

APPENDIX

REVIEW OF COMPLIANCE OF THE DIRECTIVES ISSUED BY THE COMMISSION

The Commission, in its earlier Tariff Orders and communications had issued several directives for compliance by the HESCOM. An analysis of the said directives and their compliance is as under:

1. Directive on conducting Consumers' Interaction Meetings in the O & M sub-divisions for redressal of consumer complaints:

The Commission had directed that the HESCOM shall ensure that Consumer Interaction Meetings chaired by the Superintending Engineers are conducted in each O&M sub-division according to a pre-published schedule, at least once in every three months. Further, the consumers shall be invited to such meetings giving notices in advance through emails, letters, notices on HESCOM's website, local newspapers etc., to facilitate participation of maximum number of consumers in such meetings. The HESCOM ensure that the proceedings of such meetings are recorded and uploaded on its website, for the information of consumers. Compliance in this regard shall be reported once in three months to the Commission, indicating the date, the number of consumers attending such meetings and the status of redressal of their complaints.

If the HESCOM fails to ensure conduct of the Consumer Interaction Meetings as directed, 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 who fails to conduct such meetings.

Compliance by the HESCOM:

Bi-monthly interaction meetings in HESCOM were conducted at sub divisional level up to June, 2017 as per the pre published Notification on 10.04.2017. It was decided that, on every 3rd Saturday, interaction meeting has to be conducted at every subdivision office compulsorily along with

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

The paper publication was given in the following newspapers:

Sl. No	Name of news paper	Date of publication
1.	Vijayavani	14.07.2017
2.	Vijaya Karnataka	
3.	Udayavani	
4.	Prajavani	
5.	New Indian Express	
6.	The Hindu	
7.	Sanjevani	
8.	Kannadamma	15.07.2017
9.	Samyutka Karnataka	17.08.2017
10.	Deccan Herald	
11.	Kannada Prabha	
12.	Hosa Digantha	
13.	Vishwavani	
14.	Times of India	

- i. The details of the interaction meetings conducted during the month of April to June 17 are indicated below:

Sl. No	Circle	No. of sub-divisions	No. of meetings conducted	No. of consumers attended	No. of complaints lodged	No. of complaints Solved
1	2	3	4	5	6	7
1	Hubballi	17	27	185	99	99
2	Haveri	8	8	211	101	101
3	Sirsi	11	15	173	107	107
4	Belagavi	12	40	278	123	123
5	Chikkodi	8	11	303	126	126
6	Bagalkote	11	28	270	207	207
7	Vijayapur	12	29	172	87	87
Total		79	158	1592	850	850

- ii. The details of Consumer Interaction Meetings conducted during the month of July to September 17:

Sl. No	Circle	No. of sub-divisions	No. of meetings conducted	No. of consumers attended	No. of complaints lodged	No. of complaints Solved
1	2	3	4	5	6	7
1	Hubballi	17	51	290	162	158
2	Haveri	8	24	204	178	176
3	Sirsi	11	30	199	156	153
4	Belagavi	12	42	337	248	247
5	Chikkodi	8	22	224	102	100
6	Bagalkote	11	30	205	96	87
7	Vijayapur	12	63	201	125	124
	Total	79	262	1660	1067	1045

Commission's Views:

The HESCOM has submitted the details of consumer interaction meetings conducted in all the subdivisions of its jurisdiction for 1st and 2nd quarters of FY18. The Commission, in the Review Meeting of KPTCL and ESCOMs held on 25.10.2017, directed the ESCOMs to conduct the consumer interaction meetings in the subdivisions chaired by either the jurisdictional Superintending Engineer or the jurisdictional Executive Engineer to effectively redress the consumer grievances. However, the HESCOM has not informed as to whether such meetings are being conducted under the Chairmanship of SE or EE, but from its submissions it is clear that more than one meeting is being held in some of the subdivisions. It is welcome, if the HESCOM conducts more number of consumer interaction meetings in a quarter, however, while doing so, it should bear in mind that the senior officers like SE or EE should chair such meetings, to redress the consumer complaints effectively. Also, the Commission is of the view that the dates of such meetings in the subdivisions should be spread over in a quarter so that the SE or EE can chair the meetings and is able to redress all the complaints relating to supply of electricity.

Therefore, the Commission reiterates its directive to the HESCOM to conduct consumer interaction meetings chaired by either jurisdictional SEE or jurisdictional EE once in a quarter, in a subdivision to redress the consumer grievances relating to supply of electricity and submit compliance thereon to the Commission regularly.

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 directed that 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, HESCOM shall implement the directive forthwith and the compliance regarding the same shall be submitted monthly from May, 2017 onwards, to the Commission, regularly.

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 12.22 MU is profit to the HESCOM due to billing done considering 15-minute time block during the period from May to October 2017.

Details of Open Access transactions

Sl. No.	Month	Scheduled units as per SLDC/IEX	Actual Open Access units	Profit units to HESCOM
1	May-17	35.12	33.30	1.81
2	Jun-17	34.32	31.94	2.37
3	Jul-17	35.68	33.94	1.73
4	Aug-17	36.69	33.86	2.83
5	Sep-17	33.70	30.83	2.87
6	Oct-17	28.20	27.60	0.60
Total		203.70	191.48	12.22

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 from May 2017 onwards. It is seen that due to introduction of 15 minute's billing has in fact resulted in significant quantum of energy ranging from 0.63 MU to 2.87 MU per month being billed to the open access consumer ensuring 100 per cent billing of the scheduled units vindicating the stand taken by the Commission in directing the ESCOMs to prepare monthly HT/EHT consumer bills on 15 minute's time block period to prevent revenue loss to HESCOM 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.

The Commission reiterates its directive that the HESCOM shall continue to bill the 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 the ESCOMs 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 applicant consumers' premises.

Similarly, ESCOMs were directed 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.

Further, the Commission had directed the ESCOMs to take up programmes to educate all the existing domestic, commercial and industrial consumers, through media and distribution of pamphlets along with monthly bills, regarding the benefits of using 5-star rated equipment certified by the Bureau of Energy Efficiency in reduction of their monthly electricity bills and conservation of precious energy.

Compliance by the HESCOM

As per the direction of the Commission, GoK has directed to make it mandatory to all its Departments and Public Sector undertakings to procure and use only BEE 5-star rated electrical equipment. In this regard, the HESCOM has issued circular. Further, the HESCOM has taken up programmers under DSM activities to educate existing domestic, commercial and industrial consumers to use 5-star rated equipment certified by the Bureau of Energy Efficiency.

Following are the activities carried out by the DSM Cell from April 2017 till date:

1. Providing corporate signature tune for postpaid mobile CUG numbers of HESCOM, for the period from April 2017 to March 2018.
2. 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"

Pilot project by M/s SHINFO Technologies Pvt. Ltd., Bengaluru, for Automated Lighting System (ALS) in the HESCOM's Corporate office building. The pilot project has been executed with the following procedures:

- 6 rooms in corporate building which have air conditioners chosen for the implementation of pilot project.

