

APPENDIX

REVIEW OF COMPLIANCE OF COMMISSION'S DIRECTIVES

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

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

The Commission in its Tariff Order dated 14.05.2018 and the earlier Tariff Orders had directed that the BESCOM shall ensure that Consumer Interaction Meetings chaired by the Superintending Engineers, are conducted in each of its O&M sub-divisions according to a pre-published schedule, at least once in every three months. Further, the consumers were to be invited to such meetings giving advance notice through emails, letters, BESCOM's website, local newspapers etc., to facilitate participation of maximum number of consumers in such meetings. **The BESCOM was required to ensure that the proceedings of such meetings are recorded and uploaded on its website, for the information of consumers.** Compliance in this regard was to be reported once in three months to the Commission, indicating the dates of meetings, the number of consumers attending such meetings and the status of redressal of their complaints.

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

Compliance by the BESCOM:

BESCOM has initiated Consumer Interaction Meetings during the year 2012 as per the directives from Hon'ble KERC and the aforesaid Meetings are being conducted at all Sub-Divisions on third Saturday of every month with all proper preparations. Concerned Superintending Engineers and Executive Engineers and Assistant Executive Engineers are chairing the Consumer Interaction Meetings at the Sub-Divisions pertaining to their jurisdiction on rotation basis. Concerned Superintending Engineers and Executive Engineers have been directed to chair Consumer Interaction Meetings at two different Sub-Divisions in a month on rotation basis. The Consumer Interaction Meetings are being monitored by the General Manager (Customer Relations) Section, Corporate Office, BESCOM. Details of the Consumer Interaction Meetings held at the sub-divisions during the 2nd Quarter of FY19 are as given below:

Sl. No	Month	Name of the Circle	No of Sub-Divisions Existing	No of Sub-Divisions in which consumers interaction meeting conducted	No. of Complaints Received	No. of Complaints Disposed	Closing Balance	No of Consumers Attended.
1	Jul-18	BANGALORE SOUTH CIRCLE	13	13	27	27	0	49
	Aug-18		13	13	18	18	0	41
	Sep-18		13	13	12	12	0	33
2	Jul-18	BANGALORE NORTH CIRCLE	11	11	18	18	0	61
	Aug-18		11	11	17	17	0	58
	Sep-18		11	11	18	18	0	57
3	Jul-18	BANGALORE EAST CIRCLE	13	13	31	31	0	63
	Aug-18		13	13	22	22	0	59
	Sep-18		13	13	23	23	0	53
4	Jul-18	BANGALORE WEST CIRCLE	12	12	16	16	0	41
	Aug-18		12	12	19	19	0	75
	Sep-18		12	12	16	16	0	55
5	Jul-18	BANGALORE RURAL CIRCLE	8	8	17	17	0	24
	Aug-18		9	9	9	9	0	19
	Sep-18		9	9	10	10	0	25
6	Jul-18	RAMANAGAR A CIRCLE	16	16	34	34	0	53
	Aug-18		16	15	37	35	2	53
	Sep-18		16	16	38	34	4	51
7	Jul-18	KOLAR CIRCLE	16	16	25	25	0	100
	Aug-18		16	16	29	29	0	104
	Sep-18		16	16	38	38	0	118
8	Jul-18	DAVANGERE CIRCLE	17	17	39	39	0	131
	Aug-18		17	17	37	37	0	93
	Sep-18		17	17	29	29	0	84
9	Jul-18	TUMKUR CIRCLE	18	18	37	37	0	111
	Aug-18		18	18	43	43	0	121
	Sep-18		18	18	89	89	0	232
Total			125	373	748	742	6	1964

Summary of the Consumer Interaction Meeting for the 2nd Quarter of FY19 is as below:

Consumers Interaction Meeting in O&M Sub-Divisions (2 nd Qtr) of 2018-19						
ESCOM	No. of Sub - Divisions Existing	No. of Sub-Divisions in which consumers interaction meeting conducted	No. of Complaints Received	No. of Complaints Disposed	Balance	No. of Consumers Attended
BESCOM	146*	146	748	748	0	1964

Note: During, 2nd quarter of FY-19 additional 21 sub-divisions were formed but sub-divisional offices were not setup. Hence CIM's are conducted in 125 sub-division offices.
6 (six) numbers of complaints were disposed-off after the CIM's, thus the total number of complaints are disposed.

Commission's Views:

The BESCOM has submitted the details of consumer interaction meetings conducted in its jurisdiction during 2nd quarter of FY19.

The Commission in the KPTCL and ESCOMs' Review Meeting held on 16.11.2018, had reiterated its directions to the ESCOMs to conduct the consumer interaction meetings in the sub-divisions chaired by either the jurisdictional Superintending Engineer or the jurisdictional Executive Engineer to effectively redress the consumer grievances. The Commission notes the submission made by BESCOM that, such meetings are being conducted on a single day i.e., on 3rd Saturday of every month in its entire area covering all the sub-divisions. In the preliminary observations, the Commission had raised a concern that, if such meetings are conducted on only one day of the month in its entire area covering all sub-divisions, it is not clear as to how the SEE or EE could attend and chair all such meetings, as directed by the Commission. The Commission had directed BESCOM to clarify this by furnishing the details, indicating the dates on which the meetings were conducted. BESCOM has not furnished the details as desired by the Commission, instead, has furnished the details in the form of the summary, in its replies.

