APPENDIX

NEW DIRECTIVES AND REVIEW OF COMPLIANCE OF PREVIOUS DIRECTIVES ISSUED BY THE COMMISSION

- 1. The following new directives are 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 others issues. The consumers have urged the Commission to ensure that ECOMS 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.

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 minute's 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.

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.

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 five-star rated electrical equipment. In this regard, the HESCOM has issued a circular to all its officials to make arrangement to replace all energy inefficient electrical equipment by five star rated electrical equipment, in all the offices.

Further, the HESCOM 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.

Further, the following are the activities carried by DSM Cell from April 2015 to March 2016:

SI. No.	Name of the Activity	Remarks			
1.	Essay competition on "renewable energy"	Conducted on 20th–21th Nov' 2015 in KLE Kannada medium school, Hubballi. Use LED bulbs was also stressed.			
2	Drawing competition on "World without Electricity/ World with Green Energy"	Conducted on 1st-2nd Dec'2015 in Rotar English medium High school, Hubballi. Use LEI bulbs was also stressed.			
3.	Kannada and English Brochure on "Energy Conservation Guide"	Ten thousand Kannada and English brochures were distributed as part of energy conservation.			
4.	Key chain on "Energy Saving Guide and Save Energy"	250 key chains were distributed for promoting 5 star rated appliance utilization. It got wide positive response by the employees.			
5.	Samyukta Karnataka "Utkarsh 2016"	Held on 29 th , 30th and 31 st January 2016 at Raikar grounds, Hubballi. Carried out the DSM awareness activities by opening 3m X 3m stall for 2 days. 1. Brochure- on "Energy Conservation Guide" distributed.			

2. Awareness on utilization of LED bulbs and
their sales.
3. Advantages of Solar Rooftop PV installation
was stressed.

DSM Activities from April 2016

SI. No.	Name of the Activity	Remarks
1.	Advertisement published about Energy Conservation in monthly Magazines in Ugadi special Magazine issues.	Ugadi special Kannada monthly magazines have wider publicity; hence, descriptive energy conservation tips and guide were published for public awareness. Published on April 2016.
2.	Rally for "Save Electricity".	Rally for "Save Electricity" & "avoid wastage" of electricity was held on 21st May 2016 from BVB college, Campus to IT park of Hubballi, with association of students of Deshpande Education Trust, around 500 people gathered. Also distributed was "Energy Conservation guide".
4.	Marathon on "World Environment Day" with objective of Encouraging usage of Renewable Energy sources and avoiding wastage of Electricity.	In association with District Administration, Dharwad, Marathon was held on 12th June 2016 for "Save Environment and Use renewable energy sources". Around Five thousand people gathered.
5.	Workshop on Energy Conservation and renewable energy sources. Essay and Quiz Competition on "Go green – Save Energy"	Deshpande Foundation, a NGO is running Electrician program and entered into MOU. Workshop on 'Energy Conservation and renewable energy sources' was conducted, as part of capacity building of students of Electrician program. These students, in turn will teach villagers about energy conservation as part of their curriculum. Workshop, quiz, and Essay Competition were conducted on 29 th July and 1 st , 2 nd August 2016
6.	Advertisement published about Energy Conservations to Ganga Maatu Kannada Monthly Newspaper.	Ganga Maatu is a Kannada monthly Newspaper. Descriptive energy conservation tips and guide were published for public awareness. Published on August 2016.
7.	Replacement of conventional bulbs by LED bulbs.	Utilization drive of LED bulbs is being carried out in HESCOM. All HESCOM circle offices procured 1000 LED Bulbs each and replacement of all the conventional bulbs by LED bulbs coming under their circle is in process.
		In Corporate Office building, 232 conventional bulbs were replaced by LED bulbs.

8.	Audio Advertisement through computerized announcement system on State Transport Bus Stations Karnataka (NWKRTC).	For creating awareness about energy saving among the public through Audio Advertisement through computerized announcement system on State Transport Bus Stations Karnataka (NWKRTC). Awarding is in process to M/s. Vritti Communications, for next six months.
9	Advithiya Technical Fest – 2016	For creating awareness about energy saving among the students of KLEIT, a stall was opened, banners of energy saving concepts were displayed and video strip on LCD regarding energy savings were also displayed. Also, the HESCOM's street play team was deputed to the event, to carry out the street play regarding energy savings to promote DSM activity and to address 4000+ students regarding energy conservation. The street play was successful.
10.	Ring Back tune for HESCOM CUG cell phones (HESCOM employees).	For creating awareness about energy saving among the public, who regularly call employees of HESCOM, will be hearing Caller tune/ Ring Back tune, which motivates usage of LED bulbs, Five-star rating appliances.
11.	Technical write up competition on Energy Conservation and renewable energy sources.	KLEIT is a reputed Engineering college, has entered in to MOU with HESCOM, for DSM activities. The college will be conducting Technical write up competition on 'Energy Conservation and Renewable Energy Sources' in the month of February 2017. Further, projects on energy conservation will be taken up by the college under the support of HESCOM. 'Use of LED bulbs' drive in Gokul village, Hubballi will be taken up as a project in the month of March 2017.