Recorded the energy consumption of 6 rooms for 10 working days before the installation of ALS. Pro-rata base energy consumption for 10 working days is =554 units ÷10 days = 55.4 units per day Installed the ALS in 6 rooms and recorded the energy consumption for 17 days. Pro-rata base consumption for 17 working days =573 units÷17 days = 33.71 units per day. Therefore, the percentage of energy saving concluded as 39.15 per cent.

3. VIJAYAVANI Property Expo-2017 was held on 28th, 29th & 30th May 2017 at Raikar grounds, Hubballi and the HESCOM had booked the stall for 3

days for carrying out DSM awareness activities such as energy saving tips, utilization of LED bulbs and sales of the same, use of BEE Five star rated appliances and awareness for installing solar roof top.

4. The program covering the following activities carried out in Athani O&M division:
 - a. Awareness about using energy efficient lighting like LED bulbs, tubes etc.
 - b. Awareness about using energy efficient electrical appliances like refrigerator, washing machine, air condition, fan etc.
 - c. Awareness about using energy efficient agricultural pumps.
 - d. Awareness about electrical safety measures etc.
 - e. Awareness to the public regarding online payment through PAYTM or by logging on to hescom.co.in.
 - f. Awareness to the public regarding popularity of toll free helpline-1912.
 - g. Awareness to the public regarding consumer interaction meeting which is being conducted on 3rd Saturday of every month.
5. ADVITIYA – 2017 a technical event held at KLE Institute of Technology, Hubballi on 6th and 7th of October 2017. About 1,750 students participated in the program and the awareness on use of energy efficient appliances was created through banners, certificates and talks. The programme covered the following:
 - Awareness about DSM
 - Awareness about 5-star rating equipment
 - Awareness about use of non-renewable energy sources.
6. Peak load management programme and reduction of load by using LED Bulbs, LED tube lights and efficient fan:

under HOSA BELAKU YOJANE 16,32,427 LED bulbs, 9,806 LED tube lights and 492 efficient fans have been sold in the HESCOM jurisdiction by M/s. EESL.

Appliances	Total Nos.	Energy saved in units
LED bulb	16,32,427	4,70,67,886
LED tube light	9,806	1,14,990
Efficient fan	492	1,792

The HESCOM is making all efforts to educate people about energy conservation tips, use of 5-star rated pump sets and use of 5-star rated electrical appliances and creating awareness on energy conservation by publishing in the newspapers/ magazine on regular basis and on occasions such as Ugadi, Deepavali, Kannada Rajayothsava etc. A request/appeal to the public was also published as advertisements.

Commission's Views:

The Commission notes that the HESCOM has taken a few measures for implementation of the directive. It is also important that the HESCOM needs to take effective steps in the field to ensure servicing of new installations only with BEE 5-star rated Air Conditioners, Fans, Refrigerators, etc., in the consumers' premises. Further, the HESCOM needs to focus on effective implementation of this directive by reviewing periodically the progress/status of implementation of its circular instructions by its field officers and take corrective action wherever necessary.

Further, for effective implementation of this directive it is also important that the HESCOM draws up a continuous awareness programme to educate the consumers about the benefits of using the energy efficient appliances in their premises and ensure increase in use of energy efficient appliances.

The Commission reiterates that the HESCOM shall 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 applicant consumers' premises and the compliance thereon shall be reported to the Commission once in a quarter regularly.**

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

The Directive:

The directive issued was as under:

"The HESCOM is directed to strictly implement the specified Standards of Performance while rendering services related to supply of power as per the

KERC (Licensee's Standards of Performance) Regulations, 2004. Further, the HESCOM is directed to display prominently in Kannada and English 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 energy 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 O & M sections 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 where to lodge complaint	Next higher Authority	Amount payable to affected consumer
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The HESCOM shall implement the above directives within one month from the date of the Order and report compliance to the Commission regarding the implementation of the directive.”

Compliance by the HESCOM:

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

Commission's Views

The Commission while noting the compliance submitted by the HESCOM, reiterates that it shall adhere to the specified standards of performance in rendering services to consumers in a time bound manner.

Further, the Commission directs the HESCOM to carry out effective supervision over the functioning of field offices particularly in rendering services to the consumers, relating to supply of electricity.

The Commission reiterates that the HESCOM shall continue to strictly implement the specified SoP while rendering services related to supply of electricity as per the KERC (Licensee's Standards of Performance) Regulations, 2004. For this purpose, the SEEs and the EEs during their inspections to the sub-divisions, shall ensure that this directive is being complied with without any let up. The compliance in this regard shall be submitted once in a quarter to the Commission regularly.

5. Directive on use of safety gear by linemen:

The directive issued is as under:

"The Commission directs 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 provided while working on the network. The HESCOM should sensitise the linemen about the need for adoption of safety aspects in their work through suitably designed training and awareness programmes. The HESCOM is 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 HESCOM shall implement this directive within one month from the date of the order and submit compliance report to the Commission."

Compliance by the HESCOM

All the officers are instructed to ensure that all the linemen in their jurisdiction are provided with proper and adequate safety gear and the linemen 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 linemen coming under their jurisdiction. Further, 1,050 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, 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 to avoid accidents is being conducted for the newly recruited lineman, at Training Centre of HESCOM, Hubballi. During the financial year 2016-07 training was imparted to 67 linemen. Further, training for linemen in two batches each of 40 candidates is planned for FY 2017-18. The HESCOM will continue its efforts to focus on safety aspects to reduce electrical accidents occurring in the distribution system.

Commission's Views:

The Commission notes that the HESCOM has taken steps to procure adequate supply of safety gear to all of its linemen. However, it is noted from its compliance that it has not conducted adequate training programmes to impart training on safety aspects covering all the linemen. Therefore, it is extremely important that the HESCOM should continue to focus on safety aspects to reduce electrical accidents occurring in the distribution system by imparting training to all the linemen so that they update their skill to do the required work efficiently adhering to safety aspects. Further, it is also important to ensure that the linemen use the safety gear while working on the distribution network. Therefore, strict supervision by the senior officers is a must to enforce use of safety gear by the linemen.

The Commission reiterates its directive to the HESCOM to ensure that, all the linemen in its jurisdiction are provided with proper and adequate safety gear and that they use such safety gear provided to them while working on the

network. The compliance in this regard shall be submitted once in a quarter to the Commission regularly.

6. Directive on providing Timer Switches to Streetlights by the ESCOMs

The directive issued is as under:

“The Commission directs the HESCOM to install timer switches using own funds to all the street light installations in its jurisdiction wherever the local bodies have not provided the same and later recover the cost from them. The HESCOM shall also take up periodical inspection of timer switches installed and ensure that they are in working conditions. They 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 streetlight installations shall be reported to the Commission within three months of the issue of the Order.