The Commission is of the view that the dates of such meetings in the sub-divisions should be staggered in a quarter, so that the senior officers such as the Superintending Engineer or the Executive Engineer can chair the meetings

and are able to redress all the complaints relating to supply of electricity. Accordingly, the BESCOM is directed to conduct consumer interaction meetings at the sub-divisions on different designated dates. Further, the Commission desires that, **such meetings are strictly chaired by either the jurisdictional Superintending Engineer or the jurisdictional Executive Engineer and no other officer. The Commission also declares that, if the consumer interaction meetings are conducted in the sub-divisions without the participation of the Superintending Engineer or the Executive Engineer, then it will be considered as non-compliance of the Commission's directives** and the Commission would consider imposing a penalty of up to Rs. One lakh per O&M sub-division per quarter for each instance of non-compliance and also direct that such penalty shall be recovered from the concerned Superintending Engineer or the Executive Engineer, as the case may be, who fails to conduct such meetings.

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

In addition to the quarterly meetings to be chaired by the jurisdictional SEE or the jurisdictional EE, the concerned Asst. Executive shall conduct the CIM on third Saturday of every month so as attend to the grievance of the consumers, as is being done in BESCOM as reported in the tariff filing.

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

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

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

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

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

Compliance by the BESCOM:

The month-wise details of number of open access consumers, open access units scheduled / consumed and illegally banked energy is furnished in the following table for FY18:

Month	No. of Consumers	Scheduled energy in MU	Forfeited energy in MU	Revenue gain in Rs. Crores
Apr-17	127	128.43	15.32	13.79
May-17	143	135.41	13.41	12.07
Jun-17	136	138.16	12.24	11.01
Jul-17	108	118.47	6.03	5.43
Aug-17	88	101.12	6.78	6.10
Sep-17	84	61.71	4.85	4.37
Oct-17	77	56.42	4.64	4.18
Nov-17	96	96.91	7.97	7.18
Dec-17	102	117.06	6.56	5.90
Jan-18	105	104.01	6.89	6.20
Feb-18	108	102.83	6.52	5.87
Mar-18	103	65.79	4.26	3.83
FY-18	1277	1226.31	95.47	85.93

The month-wise details of number of open access consumers, open access units scheduled / consumed and illegally banked energy is furnished in the below table for FY19.

Month	No. of Consumers	Scheduled energy in MU	Forfeited energy in MU	Revenue gain in Rs. Crores
Apr-18	93	66.98	4.71	4.24
May-18	95	48.27	2.57	2.31
Jun-18	81	57.89	2.65	2.39
Jul-18	84	60.48	2.86	2.57
Aug-18	80	56.70	1.59	1.43
Sep-18	70	33.03	1.61	1.45
FY19 Till September 2018			15.99	14.39

Commission's Views:

The Commission notes that the BESCOM has complied with the directive by initiating preparation of energy bills on monthly basis considering the 15 minute's time block period in respect of EHT / HT consumers importing power through power exchange under Open Access. It is seen that the introduction of 15 minute's billing has resulted in significant quantum of energy saving of 95.47 MU during FY18 and 15.99 MU during FY19 till September 2018. The stand taken by the Commission in directing the BESCOM to prepare monthly EHT / HT consumer bills on 15 minute's time block period has prevented a revenue loss of Rs.85.93 Crores to BESCOM during FY18, and Rs.14.39 Crores during FY19 till September 2018 by consumers who took advantage of its laxity in enforcing correct billing. The BESCOM is required to adhere to the directive and submit regularly month-wise details of number of open access consumers, open access units scheduled / consumed and illegally banked energy if any along with the details of revenue gain.

BESCOM shall ensure that the scheme of 15 minutes' time block billing is enforced on all applicable EHT / HT consumers from the month from which the necessary infrastructure was available. BESCOM shall also note that the directive in this regard was made part of the Tariff Order 2017, considering that the Commission's earlier directions in the matter was not being followed, **the Commission reiterates its directive that the BESCOM shall continue to prepare**

the energy bills on monthly basis considering the 15 minute's time block period in respect of all EHT / HT consumers importing power through power exchanges under open access and submit quarterly compliance thereon, regularly to the Commission.

3) Directive on Energy Conservation:

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

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

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

Compliance by the BESCOM:

BESCOM has issued a Circular on 30.07.2016 to use only BEE 5 star rated Energy Efficient Appliances in all offices of BESCOM. And issued a circular on 26.03.2018 mandating the use of LED lamps in all offices of BESCOM.

BESCOM has selected three offices namely Mallechwaram division, C2 sub-division and C3 sub-division for replacement of existing incandescent bulbs, CFLs and tube lights with LEDs and has instructed the concerned to submit the energy saving details within three months.

The BESCOM has implemented "Hosa Belaku" and "Pavan" programme. Under this programme, the BESCOM is distributing 9W LED bulbs, 20W LED tube lights and BEE 5 Star rated Ceiling fans through M/s Energy Efficiency Services Pvt. Ltd. The progress of sale as on 30.11.2018 is submitted as follows:

Particulars	Cumulative Progress (Nos)
9W LED bulbs (December-2015 to November-2018)	1,00,84,372
20W LED tube light (January-2017 to November -2018)	2,58,328
BEE 5 star rated Ceiling Fan (April-2017 to November -2018)	30,989

BESCOM has taken several initiatives to create awareness among the public on use of energy efficient appliances through various communication modes such as, by distributing pamphlets, printing slogans on the back of electricity bills, magazines etc., BESCOM will make all possible efforts to ensure that the energy efficient appliances are being installed in the consumer premises and to implement the directive on energy conservation, circular from GoK is sought.