Other Programmes-Sale of LED Bulbs:

		DELP programme is being implemented in HESCOM
		from 04.02.2016 as follows,
1	Hosa Belaku	Counter facilities to EESL to sell LED bulbs have been
'•	yojane	established.
		2. As on 31.10.2016 around 12,72,080 LED bulbs have
		been sold in HESCOM's jurisdiction by M/s. EESL.

In addition, the HESCOM has issued Lol for M/s Vritti Solution Pvt. Ltd, for Creating Awareness on Online Payment, ECS facility, Electrical Safety, Energy Saving and popularizing Helpline number 1912 through Audio Message in NWKRTC Bus Stations. Also, working for Ring Back Tune for the Employees of HESCOM regarding Energy Saving and Conservation tips.

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.

ii. 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 centers 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 directives."

Compliance by the HESCOM:

The HESCOM has displayed the posters in O & M sub-divisions and section offices showing the SoP parameters in both Kannada and English. Further, the HESCOM has published the advertisement in all Kannada daily newspapers for one day showing the SoP parameters for the benefit of consumers. The HESCOM is also submitting the quarterly progress report of SoP to the Commission.

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.

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."

Compliance by the HESCOM:

The HESCOM has authorized its Chief Engineers for procurement of good quality Tool Kits and Safety Belts to the employees coming under their jurisdiction. Further, Gum Boots and Rainwear have been procured and issued to the employees.

The HESCOM has also issued Purchase Orders for procurement of uniform cloths (2 pairs for 2015-16 & 1 pair for 2016-17) and awaiting supply by the Firm. Similarly, Purchase Order for supply of Helmets, Rubber Hand Gloves and Hickory Rods has been issued and awaiting supply of materials by the Firm.

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

Further, the HESCOM is conducting regular training programmes to all the linemen regarding safety aspects and prevention of electrical accidents, as part of pre-employment / pre-promotional training and also conducting training under National training program for C &D employees.

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.

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.

Compliance by the HESCOM:

As per the direction of the Commission, HESCOM is persuading with the local bodies i.e., Corporations / Municipalities / Town panchayats etc., for installation of timer switches to streetlights. Further, all new streetlight / high mast installations including extensions made to the existing streetlight circuits have been serviced with LED lamps / energy efficient lamps like induction lamps.

The below are the details of LED streetlights coming under the jurisdiction of HESCOM:

	et lights		of street lights xisting) . of street lights laced with LED ights)		Existing streetlights replacement with LED lights		Existing streetlights replacement with LED Lights		live ant
SI. No.	Description	Total No. of stree (existing)	Target No. of street lights (to be replaced with LED Lights)	Half Yearly Target	Achievement during the month	H1 - cumulative Achievement	Half Yearly Target	Achievement during the month	H2- cumulative Achievement
	1	2	3	4	5	6	7	8	9
1	Hubballi Zone Total	2,06,906	1,06,844	43,561	274	2,742	55,377	0	0
2	Belaga vi Zone Total	2,03,084	2,02,595	27,272	3,400	3,400	1,75,323	312	526
	SCOM - and Total	4,09,990	3,09,439	70,833	3,674	6,142	2,30,700	312	526

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.

v. Directive on load shedding:

The Commission had directed that:

- 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:

- The HESCOM is submitting its projections of availability and demand for power and any avoidable load shedding required to be imposed for every succeeding month in the last week of the preceding month, to the commission, regularly from April'16.
- 2. During contingencies, for any load shedding to be imposed, the HESCOM is imposing load shedding on sub-stations / feeders on rotation basis to avoid inconvenience to consumers/ public. The HESCOM has already initiated the work for providing information to the consumers through SMS regarding the time and duration of load shedding in coordination with REC.

Further, The REC has developed a web based application named as "**Urjamitra**" and HESCOM has already uploaded the data of all 11KV feeders and daily outages are being uploaded in the web based application. There is also provision for sending SMS to consumers

regarding outages. Further, consumer mobile data is being uploaded in consultation with REC and shortly SMS will be sent for every outage. The same can be viewed in www.urjamitra.com. Also, schedule outages are being updated daily in HESCOM's website indicating the time and areas affected for information of the consumers.

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.

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".

Compliance by the HESCOM:

A 24X7 HESCOM Helpline is functioning in the premises of Corporate Office, Hubballi. The Helpline Toll free number is 1800-425-1033 and popular short code for Electricity is 1912(toll) is also mapped. There are 36 Customer Care Executives to support HESCOM consumers round the clock throughout the year.

Features of the Helpline software:

Simple to registration i.e., consumer can register his complaint online by giving very few details of complaints like his name, mobile number, location and nature of the complaint. Upon successful registration, consumer will get a confirmation message to his mobile number with complaint id for future reference.

Conference Call facility is also available i.e., conferencing between Helpline executives, public (compliance) and the HESCOM officials.

On closure of the complaint, message is being sent to consumer's mobile telephone. In case the complaint is not attended, the consumer can call Helpline to re-open the complaint. Re-opened complaints will be viewed by the higher authorities for further needful.

