

Application for Approval of APR for FY-17 and Approval of Revised ARR & ERC for  
FY-19 & Tariff Filing for FY-19

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**PROFILE OF HESCOM:**

Consumer Profile (FY -18): (As on 30.09.2017)

Tariff	LT1	LT2	LT3	LT4	LT5	LT6	LT7	HT	Total
No of Consumers	763382	2432500	336850	664614	107801	59774	43369	2791	<b>4411081</b>
Percentage	17.306	55.145	7.636	15.067	2.444	1.355	0.983	0.063	<b>100</b>

**Administrative Offices :**

SL. NO.	Name of the District	Corporate Office	Zonal Offices	Circle Offices	Division Offices	Sub-Division Offices	O & M Accounting Sections	O & M Units	Vigilance Offices & Police Stations
1	Dharwad	1	1	1	4	11	2	36	1
2	Gadag				2	8	4	18	1
3	Haveri			1	2	8	8	32	1
4	Uttar Kannada			1	4	11	2	34	1
5	Belagavi		1	2	8	20	13	63	2
6	Vijayapur			1	3	12	2	36	1
7	Bagalkote			1	3	11	11	28	1
<b>TOTAL</b>		<b>1</b>	<b>2</b>	<b>7</b>	<b>26</b>	<b>81</b>	<b>42</b>	<b>247</b>	<b>8</b>

**Vacancy Position as on 30.09.2017.**

Group	Sanctioned	Working	Vacant
A	388	334	54
B	568	310	258
C	7790	4757	3033
D	7437	4436	3001
<b>Total</b>	<b>16183</b>	<b>9837</b>	<b>6346</b>

## **REVIEW OF COMPLIANCE OF DIRECTIVES ISSUED BY THE COMMISSION**

The following are the new directives issued by the Commission:

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

During the Public Hearings held by the Commission to hear the views, comments & suggestions of the consumers and other stakeholders on the ESCOMs' Tariff applications, it was brought to the notice of the Commission by the consumers that the Consumer Interaction Meetings chaired by the Superintending Engineers, in the O&M sub-divisions of ESCOMs are not being conducted regularly, thus denying them of the opportunity to attend such meetings to air their complaints/ grievances pertaining to supply of electricity and any other issues. The consumers have urged the Commission to ensure that ESCOMs take necessary action to make the sub-divisions conduct Consumer Interaction meetings regularly to hear and address the consumer grievances.

The Commission strongly opines that if the ESCOMs conduct consumer interaction meetings regularly, not only most of the grievances of the consumers could be redressed in such meetings, the ESCOMs could also redesign/realign their operations and investments on capital and other works to optimally deliver better and satisfactory service to the consumers. Such development could also increase the efficiency and revenues of the ESCOMs.

**Hence, the Commission hereby directs the HESCOM to 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 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 should 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 upto 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.**

***HESCOM COMPLIANCE :***

Bi-monthly interaction meetings in HESCOM were conducted at Sub-divisional level upto June-2017 as per the pre published notification: ಹು.ವಿ.ಸ.ಕಂ.ನಿ/ಪ್ರವ್ಯ(ತಾಂ)/EE-4/ಲೆ/17-18/771 on 10-04.2017. It was decided that, on every 3<sup>rd</sup> Saturday, interaction meeting is to be conducted at every Sub-division Office compulsorily along with Lok-adalat. The process was started from 3<sup>rd</sup> Saturday of July-2017. Since, then regular meetings are being conducted at Sub-division offices on every 3<sup>rd</sup> Saturday. Under DSM activities Awareness is given to the public regarding consumer grievance meeting. The paper publication was 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	

The details of the interaction meeting are submitted as noted below:

- 1) Consumer Interaction Meetings conducted during the month of April-17 to June-17

Sl. No	Circle	No. Of Sub-Division	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
<b>HESCOM TOTAL</b>		<b>79</b>	<b>158</b>	<b>1592</b>	<b>850</b>	<b>850</b>

2) Consumer Interaction Meetings conducted during the month of July-17 to Sep-17

Sl. No	Circle	No. Of Sub-Division	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
<b>HESCOM TOTAL</b>		<b>79</b>	<b>262</b>	<b>1660</b>	<b>1067</b>	<b>1045</b>

**ii. 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 has noticed that, year on year, there has been a substantial increase in the number of EHT and HT consumers of the distribution licensees opting for open access resulting in substantial volume of energy being procured through Power Exchanges, which imposes a burden on the SLDC, in grid management.

Further, in accordance with the stipulations in Clause 6.3 (f) of the Karnataka Electricity Grid Code (KEGC), 2015, under the chapter on Operation Planning, in order to facilitate demand estimation for operational purpose, the distribution licensee (ESCOM) is required to provide to the SLDC, on a day ahead basis, at 09.00 hours each day, its estimated demand for each 15-minute block, for the ensuing day. The distribution licensee is also required to provide to the SLDC, the estimates of loads that may be shed, when required, in discrete blocks, with the details of arrangements of such load shedding. Consequent to such stipulation the ESCOMs are required to prepare monthly energy bills in respect of EHT/HT consumers importing power through power exchange under Open Access, by considering 15 minutes time block. However, it is observed that in rare cases, except this billing requirement is not being complied with the ESCOMs.

**In view of this, the Commission directs 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. The HESCOM shall implement the directive forthwith and the compliance regarding the same shall be submitted monthly from May, 2017 onwards, to the Commission, regularly.**

**HESCOM COMPLIANCE :**

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

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

<b>Blocks</b>	<b>Quantum of load may be shed in MW</b>	<b>Category of 11 KV feeders to be shed</b>
6.00hrs to 9.00hrs	100-150	1 hr LS to NJY, Semi Urban and 1 hr LS to Non - district head quarter feeders in 3 batches (6.00hrs-7.00 hrs, 7.00hrs-8.00hrs,8.00hrs -9.00hrs)
	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 (6.00hrs-7.00 hrs, 7.00hrs-8.00hrs, 8.00hrs-9.00hrs)
9.00hrs to 18.00hrs	100-150	1 hr LS to EIP and Rural feeders in 3 batches (9.00hrs-12.00 hrs, 12.00hrs-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)
18.00hrs to 22.00hrs	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)
22.00hrs 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)

HESCOM has issued direction to all the officers to ensure that 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. The table given below shows the consumption recorded under 15 minute block, it is observed that 12.22 MUs are profit to the HESCOM due to billing done considering 15 min Block during the period from May 2017 to October 2017.