Commission's Views:

While appreciating the efforts of BESCOM in selling over one Crore LED bulbs, the Commission notes that the BESCOM has not issued any Circulars towards implementation of the directive. BESCOM has not submitted the compliance in respect of ensuring and providing of LED lamps / energy efficient lamps while servicing of new streetlight / high mast installations including extensions made to the existing streetlight circuits. This shows that the BESCOM has not implemented the directive in its letter and spirit, to take forward the initiative of conservation of energy. It is also observed that the BESCOM has issued a circular to all its offices to ensure use of BEE five-star rated Energy Efficient Appliances. However, BESCOM has not mentioned about effective steps being taken in the field to ensure that all new installations are serviced only when BEE five-star rated Air Conditioners, Fans, Refrigerators, etc., are installed in the consumers' premises. It has also noted that the BESCOM has implemented "Hosa Belaku" and "Pavan" programme under which it is

distributing energy efficient lamps, fans, etc., to the consumers which appears to have had limited success. On the whole, the Commission finds that the progress in implementation of this directive could have been much better. Therefore, the Commission directs BESCOM to focus on effective implementation of this directive by reviewing periodically the progress of implementation in the field and take necessary corrective steps.

Further, the Commission directs BESCOM to conduct the awareness programs to the consumers / public, for use of LED bulbs, energy efficient electrical equipment etc., by making use of the fund reserved for customer relation / education program. As undertaken during the review meeting, BESCOM shall adopt only energy efficient bulbs and appliances in some of its offices and demonstrate their benefits to the general consumers.

The Commission reiterates that the BESCOM shall continue to service all the new installations only after ensuring that the BEE *** (Bureau of Energy Efficiency five-star rating) rated Air Conditioners, Fans, Refrigerators, etc., are being installed in the consumers' premises, to service all new streetlight / high mast installations including extensions made to the existing streetlight circuits, only after ensuring that the LED lamps / energy efficient lamps like induction lamps are provided to the street light points and the compliance thereon shall be submitted to the Commission once in a quarter on a regular basis. Inspection by jurisdictional Executive Engineers / Superintending Engineers of new installations, selected on random basis shall be undertaken to cross check adherence to the directive by the field offices.**

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

The BESCOM is directed to implement the specified Standards of Performance strictly, while rendering services related to supply of power as per the KERC (Licensee's Standards of Performance) Regulations, 2004. Further, the BESCOM is directed to display prominently, in both Kannada & English languages, the details of various critical services such as replacing the failed transformers, attending to fuse off call / line breakdown complaints, arranging new services, change of faulty meters, reconnection of power supply, etc., rendered by it as per Schedule-1 of the KERC (Licensee's Standards of Performance)

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

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

Compliance by the BESCOM

BESCOM has prescribed minimum Standard of service as per the directives from the KERC with reference to quality, continuity and reliability of Services. BESCOM is always meticulous in delivering better services to its consumers.

The Standards of Performance specified in Schedule-I relates to Standards of Performance for which consumers are eligible for payment of an amount in the manner provided in the Schedule-I, in case the BESCOM fails to achieve the Standards of Performance. The SoP parameters have been displayed in all the sub-divisions and O&M sections.

BESCOM will submit the compliance regularly.

The details of the SoP parameters have been displayed in all the Sub-divisions and O&M sections.

Implementation of Standards of Performance (SoP)			
No. of Sub-divisions	No. of Sub-divisions where SoP is displayed	No. of O&M sections	No. of O&M sections where SoP is displayed
146	146	533	533

Commission's Views

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

It has come to the notice of the Commission that the consumers are generally not aware of the SoP prescribed by the Commission and as a result, the consumers are still facing difficulty in getting prompt services. Hence, the Commission directs the BESCOM to carry out effective supervision over the functioning of field offices particularly in rendering of services to the consumers, relating to restoration of supply of electricity. The Commission also directs BESCOM to submit the details of number of violations of SoP by officers, sub-division wise, month wise, amount of penalty levied on the officers and the amount paid to the consumers for any delay in service.

The Commission also directs the BESCOM to take action to display the SoP in the format mentioned above in its official web site for information of the consumers.

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

The Commission directs BESCOM to conduct awareness campaign at the Hobli levels for educating the public about the Standards of Performance prescribed by the Commission. BESCOM shall conduct necessary orientation programme for all the field officers and the staff up to linemen to educate them on the SoP and the consequences of non- adherence to the SoP. Further, the Commission directs BESCOM to publish the "HAND BOOK" (ಕೈಪಿಡಿ) in Kannada on the SoP and arrange to distribute to all the staff and stake holders. On any failure to implement this direction within 3 months of the issue of this order, the Commission would be constrained to initiate penal proceedings under Section 142 of the Electricity Act, 2003, against the BESCOM officials, for non-compliance of the Commission's Directives. At the same time BESCOM shall consider bringing in a system of recognizing the best performing sub-division / section in terms of adherence to SoP and publicize such recognition so as to incentivize better performance from the officers / personnel concerned.

The Commission reiterates that, the BESCOM shall continue to strictly implement the specified SoP while rendering services relating to supply of electricity as per the KERC (Licensee's Standards of Performance) Regulations, 2004. The compliance in this regard shall be submitted once in a quarter to the Commission regularly.

5) Directive on use of safety gear by linemen / Powermen:

With a view to reducing the electrical accidents to the linemen working in the field, the Commission directs the BESCOM to ensure that all the linemen in its jurisdiction are provided with proper and adequate safety gear and also ensure that the linemen use such safety gear while working on the network. The BESCOM should sensitise the linemen about the need for adoption of safety aspects in their work through suitably designed training and awareness programmes. The BESCOM 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 BESCOM shall implement this directive within one month from the date of this order and submit compliance report to the Commission.

Compliance by the BESCOM:

- a) Safety gears are procured from time to time and issued to field staff for usage of the same in the field.
- b) Rate Contract order for One / Two Years is issued to all the concerned Superintending Engineers of O & M Circle to place the Purchase Orders to procure Safety materials like Reflective jackets, Rechargeable LED Hand torch, Eyewear, Rope, Rainwear, Hand gloves, Helmets and Telescopic Earthing rods as per their requirements so that all staff wear safety gears while working.
- c) Purchase order is placed on 03.10.2018 for procurement of Safety shoes & these materials are expected on 04.12.2018.