The HESCOM Helpline is following the citizen charter timelines for resolution of complaints. If the complaint is not resolved within the stipulated time, then it will be escalated to the higher officers up to the Managing Director. Once the complaint is escalated to higher officers, then complaint can't be closed by lower officers.

Complaint will be communicated basically to section officers through Helpline software, SMS. All officers are provided with login credentials so that they can view and update assigned complaints on regular basis (if the complaint is in their login).

The consumer can track his complaint online by providing complaint id and his phone number. Reports and graphical representation of the reports are provided for data analysis for higher management.

The HESCOM is publishing contact number of the centralized Consumer Care Centre regularly in all the advertisements of HESCOM and other modes periodically, for the information of the public. Suitable measures are being taken to ensure that all the complaints of consumers are registered through CCC for monitoring the disposal of complaints registered.

Further, the SEEs and EEs are conducting consumer grievance meetings regularly. The consumer grievance redressal system in website has also been uploaded in www.hescom.co.in.

Il number of service stations established, balance numbers of service stations to be established are hereunder:

Hubballi Zone

SL No	Name of the- division	Name of the sub- division	Service stations established in S/D	Balance service stations to be established	Time required to establish balance service stations
1	Hubballi	CSD-I	1	0	0
	urban	CSD-II	1	0	0
		CSD-III	1	0	0
	Hubballi url	oan Iotal	3	0	0
2		RSD	0	1	Within one month
2	Hubballi rural	Kundagol	0	1	Within one month
		Navalagu nd	1	0	
	Hubballi ru	ıral total	1	2	
3	Dharwad	CSD-I	1	0	
	urban	CSD-II	1	0	
	Dharwad ur	ban total	2	0	
	Dharwad	RSD	1	0	
4	rural	Kalaghata gi	1	0	
	Dharwad ru	ural total	2	0	
		CSD	1	0	
		RSD	1	0	
	Gadag	Mundargi	0	1	Within one month
		Nargund	0	1	Within one month
		Laxmeshw ar	0	1	Within one month
		RON	0	1	Within one month
5		Gajendrg ad	0	1	Within one month
	Gadag division total		2	5	
	Hubballi cii		10	7	
		Haveri	1	0	
6	Haveri	Hangal	1	0	
	110,4011	Shiggaon	1	0	
		Savanur	1	0	
	Haveri divis	sion total	4	0	

		Ranebenn ur-l	1	0	
	Ranebennur	Ranebenn ur-II	0	1	6 Months required to
7	Karieberinoi	Hirekerur	0	1	establish balance
/		Byadagi	0	1	service stations
	Ranebenr	nur total	1	3	
	Haveri cire	cle total	5	3	
		Sirsi	1	0	
8	Sirsi	Siddapur	1	0	
		Yellapur	1	0	
		Mundgod	1	0	
		Haliyal	1	0	
		Dandeli	1	0	
	Sirsi divisi	on total	6	0	
		Karwar	2	0	
9		Ankola	1	0	
	Karwar	Kumta	2	0	
		Honnavar	1	0	
		Bhatkal	2	0	
	Karwar division total		8	0	
	Sirsi circl	e total	14	0	
	Hubballi zo	one total	29	10	

No. of	No. of Consumer meetings held in the sub-divisions during the period from April to November 2016							
SI.No	Name of the-D	ivision	Name of the Sub- Division	No of Meetin g held	Date of Meeting	Remarks/ the details of issues discussed		
			CSD-I	4	13/6, 8/8, 17/10 & 4/11	Consumer problems were solved		
	Hubballi urt	oan	CSD-II	4	14/6, 8/9, 18/10 & 15/11	Consumer problems were solved		
			CSD-III	4	13/4, 15/6, 8/10 & 19/10	Consumer problems were solved		
	Hubballi urban division total			12				
			RSD	4	2/4, 4/6, 03/9, & 30/11	Consumer problems were solved		
	Hubballi Rural	Kui	ndagol	2	8/4 & 4/10	Consumer problems were solved		
		Nav	alagund	3	7/4, 2/7 & 4/10	Consumer problems were solved		
	Hubballi rur	al divisio	on total	9				
	CSD-I			5	21/4, 17/6, 27/8, 20/10 & 29/11	Consumer problems were solved		
	Dharwad Urban		CSD-II	8	27/4, 28/5, 29/6, 22/7, 31/8, 20/9, 13/10 & 23/11	Consumer problems were solved		
	Dharwad urb	an divis	ion total	13				
	Dharwad	RS	SD	8	11/4, 5/5, 03/6,	Consumer problems		