Compliance by the HESCOM

As per the direction of the Commission, the HESCOM is persuading with the local bodies for installation of timer switches to street light installations and holding discussions with them to get consent letters for installation of timer switches by them. On getting the consent, the HESCOM plans to install most robust and most economical timer switches, as the available timer switches' life span is short and are not dependent on Sun raise/set. Hence, the HESCOM in its R&D Cell is designing timer switches along with some manufacturers for developing most economical and robust timer switches, which are not based on timing but on Sun light or Astronomical timing of that location.

In this regard, pilot projects carried out by manufacturer designed timer switches as per the HESCOM's views are:

- SMAT Company: Built economical / robust timer switch operates based on sunlight. pilot operations checked for around one month. Performance is good and may be used for street lights

- INELEC company: Built economical / robust timer switch thyristor based, operates based on Astronomical timing of the location. Pilot operations checked for around three months.

Performance is good and may be used for street lights.

The HESCOM is planning to utilize these timer switches to its in-house building street light/ substations. Further, the HESCOM R&D Cell is designing with SMAT Company, the Dimmer control box for alternative dimming of street lights at may be 11 p.m. onwards.

Further, the HESCOM is utilizing newspapers/ magazines for giving advertisement/ creating awareness about using LED street lights and timer switches to layouts/ campus/ township etc.

Commission's Views:

The Commission notes from the HESCOM's compliance that no progress in the installation of timer switches and the reported discussions held with the local authorities to pursue them to install timer switches so far has not yielded any result. Also, the reply submitted is same as previous year indicating the same status in installation of timer switches in its jurisdiction. This proves that complete inaction by the HESCOM has resulted in wastage of electricity by indiscriminate use of streetlights during the day time in its jurisdiction.

Further, it is noted HESCOM has not made any satisfactory progress in installation of timer switches though it was directed to install the same at its cost and subsequently recover the cost from the concerned local bodies. Also, it is noted that no progress has been made in the development of alternatives to timer switches and as it is seen it is long way to go before any breakthrough is achieved. Therefore, the HESCOM should take up the installation of timer switches on a priority basis, overcoming the challenges being faced in this regard. Further, the HESCOM is directed to take up this issue with the concerned local bodies and continue to emphasize the need to install timer switches at their cost, by availing the funds / grants received from the Government and other agencies for such programmes. HESCOM shall explore taking the services of EESL for effective implementation of this measure.

The Commission reiterates its directive to the HESCOM to arrange to install timer switches to the street light installations besides ensuring that, all the new streetlight installations and any extension/modification to be carried out to the existing streetlight installations shall be serviced only with timer switches.

7. Directive on load shedding:

The Commission had directed that:

- 1) 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.
- 2) The ESCOMs shall, on a daily basis, estimate the hourly requirement of power for each substation in their jurisdiction, based on the seasonal conditions and other factors affecting demand.
- 3) 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 substations and feeders should be identified for load shedding for the minimum required period with due intimation to the concerned sub-divisions and substations.
- 4) The likelihood of interruption in power supply with time and duration of such interruption may be intimated to consumers through SMS and other means.
- 5) Where load shedding has to be resorted to 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.
- 6) Load shedding should be carried out in different sub-stations / feeders to avoid frequent load shedding affecting the same sub-stations / feeders.
- 7) 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.

- 8) The ESCOMs shall submit to 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.
- 9) 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.
- 10) 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:

It is stated that the HESCOM has been submitting to the Commission 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.

The HESCOM has already initiated the work of providing information to the consumers through SMS regarding the time and duration of load shedding in coordination with REC. The REC has developed a web based application named as Urjmitra and the HESCOM has already uploaded the data relating to all 11 KV feeders and daily outages of such feeders are being uploaded in the web based application.

The HESCOM is hosting the details of scheduled outages (due to reasons such as system constraints, breakdown of lines/equipment, maintenance etc. for the next day) in the HESCOM's website daily as well as in Urjmitra App from October 2016 onwards.

Information of both scheduled and unscheduled outages to the relevant consumers is being triggered through SMS in a predefined format. Information on the outages to consumers is being sent through SMS since October, 2016

and about 84 lakhs of SMSs have already been sent. The same can be viewed in www.urjamitra.com also.

The HESCOM is regularly submitting its estimated demand for each 15-minute block, for the ensuing day to the SLDC on a day ahead basis considering the average consumption for previous three days.

The estimates of loads of the HESCOM that may be shed, when required, in discrete blocks is as shown below and shall be provided to SLDC:

Blocks	Quantum of load may be shed in MW	Category of 11 KV feeders to be shed
6.00 hrs. to 9.00 hrs.	100-150	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.)
	150-250	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.	100-150	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)
	150-250	1 hr LS to EIP and rural feeders in 3 batches 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)
18.00 hrs. to 22.00 hrs.	100-150	1 hr LS to NJY, semi urban, 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)
	150-250	1 hr LS to NJY, Semi Urban, 1 hr LS to non - district head quarter 1 hr LS to rural and EIP feeders and 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.	100-150	1 hr LS to EIP and Rural feeders in 2 batches (22.00hrs-02.00 hrs, 02.00hrs-06.00hrs)
	150-250	2 hr LS to EIP and rural feeders in 2 batches (22.00hrs-02.00 hrs, 02.00hrs-06.00hrs)

Commission's Views:

The Commission notes that the HESCOM has put into use the URJAMITHRA 'application software' which it has been developed for integration with the SCADA data to enable providing information to the consumers through SMS in advance regarding the time and duration of probable interruptions. The Commission is of the view that the consumers need to be informed through SMS regarding both scheduled and un-scheduled load shedding due to the reasons of system constraints, breakdown of lines/equipment, maintenance etc. This would undoubtedly address the "consumers' dissatisfaction" on this issue and prevent inconvenience/disruption caused to industrial consumers as well.

Further, the Commission directs that the HESCOM continue to submit 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 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 Center for Redressal of Consumer Complaints:

The directive issued is as under:

"The HESCOM is directed to put in place a 24x7 fully equipped Centralized Consumer Service Center at its headquarters with state of the art facility/system for receiving consumer complaints and monitoring their redressal so that electricity consumers in their area of supply are able to seek and obtain timely and efficient services / redressal in the matter of their grievances.

Every complaint shall be received on a helpline telephone number by the desk operator and registered with a docket number which shall be intimated to the Consumer. Thereafter, the complaints shall be transferred online/communicated to the concerned field staff for resolving the same.

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.

The HESCOM shall publish the details of the complaint handling procedure/Mechanism with contact numbers in the local media periodically for the information of the consumers. The compliance of the action taken in the matter is to be submitted to the Commission within two months from the date of this Order.

Further, the Commission directs the HESCOM to establish/strengthen 24x7 service stations, equipping them with separate vehicles & adequate line crew, safety kits and maintenance materials in all its sub-divisions including rural areas for effective redressal of Consumer complaints".