- d) Tenders are floated for procuring Insulated Toolkit to be issued to the Power men of BESCOM. The technical bids were opened on 14.11.2018. Since only one bidder has quoted, short term tender is called and it will be opened on 03.12.2018.
- e) Instructions have been issued from the Corporate Office to the field staff to ensure the use of safety materials, monitor the same and to follow the safety protocol at work.
- f) Every Monday the Section Officer will conduct a safety meeting before starting the work and will preach the Safety Mantra to all field staff.
- g) Instructions have been issued from the Corporate Office (to the field Officers) to conduct the surprise checks of works to verify whether the safety materials are used, safety zone is created etc., as per the check list provided. A mechanism is there to deduct one-day's casual leave if any of the staff is found not using safety equipment on three occasions. Further penalty is being imposed to the officer who does not conduct the surprise checks.
- h) Safety materials such as Reflective Jackets, Rain wear, LED hand torch, FRP Ladder, Safety eye wear & Poly propylene rope have been issued to all Power men.
- i) Materials such as Toolkit, Safety belts, Helmets & Earthing rods will be issued within April-2019. However complete set of safety materials will be issued to all working staff by April-2019.
- j) All the safety materials are used by BESCOM staff on routine work without fail, in shift basis, which is kept at BESCOM vehicle.
- k) The status of providing the safety gear to the linemen is detailed in the following table:

ESCOM	Total Nos of Linemen		No. of linemen provided with safety gear		No. of linemen yet to be provided with safety gear		Likely date of providing safety gear to all linemen	
	Regular	Contract	Regular	Contract	Regular	Contract	Regular	Contract
BESCOM	8524	593	5419	184	3105	409	Orders for procurement of materials placed on rate contract basis for one / two years. Purchase orders have been placed by all SEEs and some of the materials are dispatched from manufacturers and will be issued to all linemen within 15 days.	

Commission's Views:

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

The long time take by BESCOM to procure safety shoes, insulated tool kits etc., indicates the lack of seriousness of BESCOM in the matter. Adequate quantity of all safety gears / equipment shall be procured periodically and sufficient inventory of these materials shall also be maintained. BESCOM should take action to empanel suppliers of safety gear / equipment, so that the procurement is quicker.

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

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

6) Directive on Providing Timer Switches to Streetlights by BESCOM:

The Commission directs the BESCOM to install timer switches using own funds to all the streetlight installations in its jurisdiction wherever the local bodies have not provided the same and later recover the cost from them. The BESCOM 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 street light installations shall be reported to the Commission within three months of the issue of this Order.

Compliance by the BESCOM:

BESCOM submits that a letter dated 14.02.2017 has been addressed to the BBMP and Municipal Corporations to take up the work of providing timer switches to streetlights on top priority. It is stated that BESCOM has issued circular dated 15.09.2016 and 06.05.2017 to the field staff to insist on installation of timer switches to the new street light installations. Any extension / modification carried out to the existing street light installations shall be serviced only with timer switches. The Directorate of Municipal Administration vide letter dated 21.07.2018 has replied that, as per the Government Order dated 15.03.2018, directions are issued to all the Smart Cities and Urban Local Bodies of Karnataka to replace existing conventional lamps with LED lamps along with Centralized Control and Monitoring System (CCMS).

The CCMS, monitoring system for smart street lighting has several advantages viz., Remote switch off, Dimming facility, Smart metering, Surge protection, Theft detection mechanism, reduce the energy consumption and hence savings in electricity bills. This will serve the purpose of timer switches.

The status of providing timer switches as on September 2018 is as detailed below:

Existing Street light installations	Street Lights provided with timer switches	Balance to be provided with timer switches	Likely date of completion of all installation
56,359	16,968	42,979	-

Providing timer switches to the street lights is the job of BBMP and the local bodies. Hence, BESCOM requests the Hon'ble Commission to eliminate the directive.

Commission's Views:

The Commission observes that the progress of providing timer switches to street lights as compared to the previous year is very poor. As per the data furnished by BESCOM, it can be seen that, the timer switches existing as on October, 2017 is 16,857 and as on September 2018 it is 16,968 i.e., only 111 number of timer switches are added to the system in the past one year. Whereas, the number of street light installations serviced during the previous year was 1,702 (56,359 – 54,657). This shows that the BESCOM has not given adequate focus to this issue and has not coordinated with the concerned local authorities in installation of timer switches while servicing the new street light installations. Thus, the inaction and failure of the BESCOM has actually resulted in increase in the number street light installation requiring timer switches. Failure to remedy this situation would not only result in wastage of electricity, but also shorter life of the installations and resultant avoidable expenditure on their replacement. Hence, BESCOM should seriously pursue this matter with the concerned local authorities strictly ensure fixing of timer switches while servicing the new installations and also repairs of faulty timer switches.

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

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

7) Directive on load shedding:

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

- i) Load shedding required for planned maintenance of transmission / distribution networks should be notified in daily newspapers at least 24 hours in advance for the information of consumers.
- ii) The ESCOMs shall on a daily basis estimate the hourly requirement of power for each sub-station in their jurisdiction based on the seasonal conditions and other factors affecting demand.
- iii) Any likelihood of shortfall in the availability during the course of the day should be anticipated and the quantum of load shedding should be estimated in advance. Specific sub-stations and feeders should be identified for load shedding for the minimum required period with due intimation to the concerned sub-divisions and sub-stations.
- iv) The likelihood of interruption in power supply with time and duration of such interruptions may be intimated to consumers through SMS and other means.

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

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

Compliance by the BESCOM:

The software which BESCOM has developed to inform the consumers, the information on load shedding / power outages through SMS is not implemented due to issues in SCADA and other technical reasons.