Rural			12/7, 24/8, 14/09	were solved
			18/10 & 22/11	
	Kalaghatagi	5	17/5, 20/7, 30/8, 21/10 & 14/10	Consumer problems were solved
 Dharwad	rural division total	13		
	CSD	3	14/5, 17/7 & 11/11	Consumer problems were solved
	RSD	3	16/9, 26/10 & 19/11	Consumer problems were solved
	Mundargi	2	12/7 & 22/9,	Consumer problems were solved
Gadag	Naragund	2	23/5 & 21/9	Consumer problems were solved
	Laxmeshwar	2	23/9 & 4/11	Consumer problems were solved
	RON	3	24/4, 17/8 & 8/11	Consumer problems were solved
	Gajendrgad	5	26/4, 9/6, 4/8, 19/10 & 22/11	Consumer problems were solved
Gadag	g division total	20		
Hubbo	alli circle total	67		
Haveri	Haveri	3	10.05.16, 26.07.16 and 11.08.16	(1) Discussed regarding Konanatambag i village day time 3 phase supply (2) Discussed regarding UNIP Work (3) Discussed regarding UNIP 2011-12 left out IP sets (4) Additional TC at Kanavalli village water supply 25KVA TC (5) Discussed regarding Power supply
	Hangal	2	15.04.16, 13.07.16	(1) Regarding power supply, DTC and additional TC and dangerous location issues (2) Regarding proposal of NJY for left out villages in 1st & 2nd phases, and power supply issues
	Shiggaon	1	23.08.16	2014-15 UAIP Infrastructure creation issues
	Savanur	1	20.05.16	Regarding NJY-III Phase issues and

					power supply
					related issues
	Haveri D	ivision Total	7		
		Ranebennur-I	0		
	Ranebennur	Ranebennur-II	1	10.6.16	Discussed about creating infrastructure for UNIP-2014-15 IP installation.
		Hirekerur	2	26.4.16 and 13.7.16	(1) Regarding proposal of NJY for left out villages in 1st & 2nd phases, power supply issues and (2) Regarding Power supply, DTC and deteriorated poles issues
		Byadagi	5	30.4.16,15.6.16, 22.7.16,13.8.16 and 19.9.16	(1) Discussed regarding Kolhapur village day time 3 phase supply (2) Discussed regarding UNIP Work (3) Discussed regarding UNIP 2011-12 left out IP (4) Gundenahalli village water supply 25KVA TC (5) Discussed regarding power supply
		ennur Total	8		
	Haveri (Circle Total	15		
		Sirsi	2	08-06-2016 20.10.2016	
	Sirsi	Siddapur	10	26.12.2016 28.12.2016 05.05.2016 10.05.2016 10.05.2016 03.10.2016 26.10.2016 10.09.2016	 For IP sets of service connection 10,000/- is burden to farmers More No of GoS and DP sets required at Herur section Newly supplied LED bulbs are not working Lines running in Private land must be replaced
		Yellapur	2	04.05.2016	·

			14.11.2016	
	Mundgod	4	14.06.2016 22.09.2016	Regarding failure of transformers, restringing of loose spans, providing intermediate poles, providing additional transformers.
	Haliyal	3	06.05.2016 10.09.2016 05.12.2016	
	Dandeli	2	05.05.2016 07.10.2016	
Sirsi div	vision total	23	0711012010	
Karwar	Karwar	3	12-05-2016 02-10-2016 03-10-2016	 (1) Regarding interruption of power supply Sunkeri & members have requested to supply power continuously for three regional festivals of Bandishitta. (2) Jugle cutting in Sunkeri area & members have requested to shift the transformer located inside Samadevi Temple to the outside of the compound after completion of Temple construction work (3) Replacement of broken pole & Restringing of loose span at Kadiya
	Ankola	2	15.04.2016 17.12.2016	 (1) Gudigargalli, Mullavada & purlakkibena voltage problem (2) Devigadde voltage problem & AmbugonaVola tage problem
	Kumta	0	-	-
	Honnavar	1	15.07.2016, 21.09.2016	-
	Bhatkal	1	30.04.2016	1) 110 KV sub-

		station at Bhatkal
Karwar division total	7	
Sirsi circle total	30	
Hubballi Zone total	112	

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, BESCOM 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.

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 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:

- 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.

Compliance by the HESCOM:

i) Feeder monitoring at 11 kV level

There are 2,713 number of 11 kV feeders in the HESCOM's Jurisdiction. All the feeders are being monitored continuously by way of feeder-wise energy audit. All the feeders are being audited monthly and monitored with regards to distribution loss and AT&C loss. Also, continuous effort is being made towards loss trajectory reduction plan as directed by the Commission, other nodal agencies of Ministry of Power and Energy Department, Government of Karnataka.

11 KV feeder details

	Total number of 11 KV feeders							
HESCOM	Urban	Rural	Industrial	Exclusive IP sets feeders	Total			
Belagavi Zone	154	559	66	1,121	1,900			
Hubballi Zone	183	404	35	191	813			
Total	337	963	101	1,312	2,713			

Further, the HESCOM is carrying out energy audit of cities and towns regularly. The consolidated energy audit of towns for the FY16 is attached and the details of energy audit of towns from April to July16 on monthly basis is also enclosed for further needful.

The energy audit of 16 towns which have population of more than 50,000 is being carried out in the HESCOM. The below mentioned matrix shows average energy losses recorded in FY16 and FY17 (up to July16).