Compliance by the HESCOM

A Centralized Consumer Service Center (CCC) is functioning 24X7 in the premises of Corporate Office, Hubballi. The toll free Helpline number for electricity is 1912. There are 25 Customer Care Executives to support the consumers round the clock throughout the year. Suitable measures have been taken to ensure that all the complaints of consumers are registered through CCC for monitoring the disposal of complaints registered. The number of complaints registered in the Centralized Consumer Service Centre during FY17 were 1,89,237 and 91,888 during FY18 (up to September17) and all the complaints were resolved. The complaint handling procedures and contact number of the Centralized Consumer Service Centre has been hosted on the HESCOM's website www.hescom.co.in .

Further, the HESCOM has published the complaint handling procedure for the information of the public in the following newspapers 1) Deccan Herald 2) New Indian Express 3) Vijayavani 4) Vijaya Karnataka on 10.10.2017.

The HESCOM has also published the contact number of 24x7 service stations at the subdivisions and the toll free number of Centralized Consumer Service Centre in the following newspapers i.e., 1) Samyukta Karnataka 2) Vijaya Karnataka 3) Vijaya Vani 4) Praja Vani 5) Uday Vani 6) Sanjevani 7)

Vishwavani 8) Kannadamma 9) Kannadaprabha 10) Indian Express which appeared on 05.06.2017, 06.06.2017 and 07.06.2017 respectively, for the information of the public.

Further, the HESCOM will continue its efforts in improving the delivery of consumer services to reduce the consumer complaint down time so as to ensure delivery of prompt services to the consumers.

Commission's Views:

The Commission notes that the HESCOM has established a 24x7 customer care center at its headquarters. The Commission appreciates the steps taken to operate the 24x7 service centers at the subdivision levels for redressal of consumer complaints and publishing the complaint handling procedures / contact number of the Centralized Consumer Service Centre in the local media periodically for the information of the public. However, the HESCOM has not informed the fact as to how many number of service centers have been established at the subdivisions to deal with the consumer complaints. Therefore, the HESCOM should focus its attention for establishment of fully equipped service centers in all its subdivisions for effective redressal of the consumer complaints. Further, the HESCOM should continue its efforts in improving the delivery of consumer services to finally reduce the consumer complaint downtime so as to ensure delivery of prompt services on account of breakdown of lines/equipment, failure of transformers etc., resulting in interruptions in power supply. In addition to this, it is also extremely important that HESCOM takes up steps to continuously sensitize its field staff stressing the need to respond to the consumer complaints speedily and discharge their work efficiently.

The Commission reiterates its directive to the HESCOM to publish the complaint handling procedures / contact number of the Centralized Consumer Service Centre in the local media and other modes periodically for the information of the public and ensure that all the complaints of consumers are registered only through the centralized consumer service center for

proper monitoring of disposal of complaints registered. The compliance in this regard shall be furnished regularly once in a quarter, 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 for 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 per cent in towns/ cities having a population of over 50,000 wherever it was 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 on the progress achieved in respect of:

- 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 work.

Compliance by the HESCOM

The energy audit of 16 towns which are having population of more than 50,000 is being carried out in the HESCOM. The below mentioned matrix shows average energy losses recorded from FY17 to FY18 (up to August 2017).

Loss Levels in Towns/Cities.

Year	No. of towns monitored	No. of Towns/ Cities loss is under				
		<10 %	>10, <=15	>15, <=20	>20, <=25	>25
FY-17	16	9	6	1	-	-
FY -18 (up to Aug-17)	16	4	12	-	-	-

Year	Name of the Town / Cities where loss range is			
	Below 15%	>15%<=20%	>20% <=25%	> 25%
FY-17	Hubballi, Dharwad, Sirsi, Karwar, Dandeli, Gadag, Haveri, Ranebennur, Bealgavi, Nippani, Ilkal, Gokaka, Bagalkote , Vijayapura, Rabkavi, Banahatti,	Jamakhandi		

FY -18 (up to Aug- 17)	Hubballi, Dharwad, Sirsi, Karwar, Dandeli, Gadag, Haveri, Ranebennur, Bealgavi, Nippani, Ilkal, Gokaka, Bagalkote, Vijayapura, Jamakhandi, Rabkavi, Banahatti	Nil		
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From the above, it is seen that, for FY17 out of 16 towns the loss levels in 15 towns is less than 15 per cent, in 1 town it is more than 15 per cent. And in FY 18, out of 16 towns the loss levels in all the 16 towns is less than 15 per cent. The HESCOM will make all its efforts to maintain the energy losses in towns below 15 per cent.

The action plan for reduction of T&D and AT&C losses in towns is presented as below.

- 1) There are 378 urban feeders in the HESCOM Jurisdiction. All the feeders are continuously monitored by way of conducting feeder-wise energy audit and action for corrective measures to rectify any problems arising in the process of conducting audit.
- 2) Re-conductoring of HT and LT lines have been proposed wherever conductor capacity is less, by replacing higher capacity conductors in phased manner.
- 3) Replacement of 11 KV line having Weasel conductor by Rabbit conductor in selected 73 towns is being done in phased manner.
- 4) Replacement of age-old LT conductors by Rabbit in selected 73 towns is being done in phased manner i.e., about average of 2,414 km per annum is targeted to complete these works.
- 5) Providing meters to DTCs in non R-APDRP towns to also monitor energy audit under NEF scheme is in progress. DTC-wise energy audit will be strictly implemented once the programme of fixing meters to DTCs is completed.
- 6) Providing additional distribution transformer centers, Arial bunched cables, maintenance works of DTCS, etc., in 25 towns under R- APDRP is in progress.

- 7) Providing additional distribution transformer centers to non R-APDRP areas under NEF scheme, in which 2,342 number of different capacity distribution transformer were also proposed.
- 8) Providing UG cables / Aerial bunched cables in 11 KV distribution network for Belagavi, Hubli-Dharwad cities, under NEF scheme is made.

DTC Metering Works:

1. The HESCOM has taken up DTC metering in two phases.
2. The project consists of supply, installation, commissioning maintenance of composite thread through type meter box of class 1.0 with LT Electronic Tri-Vector Meter having AMR compliant with associated CTs, Modem and other materials for un-metered non-IP set DTCs in all the non-RAPDRP town areas and rural areas. This work is awarded to M/s. Asian Fab Tech Limited, Bengaluru on division-wise packages (Phase I & Phase II).
3. As per the DWA, the scope of the work involves;
 - a. Supply, installation, commissioning and maintenance of composite thread through type meter.
 - b. Online transfer of data from thread through type meter (meter is having in-built current transformer (CT), Modem, SIM. Modem and SIM for online data transfer) to the centralized server by establishing communication.
4. In Phase-I, metering of 21,224 of DTCs is completed out of the awarded quantity 22,693 DTCs and in Phase-II, metering of 14,759 DTCs is completed out of the awarded quantity 18,100 DTCs.
5. Out of the 35,983 metered DTCs (Phase I & II), communication is established for 25,866 DTCs in the centralized server established by the agency for subject work. Data regarding consumption, load, phase-wise voltage and currents are available in the web based application. With regard to establishing communication for the balance DTCs, there are some issues like network problem, lead wire burnt out and meter not recording, which will be addressed at the at the earliest.