BESCOM has launched a mobile Application (App) 'BESCOM MITRA' which provides an option to the consumers to view the information regarding scheduled outages for next 7 days from present day. And also information about the unscheduled interruptions of present day.

Hence it is requested to close the directive regarding the software development which is under progress.

Commission's Views:

The Commission notes that the BESCOM is still not able to effectively launch the 'application software' for integration with the SCADA data to provide information to the consumers through SMS in advance about the time and duration of probable interruptions.

Instead of spending money on development of new software, the Commission directs BESCOM to expedite the use of "URJA MITRA", the mobile based and web based application, developed and deployed by the RECTPCL under the initiative of Ministry of Power for the benefit of all ESCOMs across the country. If the base data required by the application is updated in the database of the application, it would equip BESCOM to provide the information of scheduled and unscheduled power outages, emergency outages, restoration time, power outage extension time, etc., due to reasons such as system constraints, breakdowns of lines / equipment, maintenance etc., to the consumers through SMS. 'Urjamitra' mobile application can be used as a link between BESCOM field staff and citizens for facilitation of outage dissemination information to all consumers through SMS. The cost involved for dissemination of SMS is also borne by the RECTPCL for the time being. The application can also be integrated with any other system. This would significantly address the "consumers' dissatisfaction" on this issue and prevent inconvenience / disruption caused to the consumers especially the industrial consumers. BESCOM can also save money required for development of similar software.

Further, the Commission has noted with concern that, the number as well as the duration of interruptions are increasing, causing inconvenience to the consumers. The Commission notes that, even though the power availability has improved resulting in surplus power situation, the distribution network reliability has not similarly improved, causing frequent disruptions in power supply, which causes hardship to the consumers and also revenue loss to the BESCOM. The Commission directs BESCOM to take remedial measures to minimize power

supply interruptions and ensure 24 x 7 power supply. BESCOM shall submit the action plan in this regard to the Commission within 3 months of this order.

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

Further, the Commission observes that despite directions to do so, the BESCOM 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 BESCOM is directed to submit the same regularly to the Commission without fail.

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

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

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

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

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

The Commission directs the BESCOM to establish / strengthen 24x7 service stations, equipping them with separate vehicles & adequate line crew, safety

kits and maintenance materials at all its sub-divisions including the rural areas for effective redressal of consumer complaints.

Compliance by the BESCOM:

To facilitate consumers to report any power supply related complaints, the BESCOM has established a well-integrated 24X7 Customer Helpline through the latest technology and software development along with in-built automatic call transfer system. The consumers calling the Customer Helpline Number 1912 which has 30 concurrent lines with Multi-Channel Complaint Registration Facility (Phone, SMS, Online, E-mail Facebook & Twitter).

All the consumer complaints are being registered in the web enabled PGRS (Public Grievance Redressal System) application. Whenever any consumer registers his complaint, he will be provided with the docket number, using which he can track his complaint status through Help Line or BESCOM Website. Also, for the speedy redressal of complaints, the BESCOM has established Circle Control Rooms in all the 9 Circles.

In order to facilitate consumers to register their complaints through SMS, the BESCOM has developed and deployed a SMS Complaint Management System. Consumers send SMS to 58888 to register their complaints. Once SMS is received, the consumer gets the acknowledgement message along with a docket number. The application forwards the complaint message to the concerned sub-divisional Assistant Executive Engineer and Executive Engineer for necessary action. After resolving the complaints, the concerned field-staff will inform the Circle Control Room to close the complaint docket. The executives at Circle Control Rooms confirm with the complainant before closing the docket.

As per the directions of the Commission, the BESCOM has already published the Helpline contact number 1912 in all the newspapers, Radio and Television and it also being publicized regularly through various means of publicity like

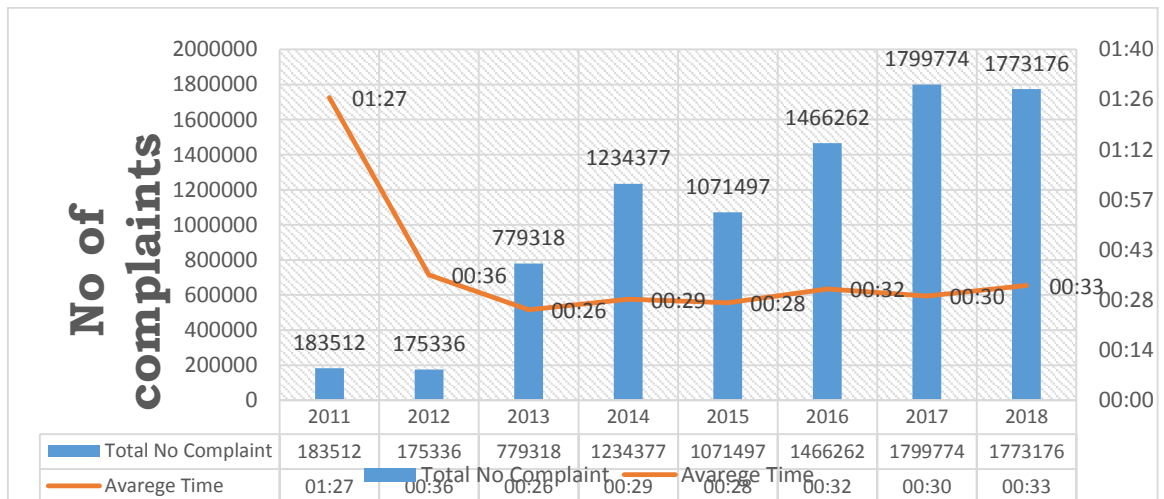
pamphlets, hoardings, advertisements, Facebook, Twitter, BESCOM Service Station vehicles, display on linemen uniforms, SMS and notifications etc.