Loss levels in towns/cities.

V	No. of		L	oss levels		
Year	towns monitored	<10 %	>10, <=15	>15, <=20	>20, <=25	>25
FY-16	16	6	9	1	-	-
FY -17	16	7	8	1	-	-

	Name of the Town / Cities where loss range is							
Year	Below 15%	>15%<=20%	>20% <=25%	> 25%				
FY-16	Hubballi, Dharwad ,Sirsi , Karwar,Dandeli, Gadag , Haveri, Ranebennur, Belgaum , Bijapur, Ilkal . Gokaka, Bagalkote , Jamakhandi, Nippani	Rabakavi Banhatti						
FY 17 up to Aug'16	Hubballi,,Sirsi , Karwar,Dandeli, Gadag , Haveri, Ranebennur, Belgavi , vijaypur, Ilkal . Gokak, NippaniBagalkote Dharwad, Rabkavi Banahatti	Jamakhandi						

It can be seen from the above that, for FY16 as well as FY17, out of 16 towns, the loss levels in 15 towns are less than 15 per cent and only in one town the loss is more than 15 per cent. The various improvement works such as replacement of electromechanical meters by static meters and replacement of 10-year-old meters are being carried out. Further, the various improvement works have been taken up such as, providing additional DTCs, bifurcation of overloaded feeders, and 100% inspection of LT-2/LT-3/LT-5 and HT- installations, to bring down the losses to less than 15 per cent.

ii) Action plan for reduction of high T&D and AT&C loss in towns is as under:

- 1) There are 337 urban feeders in the HESCOM's Jurisdiction. All the feeders are being continuously monitored by way of conducting feeder-wise energy audit and action for corrective measures to rectify any problems arising out in the process, is being taken.
- 2) Re-conductoring of HT and LT lines have been proposed wherever conductor capacity is less by replacing higher capacity conductors.
- 3) Replacement of Weasel conductor by Rabbit conductor in 11 KV lines, in selected 73 towns, is planned in a phased manner.

- 4) Replacement of age-old LT conductors by that of Rabbit in selected 73 towns is planned in a phased manner i.e., about average of 3,286 km per annum is targeted to complete.
- 5) Providing DTC metering in non R-APDRP towns and also to monitor energy audit, under NEF scheme, is in progress. Energy audit in respect of DTCs will be strictly implemented, once the programme of fixing these meters to DTC is completed.
- 6) Providing additional distribution transformer centres, Arial bunched cables, maintenance works of DTCs, etc., in 25 towns under R- APDRP.
- 7) Providing additional distribution transformer centres to non R-APDRP areas under NEF scheme. 2,145 different capacity distribution transformers were also proposed. Total capital budget provision of Rs. 16.98 crore is made.
- 8) Providing UG cables / Arial bunched cables in 11 KV distribution network for Belagavi, Hubballi-Dharwad cities, under NEF scheme and budget provision for UG cable for 11 KV system is proposed at a cost of Rs 50 crore.

lii) DTC Metering:

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 DTC metering.

In Phase-I, as per the above scope, the work of metering of 22,693 DTCs is awarded to M/s. Asian Fab Tech Ltd, Bengaluru, and the work is in the verge of completion.

Further, in DTC metering Phase-II, the following work is also awarded to M/s. Asian Fab Tech Ltd.

- ➤ Metering of remaining 12,162 DTCs.
- ➤ Replacement of the existing meters of 1,942 DTCs (non R-APDRP Town) and 3,996 DTCs (non-IP set).

Iv) DTC- wise Energy Audit:

Altogether 3,350 DTCs were analyzed as per the formats prescribed by the Commission.

- Providing DTC metering in non R-APDRP towns to monitor energy audit, under NEF scheme, is in progress. Energy audit in respect of DTCs will be strictly implemented once the programme of fixing these meters to DTCs is completed.
- 2. Providing additional distribution transformer centres to non R-APDRP areas under NEF scheme. 2,145 different capacity distribution transformers were also proposed. Total capital budget provision of Rs. 16.98 crore is made.

Further as per the Commission's Order vide No: KERC/D/137/14/91, dated 20.04.2015, 11kV feeder-wise as well as DTC-wise energy audit is submitted regularly till March 16. The consolidated 11 kV feeder details for the FY 2016 is enclosed.

The latest status of DTC-wise energy audit:

- Out of the 33,654 metered DTCs, communication is established for 15,330 DTCs in the centralized server established by the Agency for subject work. Data regarding consumption, Phase-wise voltage and currents are available. Due to network issues, balance DTCS are not communicated, and these issues will be resolved at the earliest.
- o The Data of approximately 4,500 DTCs available at the centralized server is integrated with the data of the HESCOM's system provider viz., M/s N-soft service private Ltd for energy audit during the month of November 2016.
- Updating the details of the balance metered DTCs in HESCOM's system provider server is in process.
- o Due to software issues while integrating the data, energy audit of the some of the metered DTCs is not being done. This issue will be resolved by the Agency M/s. Asian Fab Tech and M/s N-soft at the earliest.