6. As the subject works are taken up in rural areas and Malanad area of Uttar Kannada district, agency is facing network connectivity problem for establishing communication with the server. Hence, the agency is carrying out the manual meter reading of DTCs which are not in cellular coverage area, as per the DWA conditions.
7. Based on data of load, consumption, phase-wise voltage and currents available in web based application, following action is being taken by the field officials:
 - i. Analysis of imbalance in load, voltage and current on each phase of the DTC.
 - ii. Shifting of LT load from one to another phase for balancing the load.
 - iii. Providing additional DTCs/augmentation of DTCs to avoid overloading of DTCs.
 - iv. System improvement works such as re-conductoring of HT/LT lines.
8. Further, implementation of web based TRM software for non-RAPDRP areas is awarded to M/s. N-Soft (India) Services Pvt. Ltd.
9. Both the agencies have to integrate the solutions i.e., M/s. AFTL will transfer DTC meter consumption to M/s. N-Soft for DTC-wise energy auditing.
10. Meter details of 19,030 DTCs are updated in the system provider viz., M/s. N-soft service private Ltd server and updating the details of the balance metered DTCs is in Process.
11. Energy audit of approximately 13,503 DTCs is carried out during month of July 2017. However, due to software issues while integrating the data and mismatch in DTC codes, energy audit of some of the metered DTCs is not being done. These issues will be resolved in coordination with M/s. Asian Fab Tech and M/s. N-soft service private Ltd at the earliest.

DTC metering progress

Name of the division	As per DWA			Work's progress		
	Phase 1	Phase 2	Total	Phase 1	Phase 2	Total
Hubballi	1171	166	1,337	1171	166	1337
Dharwad	1199	286	1,485	1199	290	1489
Gadag	940	1,097	2,037	940	1603	2543

Haveri	2262	457	2,719	2114	236	2350
Ranebennur	503	1,050	1,553	503	1050	1553
Karwar	1406	1,494	2,900	1406	1129	2535
Sirsi	1839	1,748	3,587	1839	1350	3189
Belagavi	2508	313	2,821	2508	260	2768
Ghataprabha	1369	447	1,816	1369	447	1816
Bailhongal	974	625	1,599	974	707	1681
Chikkodi	809	1,378	2,187	819	1045	1864
Athani	742	3,101	3,843	742	690	1432
Raibag	680	3,692	4,372	590	3110	3700
Bagalkot	3288	236	3,524	2047	0	2047
Jamkhandi	402	283	685	402	283	685
Mudhol	441	49	490	441	438	879
Vijayapur	497	242	739	497	390	887
Indi	577	907	1,484	577	1035	1612
BasavanaBagewadi	1086	529	1,615	1086	530	1616
Total	22,693	18,100	40,793	21,224	14,759	35,983

Details of communication with Centralized Server				
Si. No	Division	Erected	Communicated	Balance to be communicated
1	Hubballi	1337	1114	223
2	Dharwad	1489	1297	192
3	Gadag	2543	2025	518
4	Haveri	2350	2074	276
5	Ranebennur	1553	1385	168
6	Karwar	2535	656	1879
7	Sirsi	3189	828	2361
8	Belagavi	2768	2291	477
9	Ghataprabha	1816	1515	301
10	Bailhongal	1681	1185	496
11	Chikkodi	1864	1284	580
12	Athani	1432	1169	263
13	Raibag	3700	2988	712
14	Bagalkot	2047	1552	495
15	Jamkhandi	685	559	126
16	Mudhol	879	737	142
17	Vijayapur	887	629	258

18	Indi	1612	1288	324
19	Basavana- Bagewadi	1616	1290	326
	Total	35,983	25,866	10,117

DTC-wise Energy Audit: Altogether 3,985 DTCs were analyzed as per the prescribed formats and submitted to the commission.

Further, as per the Commission's instructions vide letter No: KERC/D/137/14/91, dated 20.04.2015, 11kV feeder-wise as well as DTC-wise energy audit for FY17 is submitted to the Commission.

Commission's Views:

The Commission notes that the HESCOM has conducted energy audit of towns & cities. It is observed from the energy audit of towns/cities that there are six towns with energy losses of less than 15 percent and one town with the energy losses of more than 15 percent during FY17, while twelve towns are with losses of less than 15 per cent in FY18 (up to Aug17) as reported by the HESCOM. It goes to show that despite taking various remedial measures under an action plan, in majority of the towns to reduce distribution losses further downwards, the energy losses are still in the upper range of 10-15 per cent, which is really a matter of concern. Therefore, the HESCOM needs to verify whether the works reportedly carried out to reduce the losses are being done systematically in the field.

The Commission directs the HESCOM to conduct energy audit of identified cities/towns and by carrying out detailed analysis on the basis of energy audit results, initiate necessary remedial measures to reduce the technical losses and improving collection efficiency to achieve the mandated A T & C loss of less than 15 per cent in all the feeders. The HESCOM is directed to submit compliance thereon once in a quarter regularly, to the Commission.

The Commission further notes that the HESCOM, despite providing around 40,000 meters to DTCs at a huge cost, has totally failed to take up DTC-wise energy audit, citing un-acceptable reasons such as non-completion of tagging of consumer installations with the respective feeders/DTCs, CT failures

network/communication issues etc. It is highly improper on the part of the HESCOM to cite such reasons for the last three-four years without actually doing much in the field. It does not augur well for the Company which wants to run its business on commercial principles. The Commission notes with displeasure that despite spending considerable sums on the DTCs it could only carry out the energy audit of around 4,000 DTCs. If the expenditure incurred does not yield any benefit to the Company, it can be construed that, the huge capex incurred by the HESCOM is a colossal waste.

The HESCOM is directed to take up energy audit of 40,000 DTCs, which are metered and to take remedial measures for reducing energy losses in the distribution system further downwards. The compliance in respect of DTC-wise energy audit conducted, with the details of analysis and the remedial action initiated to reduce loss levels shall be submitted every month regularly to the Commission.

Further, the HESCOM is directed to submit to the Commission before 21st May, 2018 the consolidated energy audit report for the FY18, as per the prescribed formats 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 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.

Compliance by the HESCOM:

The DPR for implementation HVDS in Sadalga Hobli of Bhoj O&M section was submitted to the Commission. However, the Commission has pointed out certain discrepancies in the provision of new materials, reuse of existing materials, etc., and the estimate was returned to the HESCOM for attending to such observations. After attending to the observations pointed out, the said DPR will be submitted to the Commission shortly for its approval.