**Open Access details of HESCOM**

<b>Sl. No.</b>	<b>Month</b>	<b>Scheduled Units as per SLDC/IEX</b>	<b>Actual Open Access Units</b>	<b>Profit Units to HESCOM</b>
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
<b>Total</b>		<b>203.70</b>	<b>191.48</b>	<b>12.22</b>

**2. Review of Compliance of Existing Directives:**

The Commission had in its earlier Tariff Orders and other communications issued several directives for compliance by the HESCOM. While reproducing such **directives**, the compliance of the directives as reported by the HESCOM is analyzed in this Section.

**i. 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 five-star rated equipment certified by the Bureau of Energy**

**Efficiency in reduction of their monthly electricity bills and conservation of precious energy.**

**Commission's Views:**

The Commission observes that the HESCOM has not submitted the compliance regularly on implementation of the directive. It is also observed from the HESCOM's report that it has merely issued a circular to all its officers to use BEE five-star rated Energy Efficient Appliances, and has not taken any further effective steps in the field to ensure service to all new installations only with BEE five-star rated Air Conditioners, Fans, Refrigerators, etc., in the applicant consumers' premises. The HESCOM should 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, 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.**

***HESCOM COMPLIANCE:***

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 five-star rated electrical equipment. In this regard, the HESCOM has issued circular. Further, HESCOM has taken up programs under DSM activities to educate existing Domestic, Commercial and Industrial consumers to use five star rated equipment certified by the Bureau of Energy Efficiency.

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

1. Providing corporate signature tune for postpaid mobile CUG numbers of HESCOM, for the Period April-2017 to March-2018 amounts Rs. 5,90,888/-.

Ring back tune bases on DSM theme:

- Popularization of 1912 Help line.
- Use LED lights.

- Use 5 star electrical appliances.
  - Message of “Save energy and participate in progress”
2. Pilot project by M/s. SHINFO Technologies Pvt. Ltd., Bengaluru for Automated Lighting System (ALS) in Corporate office building, HESCOM, Hubballi.

The Pilot project has been executed with the following procedures:

- 6 rooms in corporate building which have air conditions 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 Automated Lighting system (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% (Thirty nine and one five percentages).

**Result:** Around 30% of Energy can be saved for Air Conditioned cabins by using Automated Lighting System, hence HESCOM called tender for the work.

3. VIJAYAVANI Property Expo-2017 was held on 28<sup>th</sup>, 29<sup>th</sup> & 30<sup>th</sup> May 2017 at Raikar Grounds, Hubballi. HESCOM booked stall amounting to Rs 50,000/- for 3 days. Through stall the DSM Awareness activities were carried out, such as energy saving tips, utilization of LED bulbs and sales of the same, BEE Five star rated appliances and awareness for installing Solar roof top etc.

4. DSM activity in Athani O&M Division on 27.08.2017 Rs. 10,440/-

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. i.e. about 5 star rated equipment.
- c. Awareness about using energy efficient agricultural pumps.
- d. Awareness about electrical safety measures etc.
- e. Awareness was given to the public regarding online payment through PAYTM or by logging in hescom.co.in.
- f. Awareness was given to the public regarding popularity of toll free helpline-1912.
- g. Awareness was given to the public regarding consumer grievance 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 6<sup>th</sup> and 7<sup>th</sup> of October 2017. Sponsor amount Rs. 25,000/-. About 1750 students participated in the program. Around 2000 people got awareness through banners, certificates and talks. The program covered followings:

- Awareness about DSM
- Awareness of 5 star rating
- Awareness about use of non-renewable energy sources.

6. Peak load management program and load reduction by using LED Bulbs, LED Tube Lights and Efficient Fan : Under HOSA BELAKU YOJANE around 16,32,427 nos of LED bulbs, 9806 number of LED tube Lights and 492 number of Efficient Fans have been sold in HESCOM jurisdiction by M/s. EESL.

Appliances	Total Nos.	Energy Saved in units
LED Bulb	1632427	4,70,67,886
LED Tube Light	9,806	1,14,990
Efficient Fan	492	1,792

HESCOM is making all its efforts to educate people regarding Energy Conservation tips , use Five Star rated pump sets, awareness to use Five Star rated electrical appliances by publishing in the newspaper/ magazine for giving advertisement/ on regular basis and on occasion such as Ugadi,10<sup>th</sup> state Sammelana, Deepavali, Kannada Rajayothsava etc. A request/appeal to the public is also published on all the advertisements as an important part of Advertisement.

The following is the appeal/ request:

“ಹೆಸಾಂ ವಿದ್ಯುತ್ ಗ್ರಾಹಕರಲ್ಲ ಈ ಪ್ರಕಟಣೆ ಮೂಲಕ ತಿಳಿಸುವುದೇನೆಂದರೆ ಬಿಇಇಯಿಂದ ಧೃಡೀಕೃತಗೊಂಡ 5 ಸ್ಟಾರ್ ರೇಟಿಡ್ ವಿದ್ಯುತ್ ಉಪಕರಣಗಳನ್ನು ಬಳಸುವುದರಿಂದ ವಿದ್ಯುತ್ ಉಪಕರಣಗಳನ್ನು ಖರೀದಿಸುವಾಗ ಬಿಇಇ ಪ್ರಮಾಣಿತ 5 ಸ್ಟಾರ್ ರೇಟಿಡ್ ಉಪಕರಣಗಳನ್ನೇ ಖರೀದಿಸಿ ಬಳಸುವಂತೆ ಹೆಸಾಂ ತನ್ನ ಗ್ರಾಹಕರಲ್ಲ ವಿನಂತಿಸುತ್ತದೆ.