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 15th May, 2017.

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.

Compliance by the HESCOM:

HVDS scheme has been implemented on 11KV Kummur feeder of Byadagi sub-division and the project has been completed on 31.01.2015. The distribution losses before implementation of HVDS were 16.77 per cent and after implementation of HVDS, the distribution losses are 12.00 per cent, and thus achieving a reduction in distribution losses of 4.77 per cent.

Further, as per the Commission's revised Guidelines, an estimate for implementation of HVDS in Sadalga Hobli of Chikkodi division in Belagavi district is already prepared and submitted to the Commission for approval vide letter No. HESCOM/SEEPMC/EEP3/AEE1P3/2383/13-14/2016-17/12463-70, dated 07.09.2016.

The salient features of this project is as follows:

- 1. Name of the feeder: 11KV Bavanmath Feeder of 33/11KV Bhoj MUSS.
- 2. Existing infrastructure of 11KV Bavanmath Feeder:
 - Length of HT line in ckm:8.38
 - Length of LT line,3 phase 4Wire in ckt.km:14.79
 - Existing DTCs: 25 KVAx10 Nos, 63 KVAx6 Nos & 100 KVAx8 Nos
 - Existing No. of IP sets: 181
- 3. Proposed & retained infrastructure of 11KV Bavanmath Feeder under HVDS:
 - a. Retained length of HT line ckt.km: 8.38
 - b. Proposed length of HT line by conversion of LT line in ckt.km: 10.10
 - c. Proposed Length of LT line, LT ABC line in ckt.km: 6.78
- 4. Retained DTCs in Nos: 25 KVAx10

- 5. Proposed DTCs in Nos: 25 KVA x 83, total: 93 numbers.
- 6. Cost of the estimate: Rs187.76 lakh.
- 7. Existing TC set of 63 & 100 KVA has been retained for 25 KVA proposed transformers.
- 14. DTC metering not proposed.
- 15. Before HVDS, percentage HTVR= 2.90
- 16. After HVDS, percentage HTVR= 2.72
- 17. Provision of 1 No of Auto recloser with sectionaliser
- 18. Payback period is 4.88 (4 years 10 Months)
- 19. Cost Benefit Ratio= 1.61
- 20. Annual savings after implementation of HVDS 6,98,316.67 units
- 21. 9-meter-long RCC poles 40 numbers and 9-meter-long PSC poles 162 numbers are proposed for conversion of LT to HT lines in view of field constraints such as the line passes through ever green sugarcane fields having crop height of 8 to 9 meters. Therefore, in order to avoid fire accidents, existing 7.5 /8-meter-long poles are to be replaced.
- 22. The Existing LT line has weasel conductor and also it is aged and deteriorated hence, it is not reused.

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.

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.

Compliance by the HESCOM:

The Detailed Work Award for implementation of NJY phase-1 comprising of 246 feeders spread over 20 taluks was issued during May-September 2011 with completion period of nine months. Further, the Detailed Work Award for NJY phase-2 comprising of 210 feeders spread over 14 taluks was issued during January-March 2012. The delay in implementation of the project is attributed to problems in the field during the execution of works such as Right of Way (ROW) issues, approval from Railway authorities, forest clearances and opposition from farmers for erection of poles in their fields I. As on 31.10.2016, totally 434 feeders under both phase 1&2 have been commissioned.

Further, the HESCOM has also taken up feeder segregation works under phase-3. The progress of the works and remaining feeders to be completed and the date of completion of the feeders are shown below:

	Total no. of feeders proposed under NJY		No. of feeders commissioned as on 31.10.2016		Work under progress		Probable date of completion of feeders				
Ph-I	Ph-II	Ph-III	Ph-I	Ph-II	Ph-III	Ph-I	Ph-II	Ph-III	Ph-I	Ph-II	Ph-III
246	210	92	237	197	0	5	06	17	Dec' 2016	Dec' 2016	September - 2017/ October - 2017/ January- 2018/

As directed by the Commission, the analysis for evaluating the benefits accrued to the system, in terms of reduction in failure of distribution transformers, improvement in tail-end voltage and improvement in supply, reduction in interruptions have been carried out through M/s CPRI. The study suggests that there is overall improvement in supply condition after implementation of NJY 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.

Further, all efforts are being made to commission the remaining feeders in a time bound manner and action has been taken to ensure that NJY feeders are not tapped illegally for operating IP sets.

The HESCOM has 1312 numbers of exclusive agricultural feeders due to implementation of NJY scheme. Therefore, computation of IP-set consumption is being made on the basis of exclusive IP-set feeder meter readings at the sub-stations.

Commission's Views:

The Commission notes that the HESCOM has not commissioned all the feeders taken up under NJY phase 1 & 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 phase1& 2works. 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.

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.

Compliance by the HESCOM:

M/s Energy Efficiency Services Limited (EESL), New Delhi, is executing a DSM project on a pilot basis in Byadagi and Nippani sub-divisions. The EESL has completed replacement of totally 590 old pump sets by new energy efficient pump sets. However, due to issues of Measurement & Verification (M&V) and Billing which are not yet resolved, approval was not accorded to the firm by the HESCOM for replacement of balance pump sets.