BESCOM intends to extend its services by immediate information on Power interruptions to its bulk customers through group messaging system. This messaging system is done through IPGRS (Integrated Public Grievance Redressal System). As a pilot, a text message was sent to the customers of E7 sub-Division between 19th Oct. 2018 and 25th Oct. 2018. This would help the customers know the condition of power supply in their locality well in advance / immediately.

BESCOM has submitted the details of complaints received during the 2nd Quarter of FY19 as follows:

Name of the ESCOM	Total complaints received at central complaint center (1912)	Total complaints received other than central complaint(*)	Details of complaints received during the 2 nd qtr (July, Aug & Sept-2018)						Time taken to attend complaints
			Fuse of call	LT Line	Transformer	11kV Feeder interruptions	Others	Total	
BESCOM	7,52,712	51,857	7,18,408	16,951	8,180	165	60,865	8,04,569	43 Mins and 60 mins. max.

BESCOM has submitted a graphical analysis of downtime since 2011 as follows:



Commission's Views:

The Commission notes that the BESCOM has established the necessary infrastructure for effective redressal of consumer complaints. **While noting the efforts made by BESCOM, it is observed that the number of complaints are increasing year on year. Also, it has come to the notice of the Commission that, the executives working in the Centralized Customer Care Centre, round the clock are deployed through outsourcing Agency. Several complaints were made during the public hearings on the negative (rude) behavioral attitude of such executives working in the CCC. BESCOM shall instruct the agency employing and deploying the executives to impart suitable training on public relations and behavioral attitude, interpersonal relations etc., BESCOM shall bring in a system of recognizing the best performing customer care executive every week / fortnight / month and publicize such recognition so as to incentivize better performance from them. The Commission directs BESCOM to deploy a Senior Level Officers to supervise and review all the activities of the CCC, and shall take disciplinary action against erring officials / executives.**

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

The BESCOM is also directed to analyze the nature of complaints registered and take action to minimize the number of complaints by taking preventive / corrective action. It is also imperative that necessary steps are taken to continuously sensitize field-staff about prompt and effective handling consumer complaints apart from improving their general efficiency.

The Commission reiterates its directive to the BESCOM to periodically publish the complaint handling procedures / contact number of the Centralized Consumer Service Centre in the local media, host it on its website and also publish it through other modes, for the information of public and ensure that all the complaints of consumers are registered only through the Centralized Consumer Service Centre for proper monitoring and disposal of complaints

registered. The compliance in this regard shall be furnished once in a quarter regularly, to the Commission.

9) Directive on Energy Audit:

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

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

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

Compliance by the BESCOM:

The status of DTC metering **as on September 2018** is as under:

a) Number of DTC's existing in the company	-	3,25,359
b) Number of DTC's exclusively feeding to IP sets and Independent water supply installations	-	1,58,215
c) Number of DTC's to be metered	-	1,67,144
d) Number of DTC's already metered	-	1,15,693
e) Balance DTC's to be metered	-	51,451
f) % Metering	-	69%

Energy Audit of 11 KV feeders of towns and cities, Division levels and DTC wise Energy Audit pertaining to 2nd quarter of FY-19 is as indicated in the following Table:

Sl.No.	Particulars	Jul-18	Aug-18	Sep-18	BESCOM ACTUAL DIST. LOSSES
1	Division wise	5.02% to 28.14%	5.15% to 30.06	1.71% to 28.20%	July-18 – 9.91 % Aug-18 – 11.51% Sep-18 – 10.32%
2	Towns and cities	0.00 % to 26.02 %	6.66% to 24.4%	4.5 % to 27.88 %	-
3	11KV feeder levels				
3.1	No of feeders having losses less than 15% (Urban)	1295	1223	1209	-
	No of feeders having losses less than 15% (Rural)	2153	2264	2146	-
3.2	No of feeders having losses more than 15 to 20% (Urban)	83	56	71	-
	No of feeders having losses more than 15 to 20% (Rural)	257	246	259	-
3.3	No of feeders having losses more than 20-30% (Urban)	71	78	78	-
	No of feeders having losses more than 20-30% (Rural)	309	278	293	-
3.4	No of feeders having losses more than 30% (Urban)	119	110	136	-
	No of feeders having losses more than 30% (Rural)	598	544	659	-
		4885	4799	4851	
4	DTC levels				
4.1	No. of DTCs having losses less than 5%	8632	19839	19063	-
4.2	No. of DTCs having losses between 5% to 10%	559	711	871	-
4.3	No. of DTCs having losses between 10% to 15%	616	528	758	-
4.4	No. of DTCs having losses between 15% to 20%	707	472	739	-
4.5	No. of DTCs having losses more than 20%	24550	12889	13274	-
		35064	34439	34705	

BESCOM is carrying out the energy audit of all 11KV feeders in its jurisdiction and based on the energy audit results, necessary action is initiated to reduce the distribution losses.

The loss levels are monitored on monthly basis. There are variations in feeder – wise loss levels and some feeders show negative loss due to frequent change overs of load in case of faults.

The DTC – wise Energy Audit is also being carried out and most of the DTCs are showing abnormal losses. Action has been taken to rectify the issues. The tagging of installations with respect to DTCs and feeders are under progress.

BESCOM has analyzed the reasons for high losses and following are some of the reasons:

- a) Lengthy LT Line, which increases I²R Losses with increase in Energy Consumption.
- b) Huge numbers of Electro Mechanical Meters.
- c) Unmetered Streetlights.
- d) DC Water supply installations.
- e) Deteriorated LT conductors.
- f) Improper location of DTCs.
- g) Unauthorized hooking of IP Sets.
- h) Improper tagging of Installations.
- i) Non-Metering of Street light installations.