**ii. Directive on implementation of Standards of Performance (SoP):**

*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 (Licensees 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 (Licensees Standards of Performance)

Regulations, 2004 and Annexure-1 of the KERC (Consumer Complaints Handling Procedure) Regulations, 2004, on the notice boards in all the O & M sections and O & M sub-divisions in its jurisdiction for the information of consumers as per the following format.

<b>Nature of Service</b>	<b>Standards of performance (indicative minimum time limit for rendering services)</b>	<b>Primary responsibility centers where to lodge complaint</b>	<b>Next higher Authority</b>	<b>Amount payable to affected consumer</b>

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 directives.”

**Commission’s Views**

The Commission while noting the compliance furnished, reiterates that the HESCOM shall continue to comply with its earlier directive by displaying the details of SoP in all its O&M section and sub-division offices for the information of the consumers, and also to adhere to the specified standards of performance in rendering services to consumers in a time bound manner.

**The Commission notes that the consumers participating in the Public Hearings held on the ESCOMs’ Tariff petitions, have stated that the ESCOMs contrary to their submission before the Commission on compliance of the directive issued by the Commission, have not displayed the details of SoP on the notice boards in O&M offices and also not adhered to the timelines stipulated in the SoP. Hence,**

**they have sought the intervention of the Commission to ensure that the ESCOMs comply with the directive on SoP.**

**The Commission notes that the situation indicates that there is lack of effective supervision over the functioning of field offices by the ESCOMs especially in rendering services relating to supply of power to the consumers.**

**Therefore, the Commission once again reiterates its directive to the HESCOM to continue to strictly implement the specified SoP while rendering services related to supply of power as per the KERC (Licensee's Standards of Performance) Regulations, 2004 and directs the HESCOM to monitor effective implementation of the directive on SoP in all its O&M offices. The Commission shall initiate appropriate action on any instance of breach of its directive.**

***HESCOM COMPLIANCE:***

Strict instructions have been issued to display the Standards of Performance (SOP) posters in all the O & M Offices of HESCOM and any breach for noncompliance in rendering services of the SOP will be penalized as per the directive of SOP. The progress report on SOP is being submitted to the Commission every quarterly and the same is hosted in HESCOM website: [hescom.co.in](http://hescom.co.in). HESCOM will make its all efforts to strictly implement the specified SoP while rendering services related to supply of power.

**iii. Directive on use of safety gear by linemen:**

*The directive issued was 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.”

**Commission's Views:**

It is important that the HESCOM should continue to focus on safety aspects to reduce electrical accidents occurring in the distribution system due to negligence and non-

adherence of safety procedures by the field staff while working on the distribution network. Further, the linemen should be sensitized by imparting training periodically on adherence to safety aspects so that it becomes part of their routine.

**The Commission reiterates its directive that the HESCOM shall 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.**

***HESCOM COMPLIANCE :***

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 for procurement of good quality Tool Kits & Safety Belts to the employees coming under their jurisdiction. Further, 1050 pairs of Gum Boots( for Malnad Areas in HESCOM)&1500 Pairs of Rainwear have been procured FY-2016-17 & issued to the employees.

This office has procured Uniform cloths (2 Pairs for 2015-16& 1 Pair for 2016-17) & issued to all employees. Total 2500 Nos of Hickery Rods have been procured and allotted to all the divisions in HESCOM.

Similarly, 3500 Nos. of Helmets, 1500 Pairs of Rubber Hand Gloves have been procured and issued to employees of HESCOM. Further, an additional 375 Pairs of Rainwear & 375 Pairs of Rubber Handgloves are procured and issued to the employees of Karwar, Honnavar & Belagavi (Rural) Divisions.

Further, tendering is under 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 during the Pre-promotional training for SSLC passed Lineman staff training program at ITC, HESCOM, Hubballi. During the financial year 2016-07 training was imparted to 67 no of Lineman staff. Further training for SSLC passed Lineman staff two batches each of 40 candidates is planned for FY 2017-18. HESCOM will continue its efforts to focus on safety aspects to reduce electrical accidents occurring in the distribution system.

#### **iv. Directive on providing Timer Switches to Streetlights by the ESCOMs**

*The directive issued was 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.

#### **Commission’s Views:**

The Commission observes that so far the HESCOM has not taken any concrete step to provide timer switches to the streetlight installations in its jurisdiction. The HESCOM has also not initiated any action to coordinate with the concerned authorities for installation of timer switches by such authorities. This inaction by the HESCOM has resulted in wastage of electricity by indiscriminate use of streetlights during the day time in its jurisdiction.

Further, wherever feasible, the HESCOM should install the timer switches at its cost and subsequently recover the cost from the concerned local bodies. The HESCOM is also directed to persuade the local bodies to install timer switches at their cost availing funds / grants received from Government and other agencies for such programmes.

**The Commission reiterates its directive 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.**

#### ***HESCOM COMPLIANCE :***

As per the direction of the Commission, HESCOM is persuading with the local bodies for installation of timer Switches to street light, carrying out discussions with local bodies to get consent letters for installation of timer Switches to Street lights.

On getting the consent, HESCOM wishes to install most robust and most economical timer switches, as the available timer switch’s life span is short and are not dependent on Sun rise/set. Hence, HESCOM in its R&D Cell, is designing Timer Switches along with some manufacturer for most economical and robust Timer Switches, which is not based on timing, but on Sun light or Astronomical timing of that location.

In this regard, Pilot projects carried out by manufacturer designed as per HESCOM ideas 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.

HESCOM is planning to utilize these timer switches to its in house building street light/ stations. Further HESCOM R&D Cell is designing with SMAT Company, Dimmer Control box for alternative dimming of street lights at may be 11 PM onwards.

HESCOM is utilizing newspaper/ magazine for giving advertisement/ awareness about using LED Street lights and timer switches to layouts/ campus/ township etc.