Further, the HESCOM vide its letter No. HESCOM/MD/PS/224 92 dated 09-12-2015, has addressed to the Additional Chief Secretary, Energy Deportment, GoK, narrating the pros and cons of the DSM project. In this regard, 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 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.

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.

Compliance by the HESCOM:

The details of the un-electrified households identified by the HESCOM and the action taken to provide electricity to these households under various schemes are as stated below:

Status as on 31.08.2016

SI. No	Particulars	Nos
1	Total No. of rural households existing as on 31.03.2015	19,53,791
2	No of rural households electrified as on 31.03.2015	16,23,449
3	Balance No. of households to be electrified	3,30,342
4	BPL households to be electrified	1,65,551
5	BPL households electrified as on 30.09.2016	2,703
6	APL households to be electrified	1,64,791
7	APL households electrified as on 30.09.2016	96,217
8	BPL households proposed under RGGVY 12 th Plan (Haveri district)	18,638
9	BPL households electrified under RGGVY 12 th Plan scheme (Haveri district) as on 15.10.2016	3,816
10	Balance BPL households to be electrified under RGGVY 12 th Plan (Haveri district)	14,822
11	BPL households proposed under DDUGJY	89,569
12	BPL households to be proposed for electrification	54,641
13	APL households To Be Electrified	68,574

- As per the revised allocation under DDUGJY scheme, the number of BPL households proposed under DDUGJY are enhanced from 85,104 to 89,569.
- Further, 3,816 BPL households are electrified under RGGVY 12th Plan scheme as on 15.10.2016.
- The balance rural households to be electrified is 1,23,215 which are inclusive of both APL households of 68574 and BPL households of 54,641.

The details of electrification of households under various schemes are as stated below:

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:

ne of the district	No. of villages proposed for intensive electrification	Total No. of habitations	lo. of habitation versed und scheme		Project cost in Rs lakh	proved project st by REC in Rs lakh	Award date	Award Amount	
Name	2 4 0		No	1 48	P P P P P		Appi cost		⋖
Haveri	692	741	702	18638	5568	606.51	607.02	10.09.2015	662.75

The work was awarded to M/s. Praveen Electrical Works, Gadag, vide letter No. HESCOM/SEE(PMC)/EE-P1/Indent-1314(A)/2015-16/Cys-2027 & CYS-2028, dated 10.09.2015 and the progress as on 15.10.2016, 3816 households are electrified.

2. Electrification of un-electrified villages:

- 1. Electrification of 30 un-electrified villages covering 827 households:
 - A. Tender is invited for electrification of these villages under standalone system of DDG scheme at a cost of Rs 4.135 crore.
 - B. Simultaneously, 3 villages viz., Landein Karwar, Nlgunde and Terali in Joida block of Uttar Kannada district have been electrified departmentally covering 103 households.
 - C. Work is in progress in Ivoli, Kuveshiand Medini villages.
 - D. 3 villages viz., Viral, Bazar Kunang and Aveda Poppalwadi in Joida block of Uttar Kannada district have been electrified through Solar Roof top (SPV) covering 50 households by the sponsors.
 - E. In Uttar Kannada district, water supply applications are registered in 35 habitations in 18 un-electrified villages and it is intended to carry out the works by conventional grid connectivity using overhead lines with the assistance of the district administration. The total estimate cost considering overhead line for all 25 villages, works out to Rs 21.94 crore. In view of the assistance extended by the District Administration, the works are in progress and by extending the infrastructure created for energization of water supply, the existing 548 un-electrified households in these villages will be electrified.
 - F. In case of 5 un-electrified villages in Khanapur taluk of Belagavi district, the tender is invited for electrification of 106 households by installing 45 KW solar photovoltaic based decentralized distributed generation system on build, operate, maintain and transfer (BOMT) basis, at a cost of Rs.1.24 crore.
 - G. Considering all the above, for electrification of un-electrified villages using overhead line in Uttar Kannada and centralized SPV plant in Belagavi district, a total cost of Rs 23.18 crore is required.

- a. Hence, it was requested to ACS, GoK vide letter No. HESCOM/ SEE(PMC)/EE-P1/AEE-2/2016-17/7825-26, dated 16.07.2016 to recommend to REC to re-allot Rs 4.135 crore sanctioned under DDG scheme to un-electrified village component under DDUGJY scheme and retain the total amount of Rs 7.05 crore initially allocated for un-electrified villages and re-allocate Rs 16.13 crore from metering component to un-electrified village component.
- b. ACS, Energy Department, GoK vide his letter No. EN 11 VSC 2015 dated 29.09.2016, has recommended to REC to approve reallocation for the electrification of un-electrified villages component.