BESCOM has taken up the following works, in order to reduce the distribution losses:

- a) 11 KV Evacuation & Link Lines.
- b) Strengthening of HT network / HT Re-conductoring Works / Covered Conductor.
- c) Strengthening of LT network / LT Re-conductoring Works.
- d) Providing Additional DTCs / Enhancement of DTCs / Providing Compact Sub-Stations (CSS).
- e) Replacement of 11kV OH line by covered Conductor etc.
- f) Replacement of electromechanical meters.
- g) Metering of Street light installations.
- h) Regularization of unauthorized IP Sets.

BESCOM is expressing the following difficulties in calculating the losses for all 11 kV feeders and DTC's:

1) For 11 kV line loss

It is required to change over the 11 kV feeders frequently, in order to provide continuous power supply to the consumers to meet the consumer satisfaction. These change overs are made when a fault occurs in 11 kV line feeding the area. There is no methodology to work out the losses under such circumstances.

2) For DTC Loss

BESCOM has implemented RAPDRP project for DTC energy audit. Modems have been provided to DTC's to fetch the reading and other technical parameters like peak load, consumption, line voltages and power factor etc. Due to many technical reasons the data of DTC's may not be recorded in many of the DTC's which include network problems, DTC failure and LT line troubles, DTC wiring problems and sometimes MNR of meters. Hence, for all the DTC's the consumption recording is not possible. Action has been initiated and instructed the field officers to set right the ambiguities at the earliest and monitor DTC loss levels.

3) For LT line loss

BESCOM has very vast LT network with several spur lines and huge consumer base. Maintenance of the master data of LT lines in software is yet to be taken up. Hence action will be taken to submit the above said data in the format in future.

The comparative statement of losses recorded in towns and cities of March,17 and March,18 as below:

Name of the Town	% T&D Loss	
	Mar-17	Mar-18
ANEKAL	12.09	7.08
BANGALORE(BMAZ)	6.58	6.24
BANGARAPETE	14.37	9.78
CHALLAKERE	10.53	13.28
CHANNAPATNA	8.15	6.88
CHIKKABALLAPURA	15.05	14.57
CHINTHAMANI	21.58	14.33
CHITRADURGA	5.80	9.26

Name of the Town	% T&D Loss	
	Mar-17	Mar-18
DAVANAGERE CSD	10.65	2.64
DODDABALLAPURA	26.73	18.02
GOWRIBIDANUR	35.74	13.69
HARAPPANAHALLI	5.60	9.17
HARIHARA	10.08	9.83
HIRIYUR	15.02	11.97
HOSAKOTE	13.37	9.32
KANAKAPUR	14.93	8.73
KGF	17.03	14.02
KOLAR	10.83	10.85
KUNIGAL	15.43	8.84
MULABAGILU	34.40	11.63
RAMANAGARA	5.68	16.46
SHIDLAGATTA	22.34	25.14
SIRA	15.79	15.45
TIPTUR	12.23	17.51
TUMKUR CSD	23.08	8.69

In Non-RAPDRP area, 45,000 number of DTCs are metered and DTC-wise energy audit is being carried out on these DTCs. Due to improper tagging of consumers, most of the DTCs are having abnormal losses. Several letter correspondences have been made and instructions are issued to the field staff to take necessary action to set right the same. The comparison of the range of losses for these DTCs is shown in the table above.

In RAPDRP area, 48,535 number of DTCs are metered and DTC-wise Energy audit is not carried out on these DTCs due to communication and other related problems. The reports require fine-tuning in incremental data, GIS updating and integration with RAPDRP system. Once it is integrated, DTC-wise system generated Energy audit reports will be submitted regularly to the Commission.

Commission's Views:

It is observed by the Commission that, the BESCOM has not submitted the monthly energy audit reports of cities / towns with detailed analysis regularly, to the Commission. The BESCOM needs to conduct energy audit of identified

cities / towns and on the basis of energy audit results, initiate necessary action to reduce the distribution losses and improve collection efficiency so as to achieve the targeted AT & C loss of less than 15 per cent in all towns. The BESCOM is directed to conduct such energy audit and submit compliance thereon every month, regularly to the Commission.

As regards energy audit of DTCs, the Commission notes that, the BESCOM is furnishing different numbers in respect of the quantity of DTC's metered in different places of its tariff filing i.e., 1,15,693 in page number 115 of tariff filing, 97,491 in page number 70 of replies to preliminary observations and 93,535 (45000 + 48535) in page numbers 70 & 71 of its replies to the preliminary observations.

Despite completion of metering of 1,15,693 number of DTCs, the BESCOM is furnishing the analysis for only around 35,000 DTCs i.e., for **30% of the metered DTCs**. BESCOM has failed to furnish the energy audit reports for the 48,535 number of DTC's metered and provided with Automatic Metering Infrastructure (AMI) in RAPDRP towns saying the problems with communication, incomplete tagging of consumer installations with the respective feeders / DTCs and also unresolved software integration issues and other issues. Similarly, BESCOM has not furnished the information on the energy audit of all the 11 kV lines operating in its jurisdiction.

It is observed that, BESCOM is mechanically repeating its claim of resolving the issues relating on tagging of consumer installations and software from the last several years. It is evident that the BESCOM is not serious about conducting energy audit of 11 kV lines and DTC level energy audit and run its business on commercial principles. BESCOM has not acted promptly in resolving early, the issues relating to tagging / software integration and in adopting accounting / auditing of energy as its core function, in spite of spending huge money on RAPDRP project, the TRM and many other software. The stakeholders have also questioned during public hearing, the rationale of incurring huge expenditure on DTC metering without any benefit to the system or consumers. **The action taken by the BESCOM in the matter, so far, is not satisfactory and the Commission views with displeasure this delay in completing the tagging of**

consumer installations and taking up energy audit of all the feeders and metered DTCs.