**v. 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 5<sup>th</sup> day of the succeeding month.

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

**Commission's Views:**

The Commission notes that the HESCOM has not expedited the application software which it has been developing 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. There is no progress in this regard as the status is the same as compared to the previous year. The Commission notes that the HESCOM has not effectively and satisfactorily complied with the directive on load shedding. The HESCOM shall expedite development of necessary software and other process required to inform consumers through SMS regarding both scheduled and un-scheduled load shedding due to reasons such as system constraints, breakdowns of lines/equipment, maintenance etc., This would significantly address the "consumers" dissatisfaction" on this issue and prevent inconvenience/ disruption caused to industrial consumers.

Further, the Commission observes that 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 shall henceforth 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.**

***HESCOM COMPLIANCE :***

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. Projections of availability and demand of power is submitted to KERC for last 2 months.

HESCOM has already initiated the work for providing information to the consumers through SMSs regarding the time and duration of load shedding in coordination with REC. REC has developed an web based application named as Urjamitra and HESCOM has already uploaded all 11 KV feeder data & daily outages of such feeders are being uploaded in the web based application.

HESCOM is hosting the scheduled outages details (due to reasons such as system constraints, breakdown of lines/equipment, maintenance etc. for the next day) in HESCOM website daily as well as in Urja Mitra App since from Oct-2016.

Outage information for both scheduled and unscheduled to relevant consumers is being triggered through SMS's in predefined format .Outage information to consumers is being sent through SMS's since Oct-2016, of about 84 lakhs of SMS have already been sent. The same can be viewed in [www.urjamitra.com](http://www.urjamitra.com).

**vi. Directive on Establishing a 24x7 Fully Equipped Centralized Consumer Service Center for Redressal of Consumer Complaints:**

*The directive issued was 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”.

**Commission’s Views:**

The Commission notes that the HESCOM has established a 24x7 customer care centre and taken certain measures for redressal of consumer complaints in its jurisdiction. The HESCOM should continue its efforts in improving the delivery of consumer services to reduce the consumer complaint downtime so as to ensure delivery of prompt services to them. The HESCOM effective should develop necessary capacity and infrastructure for prompt and effective response to consumer complaints on breakdown of lines/equipment, failure of transformers etc., resulting in interruptions in power supply. In addition to this, BESCO should take up steps to continuously sensitize its field staff that they need to 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.**

***HESCOM COMPLIANCE :***

**Centralized Consumer Service Center (24X7 )** is functioning in the premises of Corporate Office, Hubballi. The Helpline number for Electricity is 1912(toll free). There

are 25 Customer Care Executives to support HESCOM consumers round the clock throughout the year. Suitable measures are taken to ensure that all the complaints of consumers are registered through CCC for monitoring the disposal of complaints registered. The complaints registered in the Centralized Consumer Service Centre during FY-17 was 189237 Nos and 91888 Nos during FY-18 (UP TILL Sep -17) and the complaints were resolved. The complaint handling procedures & contact number of the Centralized Consumer Service Centre has been hosted in HESCOM website [www.hescom.co.in](http://www.hescom.co.in).

Further, HESCOM has published the complaint handling procedures 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.

HESCOM has also published the contact number of 24 / 7 service Stations at the Sub Divisions and the toll free number of Centralized Consumer Service Centre in the following newspapers i.e 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 in the newspapers on 05.06.2017, 06.06.2017 and 07.06.2017 respectively, for the information of the public.

The HESCOM will continue its efforts in improving the delivery of consumer services to reduce the consumer complaint downtime so as to ensure delivery of prompt services to the consumers.

**vi. 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 wherever it was above this level in towns/ cities having a population of over 50,000.

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

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

**Commission's Views:**

It is observed that the monthly energy audit reports of cities/towns with detailed analysis are not being submitted by the HESCOM regularly to the Commission. The Commission directs the HESCOM to conduct energy audit of identified cities/towns and initiate necessary remedial measures on the basis of energy audit results to reduce the technical losses and improving collection efficiency to achieve the mandated A T & C loss of less than 15 per cent. The HESCOM is directed to submit compliance thereon regularly to the Commission.

The Commission further notes that the HESCOM despite completing significant percentage of the metering of the DTCs, has failed to take up DTC-wise energy audit, citing non-completion of tagging of consumer installations with the concerned feeders/DTCs, CT failures and network issues. The stand repeatedly taken by the HESCOM for the last three years that tagging of consumer details with the concerned feeders/DTCs is not completed, does not augur well for the Company which wants to run its business on commercial principles. This shows that the HESCOM is not serious about conducting energy audit and taking remedial measures to reduce losses in order to run its business efficiently. The Commission views with displeasure, the delay on the part of the HESCOM to complete the pending works and take up the DTC-wise energy audit.

**The HESCOM is directed to take up energy audit of DTCs where meters have already been installed and to initiate remedial measures for reducing energy losses in the distribution system. The compliance in respect of DTC-wise energy audit conducted with 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 the consolidated energy audit report for the FY17, as per the formats prescribed by the Commission, vide its letter No: KERC/D/137/14/91 dated 20.04.2015, before 15<sup>th</sup> May, 2017.**

**HESCOM COMPLAINEE :**

The Energy audit of 16 towns which have population of more than 50000 is being carried out in HESCOM. The below mentioned matrix shows average energy losses recorded from FY-17& FY-18 (Up to August -2017) in these 16 towns.

**Loss Level in Towns/Cities.**

Year	No. of towns Monitoring	No. of Town/ Cities loss 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 ( upto Aug- 17 input and Sept-17DCB)	Hubballi, Dharwad , Sirsi , Karwar,Dandeli, Gadag , Haveri, Ranebennur, Bealgavi , Nippani, Ilkal . Gokaka, Bagalkote , Vijayapura,Jamakhandi, Rabkavi, Banahatti	Nil		

From the above it is seen that, for FY-17 out of 16 towns the loss level in 15 towns is less than 15%, in 1 town it is more than 15%. And in FY-18 out of 16 towns the loss level in all the 16 towns is less than 15%. HESCOM will make its all efforts to maintain the losses in town below 15%.