Commission's Views:

Earlier, the Commission had constituted an expert committee to look into whether any other useful alternatives are available to implementation of HVDS in the ESCOMs, in the wake the suggestion of Sri B.S. Hanumanthappa, a member of the Advisory Committee of the Commission that implementation of the HVDS in the ESCOMs is not beneficial to the distribution system. The Committee after studying the various alternatives to HVDS, has recommended that HVDS is beneficial to the system and higher loss reduction could be achieved if implemented at a reasonable cost by utilizing the released materials such as conductors, poles, etc. However, it is noted that the ESCOMs are not submitting realistic estimates for implementation of HVDS projects as per the guidelines issued by the Commission.

For the present, the Commission has decided not to approve HVDS proposals here onwards and hence, the HESCOM is directed to not to submit any proposals of HVDS until further orders from the Commission.

11. Directive on Niranthara Jyothi – Feeder Separation

The ESCOMs were directed to furnish to the Commission the programme of implementing 11 KV taluk wise feeder 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:

DWA for NJY phase-1, comprising of 246 feeders spread over 20 taluks was issued during the period from May to September 2011 with completion period of nine months. Of the 246 feeders, 4 feeders are shifted to phase-III resulting in net 242 feeders. The inordinate delay in implementation of the project is attributed to problems in the field during execution of the work such as right of way (ROW) issues, approval from Railway authorities, Forest clearance, opposition from farmers for erection of poles in their field and Labour

problems faced by the executing agency. On 24.07.2017, the phase-1 of the project was completed which constitutes 100 per cent of the works undertaken.

The analysis for evaluating benefits accrued to the system, in terms of reduction in failure of distribution transformers, improvement of tail-end voltage and improvement in supply, reduction in interruptions vis-à-vis the benefits envisaged in the DPR has been carried out through M/s. CPRI.

DWA for NJY phase-2, comprising of 210 feeders spread over 14 taluks was issued during January to March 2012. Out of 210 feeders 5 feeders are shifted to Phase-3, 2 feeders are clubbed with nearby NJY feeders and 1 feeder was dropped due to forest clearance issue, resulting in net 202 feeders. On 24.04.2017 the phase-2 of the project was completed which constitutes 100 per cent of the works undertaken. Further, all feeders in which the segregation work is completed have been commissioned resulting in realization of envisaged benefits and the same is confirmed by M/s. CPRI while evaluating the project.

Further, action has been taken to ensure that NJY feeders are not tapped illegally for operating IP sets. Strict instructions are issued to Vigilance staff to monitor closely and to book cases against the concerned who are responsible for tapping NJY feeders illegally and operate IP sets on NJY feeders.

Also, action has been taken to furnish feeder-wise IP set consumption based on feeder energy meter data, to the commission, every month, in respect of agriculture feeders segregated under NJY.

NJY Phase-3: Initially, a decision was taken to take up NJY works under Phase-1 & 2 covering 34 talukas excluding the areas covered under RLMS. Later on, it was felt necessary to take up NJY works in the areas covered under RLMS also. Hence, DPRs were prepared to take up NJY works under Phase-3 at an estimated cost of Rs 113/- crore and accordingly M/s REC have sanctioned loan to the tune of Rs 101.76 crore.

The details of works proposed is as follows:

- ✓ No of feeders proposed: 92
- ✓ No. of villages covered: 575
- ✓ Length of 11KV line proposed (in Km): 2,589.25
- ✓ No. of transformers to be erected: 1,211
- ✓ Estimated cost in Rs crore: 113/-

Further, common PQRs were stipulated for the subject tenders and approved by GoK. Accordingly, district-wise tenders have been floated for Belagavi, Dharwad, Haveri and Gadag. The Detailed Work Awards have been issued for all the packages. The works in respect of all 4 packages have already been commenced by the agencies.

The progress achieved by the end of October 2017 is as follows:

- ✓ Total No. of feeders – 92
- ✓ No. of feeders under progress -50
- ✓ No. of feeders commissioned -42

All efforts are being made to complete the NJY Phase-3 projects as per schedule i.e., on or before April 2018.

Progress of NJY works under Phase 1, 2 & 3

Name of the Company	Total no. of feeders proposed under NJY			No. of Feeders commissioned as on 30.09.2017			Work under progress			Probable date of Completion		
	Ph-1	Ph-2	Ph-3	Ph-1	Ph-2	Ph-3	Ph-1	Ph-2	Ph-3	Ph-1	Ph-2	Ph-3
HESCOM	246*	210**	92	242	202	42	00	00	50	completed on 24.07.17	completed on 24.04.17	9.04.18

* 4 Feeders under Phase-1 are proposed under Phase-III.

** 5 Feeders under Phase-2 are proposed under Phase-III.

2 Feeders under Phase-2 are clubbed with nearby NJY feeders.

1 Feeder under Phase-2 in Khanapur taluk is de-scoped.

IP set consumption: There are 2,888 number of 11kV feeders as on October 2017. All the feeders are monitored continuously by way of feeder-wise energy audit. All the feeders are audited monthly and monitored with regards to distribution loss and AT&C loss. Also, continuous effort is being made towards trajectory reduction plan as directed by the Commission and other nodal agencies of Ministry of Power and Energy.

Details of 11 KV Feeders

Zone	Total number of 11 KV feeders				
	Urban	Rural	Industrial	Exclusive IP set Feeders	Total
Belagavi Zone	162	504	72	1260	1998
Hubli Zone	216	399	43	232	890
Total	378	903	115	1,492	2,888

As per the directions of the Commission in its Tariff Order dated 30th March 2016, the HESCOM has submitted the consumption of IP sets based on the readings from the meters provided to 11 KV agricultural feeders at the sub-stations duly deducting the 11KV and LT distribution system losses.

Commission's Views:

The Commission notes that at last the HESCOM has completed all the feeders taken up under NJY phase 1 & 2. It is also noted that substantial progress has been achieved in NJY Phase-3 works. However, the progress of the above works should have been completed long back. The delay in implementation of NJY works in fact has resulted in non-realization of envisaged benefits set out in the DPR when the project was initiated during 2011. Therefore, the Commission directs the HESCOM to expedite completion of remaining feeders taken up under Phase-3 and also to carry out the analysis of such feeders after commissioning the same to ensure that the objectives set out as per DPR are accomplished. Also, the HESCOM is directed to report compliance thereon to the Commission, regularly.

As regards the analysis carried out by the HESCOM in respect of the completed feeders, the Commission notes the benefits accrued to the system in terms of reduction in failures of distribution transformers, improvement in tail-end voltage and improvement in supply/reduction in interruptions. The analysis reveals that there is overall improvement in supply condition after implementation of NJY works under Phase-1 & 2.

