits and safety belts to be provided to power men coming under their jurisdiction.

375 pairs of rainwear and 375 pairs of rubber hand gloves are procured and issued to the employees of Karwar, Honnavar and Belagavi divisions.

Total 2,500 number of hickory rods 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 the field. Similarly, 3,500 helmets and 1,500 pairs of rubber hand gloves have been procured and issued to linemen.

Further, tendering is in process for procurement of safety materials such as rainwear, helmets, tool kit, safety belts and safety goggles.

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

During the FY 18 safety training was imparted to power men, and HESCOM will continue its efforts to educate its staff regularly.

➤ Details of the electrical accidents since FY16 is updated as follows:

Sl. no	District	Electrical Accident FY-15	Expenditure incurred (in crores) for prevention of Accidents	Electrical Accident FY-16	Expenditure incurred (in crores) for prevention of Accidents	Electrical Accident FY-2017	Expenditure incurred (in crores) for prevention of Accidents	Electrical Accident FY-2018	Expenditure incurred (in crores) for prevention of Accidents
1	Dharwad	43	0.039	28	0.36	24	0.18	34	0.12
2	Gadag	30	0.0044	22	0.07	21	0.0015	26	0.12
3	Uttar Kannada	32	0.24	21	1.4	29	0.11	36	0.073
4	Haveri	37	0.132	32	1.73	45	0.11	51	0.013
5	Belgaum	89	0.2	74	1.44	63	2.05	64	2.17
6	Bijapur	13	0.028	16	0.095	11	0.108	7	0.56
7	Bagalkot	21	0.049	16	0.37	11	2.027	18	0.26
	Total	265	0.692	209	5.46	204	4.58	236	3.316

In view of frequent accident occurring in HESCOM, various Preventive Measures taken to reduce accidents are as detailed below:

	FY15	FY 16	FY17	FY18
Providing intermediate poles in lengthy span in Nos.	1898	3391	1680	2648
Replacement of Broken / Deteriorated poles Nos.	2386	2137	1947	1893
Shifting of DTCs in Nos	298.3	416	121	313
Replacement of Deteriorated conductor in Kms	71.634	70.58	122.47	183.18

Apart from the above, following works are also taken up:

- DTC Earthing – 58 Nos.
- Re conductor works: 11kV line - 14 feeders, 62.8 kms tendered; 3 feeders, 18.48 kms completed and the balance work is under progress.
- Re conductor works: LT Line - 281 feeders, 496.12 kms tendered; and 29 feeders, 64.1 kms completed and the balance work is under progress.
- Transformer maintenance work has been carried out to reduce the accident.

Action is being taken to educate the large public on safe use of equipment's. Consumer awareness programmes are arranged. Street shows are arranged at all the District Headquarters on electrical safety.

All efforts are being made to reduce the accidents on priority, by educating consumers through street shows, Lok Adalat Meeting of respective Sub Divisions etc.

Commission's Views:

The Commission notes that the HESCOM has taken several remedial measures to improve its distribution network and also has taken up awareness programmes to educate the field staff and public about the electrical safety measures. However, despite these measures, the rate of fatal electrical accidents involving human, animal and livestock has not substantially decreased, 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 hazardous installations, more systematically and regularly. Therefore, the HESCOM should continue to focus on identification and rectification of all the hazardous installations 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 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 to 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, 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 of the concerned officers / officials should entail them to face disciplinary action.

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