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

- 1) There are 378 Nos of 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) T&D losses are mainly, energy losses due to reduced size of cross section of current carrying conductor. Therefore Re conducting 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 Weasel conductor by Rabbit conductor in selected 73 towns is being done in phased manner.
- 4) Replacement of age old LT conductors by that of Rabbit in selected 73 towns is being done in phased manner i.e. about average of 2414 km per annum is targeted to complete, these works.
- 5) Providing DTC metering in Non R-APDRP towns also to monitor energy audit, under NEF Schemes, is under progress . Audit in respect of DTCs will be strictly implemented once the programme of fixing these meter to DTC is completed.
- 6) Providing additional distribution transformer centers, Arial bunched cables, maintenance works of DTCS, etc. in 25 towns under R- APDRP (population more than 30,000) is in progress.
- 7) Providing additional distribution transformer centers to Non R-APDRP areas under NEF scheme. 2342 nos of different capacity distribution transformer were also proposed. Total Capital budget provision of Rs. 54.06 crores is made during this year.
- 8) Providing UG cables / Arial bunched cables in 11 KV distribution network for Belgavi, Hubli-Dharwad cities, under NEF Schemes the budget provision of 75 crores for UG cable for 11 Kv system is made for this year .

**DTC Metering Works :**

1. HESCOM has taken up DTC Metering in two Phases (Phase-I & II).
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 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 and The work is awarded to M/s. Asian Fab Tech Limited, Bangalore 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. The agency is maintaining server and has hosted web based application. URL (address of the web application, 125.16.20.2/ HESCOM), user login id and password have been given to the concerned HESCOM officials.
5. In Phase-I, Metering of **21224** Nos of DTCs is completed out of the awarded Quantity **22693 Nos of** DTCs and in Phase-II, Metering of **14759** Nos DTCs is completed out of the awarded Quantity **18100Nos of** DTCs.
6. Out of the **35983** Metered DTCs (Phase I & II), communication is established for **25866** 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 establishing communication for the Balance DTCs there are some issues like Network Problem, Lead wire burnt and MNR which be addressed at the at the earliest.
7. As the subject works is taken in rural areas and Malanad area of Uttar Kannada district, agency is facing network connectivity Problem for establishing communication with the server. Hence, Agency is carrying out the manual meter reading of DTCs which are not in cellular coverage area, as per the DWA conditions.
8. 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. Analyses 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 ovoid overloading of DTCs which has resulted in decrease in Failure of DTCs.
  - iv. System improvement works such as Re-Conductoring of HT/LT lines.
9. Further, implementation of web based TRM software for Non-RAPDRP areas of HESCOM is awarded to M/s. N-Soft (India) Services Pvt. Ltd., Bengaluru by SEE (T&P),HESCOM.
10. 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.
11. Meter Details of 19030 Metered 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 under Process
12. Energy Audit of approximately 13503 Nos of DTCs is carried out during month of July-2017. Due to software issues while integrating the data and mismatch in DTC Code, Energy Audit of the some of the Metered DTCs is not being done. Issue will be resolved by the HESCOM in coordination with M/s. Asian Fab Tech and the System Provider viz., M/s. N-soft service private Ltd at the earliest.

**DTC METERING PROGRESS**

Name of the Division	As per DWA			Work Progress		
	Phase 1	Phase 2	Total	Phase 1	Phase 2	Total
Hubli	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
Belgaum	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
Bijapur	497	242	739	497	390	887
Indi	577	907	1,484	577	1035	1612
Basavana Bagewadi	1086	529	1,615	1086	530	1616
<b>Total</b>	<b>22693</b>	<b>18,100</b>	<b>40,793</b>	<b>21224</b>	<b>14759</b>	<b>35983</b>

Details of communication with Centralized Server				
Si. No	Division	Erected	Communicated	Balance to be Communicated
1	Hubli	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	Belgaum	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	Bijapur	887	629	258
18	Indi	1612	1288	324
19	Basavana Bagewadi	1616	1290	326
	<b>Total</b>	<b>35983</b>	<b>25,866</b>	<b>10,117</b>

**DTC Wise Energy Audit :** Altogether 3985 Nos of DTCs were analysed as per formats issued by Hon'ble Commission and submitted to the commission .

1. Providing DTC metering in Non R-APDRP towns to monitor energy audit, under NEF Schemes, is under progress. Audit in respect of DTCs will be strictly implemented once the programme of fixing these meter to DTC is completed.
2. Providing additional distribution transformer centers, Arial bunched cables, maintenance works of DTCS, etc. in 25 towns under R- APDRP (population more than 30,000).
3. Providing additional distribution transformer centers to Non R-APDRP areas under NEF scheme. 2342 nos of different capacity distribution transformer were also proposed. Total Capital budget provision of Rs. 54.06 crores is made.

Further as per Hon'ble Commission order vide ltr No: KERC/D/137/14/91 Dated 20.04.2015. 11kv feederwise as well as DTC wise energy Audit for FY-17 is submitted to KERC.

#### **viii. 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.

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

The Commission has been directing the ESCOMs to identify one sub-division in each ESCOM with high LT/HT ratio and high distribution loss levels, so that substantial loss reduction could be achieved by implementing the HVDS in such subdivisions. Therefore, keeping this in view, the Commission has also issued revised guidelines to the ESCOMs to implement HVDS in subdivisions/feeders having the highest distribution losses.

As for the estimate for implementation HVDS in Sadalga Hobli of Bhoj Section submitted to the Commission, the same has been verified and the Commission has pointed out many discrepancies, as far as provision of new materials and reuse of existing materials, are concerned. Accordingly, the estimate will be returned to the HESCOM in due course for attending to such observations.

Hence, the HESCOM is directed to follow the revised guidelines issued by the Commission and to take up implementation of HVDS programme in Sadalga Hobli and submit compliance of the same from time to time to the Commission.



**HESCOM COMPLAINT:**

**HVDS estimate of Sadalga Hobli of Bhoj Section :-**

The estimate for implementation HVDS in Sadalga Hobli of Bhoj Section was submitted to the Commission, the Commission verified and has pointed out many discrepancies, as far as provision of new materials and reuse of existing materials, are ... Accordingly, the estimate was returned to the HESCOM in due course for attending to such observations.