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

Also, it is noted that the HESCOM has already segregated totally 1,492 agricultural feeders under NJY phase-1, 2 & 3 works and consequent to this, agricultural feeders are exclusive from rural loads and the energy consumed by the IP-sets could be more accurately measured at the 11 KV feeders at

the substations after allowing for distribution losses in 11 KV lines, distribution transformers and LT lines. The HESCOM is directed to continue to report every month, specific consumption and the overall IP-set consumption only on the basis of data obtained from agricultural feeders' energy meters as per the prescribed formats.

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

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 pumps with energy efficient pumps approved by the Bureau of Energy Efficiency, at least in one sub-division in its jurisdiction.

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 and has already completed replacement of 590 old pump sets by new energy efficient pump sets. Further, vide letter No: HESCOM/MD/PS/22492, dated 9.12.2015, a letter was addressed to the Additional Chief Secretary, Energy Department, GoK, Bengaluru narrating the pros-n-cons of the project. 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 no further progress has been achieved by the HESCOM except replacement of 590 existing pumps by energy efficient pump sets in its Byadagi and Nippani areas. The Commission observes that there is an undue delay in implementation of this project. The HESCOM needs to expedite this project for early completion. The Commission is of the view that timely completion of the above works will ensure envisaged benefits of the scheme

reach the beneficiary farmers. Further, the HESCOM should take up DSM initiatives in other parts of its jurisdiction also.

It is extremely important that the HESCOM should focus its attention on early implementation of DSM measures by necessary coordination with all the stakeholders concerned to arrive at an early agreement on a crucial measurement and verification methodology.

The HESCOM is directed to expedite the implementation of DSM project in Nippani and Byadagi sub-divisions and complete it at the earliest. The compliance thereon shall be submitted to the Commission within three months from the date of this Order.

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 panchayaths and the action plan prepared based on the data of un-electrified households.

Compliance by the HESCOM

The status of electrification of un-electrified households as on 30.09.2017 is as indicated below:

SL No	Particulars	Nos
1	Total No. of rural households existing as on 30.09.2017	22,60,581
2	No of rural households electrified as on 30.09.2017	20,36,137
3	Balance No. of households to be electrified	2,24,444
4	BPL households proposed under DDUGJY	88,707
5	BPL households taken up under RGGVY 12 th Plan	18,638
6	Total BPL households electrification proposed	1,07,345
7	Total BPL households surveyed & identified for electrification	1,50,379
8	Balance BPL households to be electrified	43,034

As noted in the above table, as per the details uploaded in GARV portal, there are 2,24,444 households to be provided with electricity which are inclusive of both APL & BPL houses. The electrification of BPL households is covered under DDUGJY & RGGVY schemes.

As per the survey conducted by our field officers, there are 1,50,379 un-electrified BPL households identified. Out of these, electrification of 1,07,345 of BPL households are covered under DDUGJY and RGGVY 12th Plan for which the works are in progress. Hence, balance 43,034 BPL households are left out from accessibility of electricity.

The approximate estimated cost required for arranging electricity to these balance 43,034 BPL households works out to Rs.24.00 crore. A letter is addressed to M/s. REC requesting it to arrange the required grant for electrification of these balance un-electrified households not covered under DDUGJY.

The details of households to provide electricity under various schemes are here under.

1. Electrification of rural households taken up under RGGVY 12th Plan scheme:

The details of the un-electrified households identified by HESCOM under the scheme are stated below.

Name of the District	No. of villages proposed for intensive electrification	Total No. of habitations	No. of habitations covered under this scheme	No of un-electrified house holds		Project Cost in Rs lakhs	Approved project cost by REC in Rs lakh		Award Date	Awarded Amount in RS lakh
				BPL	APL					
Haveri	692	741	702	18638	5568	606.51	607.02	10.09.2015	662.75	

- Work is in progress.
- As on 30.09.2017, 18,284 BPL households are electrified.

2. Electrification of Un-electrified villages:

In HESCOM's jurisdiction, 30 un-electrified villages were existing and out of these, 25 villages were in Uttar Kannada and 5 are in Belagavi districts.

The status as on 30.09.2017 is as noted below:

1. Uttar Kannada District:

- i. It is intended to carry out the electrification of 25 villages in Uttar Kannada district by conventional grid connectivity using overhead lines.
- ii. Presently as on 30.09.2017, the progress achieved is as under:
 - a) Number of villages electrified - 23
 - b) Number of villages where work is to be taken up – 2
(Diggi, Asulli in Joida taluk)

In Diggi & Asulli villages, as per the instruction of Forest Authority, work involving electrification is taken up through UG cable since these villages are located in thick forest. Presently, LT line works in village limits are completed and trench excavation for laying of HT UG cable is in progress.

2. Belagavi District:

- i. In case of 5 un-electrified villages existing in Khanapur taluk, electrification of 1 village i.e., Degaon is completed through conventional grid connectivity and for the remaining 4 villages it is intended to electrify through centralized SPV System and DG set on BOMT basis and the said works are in progress.

- ii. The present status of the works in these villages is as noted below:

Sl. No	Name of Village	Present status
1]	Talewade	All materials including solar panels, mounting structures, battery bank, DG set etc., mobilized. Household wiring completed and LT line work is in progress.
B D L	Kelil (Krishnapur)	Solar panels, mounting structures, battery bank, DG set etc., are received at site. Household wiring and erection of poles in LT distribution are completed. Excavation for Module mounting structure and control room for battery bank & DG set is in progress.
3	Holda	
4	Mendil	Works are in progress

Households proposed under Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) scheme:

Sl. No.	Name of the District	No of BPL households proposed in SAGY	No of BPL households proposed under DDUGJY	Total
1	Uttara Kannada	18	9654	9672
2	Haveri	0	7627	7627
3	Gadag	78	11399	11477
4	Dharwad	0	3324	3324
5	Vijayapur	60	12699	12759
6	Bagalkote	159	8352	8511
7	Belagavi	269	35068	35339
8	Total	584	88123	88707

- Rs. 48.34 crore is sanctioned to the HESCOM vide letter No: REC/BLR/DDUGJY/15-16/299 dated: 09.09.2015 for providing access to electricity to rural households under DDUGJY scheme.
- Rs. 9.9 crore is sanctioned for Sansad Adarsh Gram Yojana (SAGY) under DDUGJY.
- Tender for all 7 districts were invited and awarded on 01.04.2017 and the works are in progress with a time completion period of 24 months.

Commission's Views:

The Commission notes that the progress achieved in electrification of un-electrified households under DDUGJY scheme 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 2,24,444 un-electrified households 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 should overcome the tardiness in electrification of un-electrified households and implement this programme with a vigour to complete the same within a definite timeframe in order to ensure that the people without electricity are provided with the basic need of electricity.

Further, the Commission showed its concern, on the slow pace of progress of this programme, in its previous Tariff Orders had directed the HESCOM to cover electrification of 5 per cent of the total identified un-electrified households every month beginning from April, 2015 so as to complete this programme in about twenty months. However, as 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 Commission directs the HESCOM to expedite action to provide electricity to the un-electrified households and report compliance thereon to the Commission regarding the monthly progress achieved from May, 2018 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 the HESCOM in the event of non-compliance in the matter.