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

SI. No.	Name of the district	Total No of BPL households
1	Uttara Kannada	9,672
2	Haveri	7,627
3	Gadag	11,477
4	Dharwad	3,324
5	Vijayapura	12,759
6	Bagalkot	8,511
7	Belagavi	35,339
8	Total	88,707

- Rs. 48.34 crore sanctioned to 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 under DDUGJY.
- Tenders were invited under DDUGJY in 8 Packages under Partial Turnkey basis. But, none of the bidders has participated in 7 packages except one bidder in Uttara Kannada district.
- As per the direction of MoP, the tenders were invited on total turnkey basis on 26.09.2016 in 12 packages and the last date for submission of bid was 10.11.2016.
 - 1. Connecting unconnected Rural Households proposed under Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) scheme:

SI. No.	Name of the District	households as proposed to be per Census electrified including BPL under DDUGJY		No of BPL households proposed to be electrified under DDUGJY
1	Uttara Kannada	24,529	22,680	20,510
2	Haveri	31,059	13,360	9,020
3	Gadag	27,070	21,946	21,946
4	Dharwad	10,489	10,489	10,142
5	Vijayapura	9,611	69,611	13,176
6	Bagalkot	43,478	34,885	12,739
7	Belagavi	124951	116495	78018
8	Total	2,71,187	2,89,466	1,65,551

2. Electrification of Mettinagadde and 13 un-electrified Habitations in Honnavar Taluk of Uttara Kannada District:

- Electrification of 83 rural households in Mettinagadde and 13 unelectrified habitations in Honnavar Taluk of Uttara Kannada district is proposed under this project.
- Detailed Work Award was issued to M/s. Mahesh Electricals & Telecom, Pune vide letter No. HESCOM/SEE(PMC)/EE-P1/Indent-839(A)/2014-15/Cys-763 for supply portion and the work has been completed on 28.05.2015.

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.

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 visà-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:

The directive on sub-division as a Strategic Business Unit (SBU) has been dropped and instead the Commission has issued the directive on the Financial Management Framework in HESCOM to assess the performance of

the divisions/sub-divisions in its jurisdiction. In this regard, Gadag division has been selected for implementation of Financial Management Framework as a pilot project duly entrusting the work to an external consultant agency. Therefore, the HESCOM will take up the work of fixing boundary meters in Gadag division so as to get the data of the division to study the exact energy input, consumption, loss etc., pertaining to the division. In this regard, the HESCOM has already made a submission to the Commission vide letter No. HESCOM / GM(T)/EE-4/AO/16-17/ CYS-1403 dated 22.07.2016, to allow some time to collect the data.

The progress at present is that the work of fixing boundary meters is completed. Arrangements are being made to take readings. Rating and calibration of meters being done by the HESCOM's MT wing. In this regard, HESCOM will submit the progress report regularly to the Commission.

Further, HESCOM will take up the implementation of Financial Management frame work in other divisions of HESCOM based on the results of pilot study in Gadag division.

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 per cent 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.

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."

Compliance by the HESCOM:

Following works have been completed for prevention of electrical accidents to employees/consumers/ public.

	FY15	FY16
Providing intermediate poles in lengthy span in Nos.	1,898	3,391
Replacement of broken / deteriorated poles Nos.	2,386	2,137
Shifting of DTCs in Nos	298.3	416
Replacement of deteriorated conductor in Km	71.63	70.58

The details of rectification works taken up in FY17 are as follows:

- ➤ Providing intermediate poles in lengthy span 845 numbers.
- ➤ Replacement of broken /deteriorated poles 1549 numbers.
- ➤ Shifting of transformers to safer place–79 numbers.
- Replacement of deteriorated conductor 100.89 Km
- ➤ Shifting of HT/LT lines 5.31 Km
- ➤ HT re-conductoring: 62.8 km covering 14 feeders is tendered, out of which 18.48 km covering 3 feeders is completed and the balance work is in progress.
- ➤ LT re-conductoring: 496.12 km covering 281 feeders is tendered, out of which 64.1 km covering 29 feeders is completed and the balance work is in progress.
- > Transformer maintenance work has been carried out to reduce the accident.

The following are the details of accidents occurred and the amount spent district-wise, towards rectification of hazardous installations to prevent accidents:

SI. No	District	Electrical accidents in FY15	Expenditure incurred in Rs crore	Electrical accidents in FY16	Expenditur e incurred in Rs crore	Electrical accidents in FY-2017 (up to Sep'16)	Expenditure incurred in Rs crore
1	Dharwad	43	0.039	28	0.36	19	0.15
2	Gadag	30	0.0044	22	0.07	14	0
3	Uttar Kannada	32	0.24	21	1.4	21	1.99
4	Haveri	37	0.132	32	1.73	30	0.36
5	Belagavi	89	0.2	74	1.44	11	1.14
6	Vijayapura	13	0.028	16	0.095	1	0.051
7	Bagalkot	21	0.049	16	0.37	3	0.155
	Total	265	0.692	209	5.46	99	3.85

Further, budget provision is made every year, for preventive measures to reduce accidents. As a result, the number of accidents in some districts have come down. Further, action is being taken to educate the employees regarding safe use of equipment and consumer awareness programme about safety aspects is being conducted at the district Headquarters. All efforts are being made to reduce the electrical accidents occurring in the distribution system.

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.