In Obedience to above, vide This Office Letter No. No: HESCOM/ SEEPMC/ EEP3/ AEE1P3/ HVDSBHOJ/ 2383/ 2014-15/ CYS-1497 Dtd. 13.07.2017 Chikkodi O & M Division Executive Engineer (Ele) & Sadalga O & M Sub-division Assistant Executive Engineer (Ele) are directed to comply observations and submit the HVDS estimate at the earliest [(as per KERC Revised Guidelines issued by the Commission and to take up implementation of HVDS programme in Sadalga Hobli (Chikkodi Division in Belgaum District)] we will forward the said estimate duly complying with the observations pointed out by the Hon'ble KERC shortly.

**ix. Directive on Niranthara 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.

**Commission's Views:**

The Commission notes that the HESCOM has not commissioned all the feeders taken up under NJY phase1 & 2. The Commission observes that the progress achieved so far by the HESCOM in implementing the works under NJY is not satisfactory as the same has been delayed inordinately. The delay in implementation of NJY works across its jurisdiction which has resulted in non-realization of envisaged benefits set out in the DPR when the project was initiated.

Therefore, the Commission directs the HESCOM to expedite completion of remaining feeders 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.

Further, the Commission has noted that the HESCOM has carried out the analysis of feeders commissioned under NJY indicating 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 and increase in metered consumption. The analysis reveals that there is overall improvement in supply condition after implementation of NJY.

The HESCOM is directed to expedite execution of NJY works and report compliance thereon to the Commission, regularly. Further, the HESCOM is directed to ensure that NJY feeders are not tapped illegally for running IP-sets which would defeat the very purpose of feeder separation scheme undertaken at huge cost. The consumers who are found to be tapping the NJY feeders need to be dealt with seriously for theft of energy. The field officers/officials who fail to note and curb illegal tapping shall be personally held responsible for these irregularities.

Further, it is noted that the HESCOM has already segregated totally 434 feeders under NJY phase 1 & 2 works. Consequent to this, 1312 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 sub-stations after duly allowing for distribution losses in 11 KV lines, distribution transformers and LT lines. The HESCOM is directed to report every month, specific consumption and the overall IP-set consumption only on the basis of data obtained from agricultural feeder energy meters as per the formats prescribed by the Commission.

**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.**

***HESCOM COMPLAINT :***

**Nirantara Jyothi Yojane** : DWA for **NJY phase 1**, comprising of **246 feeders** spread over 20 Taluks of HESCOM was issued during the period May 2011 to September 2011 with completion period of nine months. Out of the 246 feeders, 4 Feeders are shifted to Phase-III resulting in **242 Nos.** of feeders. The inordinate delay in implementation of the project is attributed to problems in the field during execution of 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-I of the project was completed and commissioned which constitutes **100%** of work. 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 have been achieved and the same is confirmed by M/s. CPRI by evaluating the project. DWA for **NJY phase 2**, comprising of **210 feeders** spread over 14 Taluks was issued during January 2012 to March 2012. Out of 210 feeders 5 Feeders are shifted to Phase-III, 2 Feeders are clubbed with nearby NJY feeders and 1 Feeder was De scoped due to forest issue resulting in **202Nos.** of feeders on 24.04.2017 the Phase-II of the project was completed and commissioned which constitutes **100%** of work. Further, the feeders in which the segregation work is completed have been commissioned this resulting in realization of envisaged benefits and same is confirmed by M/s. CPRI by evaluating the project.

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, responsible for tapping NJY feeders illegally and operate IP Sets on NJY feeders.

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-I & II covering 34 Talukas excluding the areas covered under RLMS. Later on it was felt necessary to take up NJY works in the areas covered under RLMS also. Hence, DPRs were prepared to take up NJY works under Phase-III involving estimated cost of Rs 113.06 Crores and accordingly M/s REC have sanctioned loan to the tune of Rs 101.76 Crores. The details of works proposed is as follows: No of feeders proposed: 92, No. of villages to be covered: 575, Length of 11KV Line proposed(in Kms): 2589.25, No. of Transformers to be erected: 1211, Estimated cost in Rs Crores : 113.06. 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 packages. The works in respect of all above mentioned 4 packages have already been commenced by the Agencies.

Further the progress achieved by the end of Oct-2017 is as follows:

Total No. of feeders - 92 Nos.

No. of feeders Under progress -50 Nos

No. of feeders commissioned -42Nos.

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

For detailed progress of phase I & II please is given below.

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-I	Ph-II	Ph-III	Ph-I	Ph-II	Ph-III	Ph-I	Ph-II	Ph-III	Ph-I	Ph-II	Ph-III
<b>HESCOM</b>	246*	210 **	92	242	202	42	00	00	50	Completed On 24.07.2017	Completed on 24.04.2017	09.04.2018

\* 4 Feeders under Phase-I are proposed under Phase-III.

\*\* 5 Feeders under Phase-II are proposed under Phase-III.

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

1 Feeder under Phase-II in Khanapur Taluk is De scoped.

**IP SET CONSUMPTION:** There are 2888 Nos of 11kv feeders in the HESCOM Jurisdiction as on October-2017. All the feeders are monitored continuously by way of feeder-wise energy audit. And all the feeders are audited monthly and monitored with regards to Distribution loss and AT&C loss. Also continuous effort are being made towards trajectory reduction plan as directed by Hon'ble KERC and other nodal agencies of Ministry of Power and Energy.

**11 KV FEEDERS DETAILS**

Sl. No.	Name of the Company	Zone	Total number of 11 KV feeders				
			Urban	Rural	Industrial	Exclusive IP sets Feeders	Total
1	HESCOM	Belgaum Zone	162	504	72	1260	1998
2		Hubli Zone	216	399	43	232	890
		Total	378	903	115	1492	2888

As per directions of Hon'ble Commission in its Tariff Order dated 30<sup>th</sup> 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. Now in Format –A the month wise Sub division wise feeder wise consumption of all the agricultural feeders segregated under NJY scheme from April-2016 to March-17 is already mailed Via Gmail on 22.08.2017, 27.10.2017. As per Annexure A&B format, altogether 1114 Nos of feeders (other than Segregated IP set Feeders), 1040 Nos of Segregated IP Set feeders and 3985 Nos of DTCs have been analysed and submitted to the Hon'ble commission vide email dated 22.08.2017.