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 maintenance and supply of power to the

consumers 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 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 directed the HESCOM to introduce the system of Cost-Revenue Centre Oriented sub-divisions at least in two divisions in its operational area and report results of the experiment to the Commission.

Compliance by the HESCOM:

As per the observations made by the Commission in the Tariff Order 2017 dated 11-04-2017, the work award entrusted to M/s PWC Bengaluru, to carry out the implementation of Financial Management Framework in Gadag division has been cancelled. The HESCOM has initiated to work out this programme on the models of the CESC and BESCO to fix the targets for divisions and subdivisions. The HESCOM will submit the report to the Commission shortly.

Commission's Views:

The Commission observes from the HESCOM's compliance that; so far it has not taken any action for implementing this directive. It is observed that the HESCOM, without actually taking any measurable action on the ground, has only repeated whatever was submitted during the last year. It confirms that the HESCOM is not serious about implementing the model on Financial Management Framework in its jurisdiction, for bringing in accountability of its operations but continued to report that it will implement the directive shortly but has done nothing in reality.

The Commission disapproves the inaction of the HESCOM in the matter and directs it to review the performance of the divisions & sub-divisions in respect of energy received, sold, average revenue realization and average cost of supply using the Financial Framework Model.

Further, the HESCOM shall analyze the following parameters for 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 at each category.
- c) Target revenue to be collected and achievement at all categories.
- d) Targeted distribution loss reduction as compared to previous years' losses.
- e) Comparison of high performance divisions in sales with low performance divisions.

Therefore, based on the analysis, the HESCOM needs to take corrective measures to ensure 100 per cent meter reading, billing, and collection; analysis of abnormal/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.

15. Directive on Prevention of Electrical Accidents:

The directive issued was as follows:

“The Commission has reviewed the electrical accidents that have taken place in the State during the year 2016-17 and with regret noted that as many as 402 people and 416 animals have died due to these accidents.

Sl. no	District	Electrical accidents in FY-15	Expenditure incurred in Rs crore for prevention of accidents	Electrical Accidents in FY-16	Expenditure incurred in Rs crore for prevention of accidents	Electrical Accidents in FY-17	Expenditure incurred in Rs crore for prevention of accidents	Electrical Accidents in FY-18 up to oct-17	Expenditure incurred in Rs crore for prevention of accidents
1	Dharwad	43	0.039	28	0.36	24	1.17	24	0.454
2	Gadag	30	0.0044	22	0.07	21	1.39	22	0.196
3	Uttar Kannada	32	0.24	21	1.40	29	5.59	30	4.87
4	Haveri	37	0.132	32	1.73	45	0.89	32	0.79
5	Belgaum	89	0.20	74	1.44	63	2.05	46	0.83
6	Vijayapur	13	0.028	16	0.095	11	0.108	5	0.097
7	Bagalkot	21	0.049	16	0.37	11	2.27	15	0.142
	Total	265	0.692	209	5.46	204	13.468	174	7.379

From the analysis of the causes of accidents, it is seen that the major causes of these accidents are due to snapping of LT/HT lines, accidental contact with live LT/HT/EHT lines, hanging live wires around the electric poles/transformers etc., in the streets posing great danger to human lives.

Having considered the above matter, the Commission hereby directs the HESCOM to prepare an action plan to effect improvements in its distribution networks and implement safety measures to prevent electrical accidents. Detailed division wise action plans shall be submitted by the HESCOM to the Commission."

Compliance by the HESCOM:

Following measures have been taken for prevention of accidents:

- Providing intermediate poles in lengthy span – 2589 numbers
- Replacement of broken /deteriorated poles – 1139 numbers
- Shifting of transformers to safer place –140 numbers
- Replacement of deteriorated conductor -221.05 Km
- Shifting of HT/LT Lines – 14.43 Km
- Re conductoring works : 11kV line: 38 feeders (198.52 km) tendered & 31 feeders (156.11 km) completed and balance work is in progress.

- LT re-conductoring: 410 feeders for 1017.12 km tendered & 313 feeders for 616.15 km is completed and balance work is in progress.
- Transformer maintenance works have been carried out to reduce the accidents.

**Consolidated details of hazardous installations identified and rectified from
Apr-Oct-17**

Division	OB	No. of hazardous installations (both HT& LT)identified	No. of hazardous installations rectified	No. of hazardous installations yet to be rectified
Hubballi urban	0	5	5	0
Hubballi rural	135	47	19	163
Dharwad urban	46	47	27	66
Dharwad rural	47	16	3	60
Gadag	51	78	78	51
Ron	61	9	23	47
Haveri	306	75	76	305
Ranebennur	77	130	124	83
Sirsi	13	35	36	12
Dandeli	3	18	19	2
Honnavar	16	30	36	10
Karwar	0	12	4	8
Belagavi urban	0	97	97	0
Belagavi rural	21	1	16	6
Bailhongal	85	65	21	129
Ramdurga	0	23	23	0
Ghataprabha	0	40	36	4
Chikkodi	11	30	39	2
Raibag	50	73	46	77
Athani	67	51	22	96
B. Bagewadi	127	33	16	144
Vijayapura	9	24	31	2
Indi	11	32	30	13
Bagalkote	8	102	12	98
Jamkhandi	24	35	4	55
Mudhol	55	28	6	77
Total	1223	1136	849	1510

Action is being taken to educate the employees regarding safe use of equipment and consumer awareness programme was also arranged at all the district Headquarters regarding safe use of electricity.

To implement the works related to prevention of accidents, a budgetary expenditure of Rs13.46 cores in FY-17 and Rs 15.5 crore in FY18 is earmarked.

Hence, from above, it is seen that the number of accidents have reduced as compared to previous years.

Commission's Views:

The Commission notes that, in spite of the HESCOM taking certain remedial measures including rectification of hazardous installations and improvements to its distribution network, the fatal electrical accidents involving both human and livestock have not drastically reduced, which is a matter of serious concern. The Commission is of the opinion that the identification and rectification of hazardous installations is not being done by the HESCOM as expected. The HESCOM should take the rectification of hazardous installations prevalent in the distribution network in its jurisdiction as a challenge and continue to work towards elimination of such installations so as to ensure that the electrical accidents are reduced to barest minimum or totally eliminated. Therefore, the HESCOM should make more concerted efforts for identification and rectification of all the hazardous installations including streetlight installations / other electrical works under the control of local bodies to prevent electrical accidents. In addition, it is also important that the HESCOM takes up awareness campaigns through visual/print media continuously to spread safety aspects among public.

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.

Also, the Commission notes that the hazardous installations in the distribution network mainly occur because of the shabbily laid works, carried out without

adhering to the best construction practices as per the standards, while taking up 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.

The Commission, therefore, 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 the distribution system. The compliance thereon shall be submitted to the Commission every month, regularly.