HESCOM has made efforts to calculate the EIP feeder consumption intensely by carrying out energy audit as per directions of Hon'ble Commission. Where the 11 kV, LT line losses has been calculated by the method of KVA-KM as per the Commission guidelines for energy audit Annexures and distribution transformers loss has been calculated on the bases of Copper and Iron loss method.

On the basis of TERI study and KVA-KM base HESCOM has studied that moderately the 11KV, LT LINE loss and Transformer Distribution loss overall to range from 11% to 14%. Hence for the given sub division wise segregated Agricultural Feeder Format the Distribution loss (11 KV, LT Line & DTC) is considered on an average as 13%.

**x. 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.

**Commission's Views:**

The Commission notes that the status of implementation of DSM project in Nippani and Byadgi sub-divisions is same as that of the previous year. In this project, no further progress has been achieved except replacement of 590 existing pumps by energy efficient pump sets. It is important to see that all the balance works relating to this project are expedited so that the work is completed in a time bound manner and the farmers are able to avail the benefits of this scheme.

The Commission during its review meetings with the ESCOMs held in the Commission has been directing them to initiate DSM measures in any one sub- division/taluk in order to assess the results of such measures before scaling up in whole of its jurisdiction.

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.**

***HESCOM COMPLAINT :***

HESCOM has taken up this project with Energy Efficiency Services Limited, New-Delhi (EESL) as a pilot project and completed 590 Nos. of replacement of Old Pump Sets by Energy Efficient Pump Sets (i.e., in Byadgi- 390 Nos. and in Nippani- 200 Nos.).

Vide letter no: HESCOM/MD/PS/22492 Dtd: 09-12-2015, a letter was addressed to Hon'ble Additional Chief Secretary, Energy Department, GoK, Bangalore and narrated the pros-n-cons of the Project. A detailed study is being carried out by HESCOM regarding the same and based on the reports; further works will be taken up as per the Commission's views.

**xi. 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.

**Commission's Views:**

The Commission notes with displeasure that only meager progress has been achieved by the HESCOM, in electrification of the households under various schemes. The HESCOM needs to expedite electrification of un-electrified households so as to complete the same at

the earliest. It is noted that the electrification of households has not progressed as targeted for the last many years resulting in large number of households in the State remaining without electricity.

The Commission expresses its displeasure over the HESCOM's tardy progress and apparent lack of seriousness in electrification of un-electrified households in its jurisdiction. Even after so many years, there are a large number of households remain without electricity, which is of serious concern.

Further, the Commission concerned with 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, the progress achieved in electrification of households so far by the HESCOM is disappointing.

**The Commission directs the HESCOM to expedite action to provide electricity to the un-electrified households and cover all the remaining households at the earliest and report compliance thereon to the Commission regarding the monthly progress achieved from May, 2017 onwards. The Commission as already indicated in the earlier Tariff Orders would be constrained to initiate penalty proceedings under section 142 of the Electricity Act, 2003, against HESCOM in the event of non-compliance in the matter.**

***HESCOM COMPLAINCE :***

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

<b>SL NO</b>	<b>PARTICULARS</b>	<b>NO'S</b>
1	Total No. of Rural Households existing as on 30.09.2017	2260581
2	No Of Rural Households electrified as on 30.09.2017	2036137
3	Balance No. of Households to be electrified	224444
4	BPL HHs proposed under DDUGJY	88707
5	BPL HHs taken up under RGGVY 12 <sup>th</sup> Plan	18638
6	Total BPL HHs electrification proposed	107345
7	Total BPL UE households surveyed & identified for electrification	150379
8	Balance BPL households to be electrified	43034

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

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

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

The details of HESCOM to provide electricity to these households under various schemes are as stated below.

**1. Electrification of Rural households taken up under RGGVY 12<sup>th</sup> plan scheme:**

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

SI.No	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 Lakhs	Approved Project cost by REC in Lakhs	Award Date	Award Amount
					BPL	APL				
1	Haveri	692	741	702	18638	5568	606.51	607.02	10.09.2015	662.75

- Work awarded to M/s. Praveen Electrical Works, Gadag vide Ltr. No. HESCOM/SEE(PMC)/EE-P1/Indent-1314(A)/2015-16/Cys-2027 & Cys-2028 Dtd.: 10.09.2015.
- Work is under progress.
- **As on 30.09.2017, 18,284 BPL Households are electrified.**

**2. Electrification of Un-electrified villages in HESCOM:**

In HESCOM jurisdiction 30 un-electrified villages were existing and out of these, 25 villages were in Uttar Kannada & 05 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 convention grid connectivity using overhead lines.
- ii. Presently as on 30.09.2017, the progress achieved is as noted;
  - a) No. of villages electrified - 23 Nos
  - b) No. of villages where work is to be taken up – 02 Nos.(Diggi, Asulli in Joida Taluk)

**In Diggi & Asulli** villages, as per the instruction of Forest authority, the work 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 HT UG cable is under progress.

**2. Belagavi District:**

- i. In case of 5 nos of UE villages existing in Khanapur taluk of Belgaum district, in 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 works are under progress.
- ii. The work is awarded to M/s.Pratham Integrated Solutions (I) Pvt Ltd., Bengaluru.
- iii. The present status of the works in these villages is as noted below;

Sl.No	Name of Village	Present status
1	Talewade	All materials Solar Panels, Mounting structures, battery bank, DG Set etc mobilized. Household wiring completed. LT line work is under progress.
2	Kelil (Krishnapur)	Solar Panels, Mounting structures, battery bank, DG Set etc received at site. Household wiring and LT distribution pole erection completed. Excavation for Module mounting structure and Control room for battery bank & DG set is under progress.
3	Holda	Solar Panels, Mounting structures, battery bank, DG Set etc received at site. Household wiring and LT distribution pole, Module mounting structure erection completed. Construction of Control room for battery bank & DG set is under progress.
4	Mendil	Works are under progress

**3. BPL Households proposed under Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) scheme :**

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
1	Uttara Kannada	18	9654	9672
2	Haveri	0	7627	7627
3	Gadag	78	11399	11477
4	Dharwad	0	3324	3324
5	Bijapur	60	12699	12759
6	Bagalkot	159	8352	8511
7	Belgaum	269	35068	35339
8	<b>Total</b>	<b>584</b>	<b>88123</b>	<b>88707</b>

- Rs. 48.34 Crores is sanctioned to HESCOM vide Ltr. No.: REC/BLR/DDUGJY/15-16/299 Dtd.: 09.09.2015 for providing access to Electricity to Rural Households under DDUGJY scheme.
- Rs. 9.9 Cr is sanctioned for Sansad Adarsh Gram Yojana under DDUGJY.
- Tender for all 7 districts of HESCOM were invited and awarded on 01.04.2017 and the works are under progress with a time completion period of 24 months.

**xii. 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 of power supply 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.

**Commission's Views:**

**The Commission has forwarded a report prepared by the consultants, M/s PWC regarding implementation on Financial Management Framework to bring in accountability on the performance of the divisions / sub-divisions by analyzing the quantum of energy received, sold and cost so that the ESCOMs conduct their business on commercial principles.**

However, it is observed from the HESCOM's compliance of the directive that, the HESCOM has not taken necessary action for implementing this directive. The HESCOM, without actually taking any measurable action on the ground, has only repeated whatever it has submitted last year on the directive.

The Commission directs the HESCOM 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 without resorting giving lengthy explanation. Further, the HESCOM is directed to 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 when 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 percent meter reading, billing, and collection; analysis of sub-normal consumption; replacement of not-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.**

**Since PWC has already submitted a report on the implementation, the Commission is of the view that there is no question of entrusting a study again which results in waste of time and money. The HESCOM has to implement the framework already suggested by the consultant. Compliance in this regard shall be submitted to the Commission on a quarterly basis, regularly.**

***HESCOM COMPLAINT :***

As per the observations made by the Hon'ble KERC in the tariff order 2017, Dtd : 11-04-2017, the work award entrusted to M/s PWC Bengaluru to carry out the implementation of Financial Management frame work in Gadag Division has been cancelled. HESCOM has initiated to work out on the model of CESC and BESCO to fix the targets for Divisions and will submit the report to the Hon'ble Commission shortly.

**xiii. 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 2015-16 and with regret noted that as many as 430 people and **520** animals have died due to these accidents.

From the analysis, 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 distribution networks and implement safety measures to prevent electrical accidents. Detailed division wise action plans shall be submitted by the HESCOM to the Commission.”

**Commission’s views:**

The Commission notes that the HESCOM has taken certain remedial measures including rectification of number of hazardous installations and also carried out improvements to its distribution network. However, in spite of these measures taken by the HESCOM, the number of fatal electrical accidents involving both human and livestock has increased, which is a matter of serious concern.

The Commission would like to impress upon the HESCOM that the identification and rectification of hazardous installations is a continuous process, which should be regularly carried out without any let up, with a focused attention, this matter deserves. 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.

During the ESCOMs “Review meetings held the Commission has been emphasizing that the ESCOMs should take up periodical preventive maintenance works, install LT protection to distribution transformers, conduct regular awareness

programme for public on electrical safety aspects in use of electricity and also ensure use of safety tools & tackles by the field staff besides imparting necessary training to the field staff at regular intervals.

Further, the Commission is of the view that the hazardous installations in the distribution network is the result of works carried out shabbily without adhering to the best construction practices as per the standards, while taking up construction/expansion of the distribution network. Therefore, the HESCOM shall take adequate and effective steps to ensure that distribution network is hazardous free. In addition to this, the HESCOM also needs to conduct regular safety audit of its distribution system and to carryout preventive maintenance works as per schedule in order to keep the network equipment in healthy condition.

The Commission has already forwarded the Safety Technical Manual to the ESCOMs, which enumerates detailed account of the steps to be taken on each element of the distribution system which would help the engineers in the field to identify and attend to the defects. In this context, it is necessary that the ESCOMs are required to continuously monitor the implementation of the suggestions / recommendations contained in the Safety Technical Manual to ensure that distribution network is maintained properly.

**The Commission, therefore, reiterates its directive that the HESCOM shall continue to take adequate measures to identify & 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.**

**HESCOM COMPLAINEE** : Following measures have been taken up for prevention of accidents.

Sl. no	District	Electric al Acciden t FY-15	Expenditure incurred in crores for prevention of Accidents	Electric al Acciden t 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 up to oct-17	Expenditure incurred in crores 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	Bijapur	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

**Following measures have been taken up for prevention of accidents to Employees/consumers/ Public :**

- Providing intermediate poles in lengthy span – 2589 Nos
- Replacement of Broken /Detoriated poles – 1139 Nos
- Shifting of DTC Lines to safer place –140 Nos
- Replacement of detoriated conductor 221.05 Kms
- Shifting of HT/LT Lines – 14.43 Kms
- Re conductoring works : 11kV line: 38 Nos feeders ,198.52 kms tendered: 31 Nos feeders, 156.11 kms completed balance work under progress.
- LT re-conductorng: 410 Nos of feeders for 1017.12 kms tendered and 313 Nos of feeders 616.15 kms completed balance work under progress.
- Transformer maintenance work has been carried out to reduce the accident.

**Consolidated Details of Hazardous installations identified and rectified from  
Apr-17 to 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

Action is being taken to educate the employees regarding safe use of equipments, Consumer awareness program is arranged regarding safety, arranged at all the district Headquarters.

To implement the works related to prevention of accidents and to have safety a budgetary expenditure in FY-17 is 13.46 cores and 15.5 Crores is earmarked in FY-18.

All efforts are being made to reduce the accidents in all the Districts coming under the jurisdiction of HESCOM on priority. Hence from above it is seen that the number of accidents have reduced as compared to previous years.