The BESCOM is directed to take up energy audit of all the 11 kV feeders, 1,15,693 DTCs, which are said to be metered and the energy audit of major Cities / Towns and take remedial measures for reducing energy losses in the high loss making distribution areas. The compliance in respect of energy audit conducted, with the details of analysis and the remedial action initiated to reduce loss levels shall be regularly submitted to the Commission on a quarterly basis.

The Commission directs BESCOM to conduct workshops at the Division Office level, for educating the officers of all cadre on the importance of conducting the energy audit, feeder-wise, DTC-wise etc., and motivating them to take action to reduce the losses in their areas, address issues relating to consumer tagging, recognise the importance of energy metering and maintaining them in good condition, strictly servicing all the installations by providing appropriate energy meters, providing and maintaining energy meters to the DTC's, Metering of Street light installations, Replacement of electro-mechanical meters etc., An action plan on conducting such workshops shall be submitted by BESCOM within 60 days from the date of this order. The feeder-wise and DTC-wise energy audits shall be reviewed in the review meetings at the Circle level every month. Copy of the proceedings of such meetings shall be sent to the Commission for information and further review.

The Commission does not find the reasons submitted by BESCOM for not conducting the energy audit in respect of 11 kV lines, DTC's and LT lines as justifiable and directs BESCOM to submit the consolidated energy audit report for the FY19 before 31st May 2019, as per the formats prescribed by the Commission, vide its letter No. KERC/D/137/14/91 dated 20.04.2015.

10) Directive on Implementation of HVDS:

In view of the obvious benefits in the introduction of HVDS in reducing distribution losses, the Commission had directed the BESCOM to implement High Voltage Distribution System (HVDS) in at least one O&M division in a rural

area in its jurisdiction, by utilizing the capex provision allowed in the ARR for the year.

BESCOM still has not submitted the status of implementation of HVDS in Ramanagara Circle and pre & post-analysis of HVDS works for outlining the benefits accrued to the system post -implementation of the HVDS project in Kanakapura division based on the report of the third party agency.

However, the Commission in its previous tariff order dated 14.05.2018, based on the report of the expert committee and the suggestions by Sri B.S. Hanumanthappa, a member of the State Advisory Committee that implementation of the HVDS in the ESCOMs is not beneficial to the distribution system, was of the view that the HVDS should be implemented by following the guidelines issued by the Commission, only wherever it is techno-economically viable.

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

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

11) Directive on Nirantara Jyothi – Feeder Separation:

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

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

Compliance by the BESCOM:

The status of implementation of NJY is as mentioned in the following table:

Name of the Company	Total no of feeders proposed under NJY				Total no of feeders Commissioned as on 31.08.18			Total no of feeders Work under progress		Date of completion				No. of Hrs of power supply given on NJY, agriculture feeders NJY/Agri fdr		
	Ph-1	Ph-2	Ph-3	Total	Ph-1	Ph-2	Ph-3	Total	Ph-1	Ph-2	Ph-3	Total	Ph-1	Ph-2	Ph-3	
BESCOM	271	281	414	966	271	281	407	959	0	0	7	7	Mar-14	Feb-17	Under Progress*	22:03 Hrs / 6:14 Hrs

* Will be completed in the month of December-2018.

BESCOM has completed the implementation of feeder separation of proposed number of feeders in phase 1 and phase 2 of the project. BESCOM has proposed 414 number of feeders under phase 3 of the scheme at an estimated cost of Rs.848.68 Crores. The Government of Karnataka has released an equity to the tune of Rs.246.7 Crores towards implementation of the scheme in phase 1 and phase 2. BESCOM is pursuing, equity participation by GoK for phase 3 also.

Out of 414 feeders proposed in phase 3 of the scheme, the work is completed for 412 feeders and 407 feeders commissioned. 2 feeders are commissioned during the month of December 2018. 4 more feeders will be completed and commissioned during the same month and one feeder will be completed by the end of January, 2019.

Commission's Views:

The Commission notes that the BESCOM has commissioned all the feeders taken up under NJY scheme phase 1 & 2 and achieved significant progress under phase 3 also by commissioning 407 feeders out of 414 feeders taken up for implementation. However, there has been an inordinate delay in completion of the NJY works which has resulted in non-realization of envisaged benefits to the organization, as per the DPR.

Therefore, the BESCOM is directed to commission all the remaining feeders taken up under phase-3 as committed and thereafter to carry out the feeder-wise analysis to ensure that the objectives set out in the DPR are accomplished. Further, the BESCOM shall ensure that, any illegal tapping of NJY feeders by the farmers for running their IP-sets should be stopped. Failure to stop this illegal activity will defeat the very purpose of feeder segregation works undertaken at huge cost and therefore, the BESCOM needs to take stern action on such offenders. Further, the field officers / officials who fail to curb illegal tapping shall be personally held responsible for these irregularities.

The Commission has observed an increase in IP set consumption in FY18. The BESCOM should strictly monitor the implementation of the regulated power supply scheme to IP feeders and take necessary corrective action if the same is faulty.

It is noted that the BESCOM has already segregated significant number of feeders under NJY phase1, 2 and 3 works and consequently the energy consumed by the IP sets could be more accurately measured at the 11 KV feeder levels at the sub-stations, duly considering the distribution losses in 11 KV lines, distribution transformers and LT lines. Therefore, the Commission directs the BESCOM to continue to report every month, the specific consumption and the overall IP set consumption, only on the basis of the data from energy meters installed to the agricultural feeders, as per the prescribed formats. Any data furnished based on other assumption will not be considered by the Commission.

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

12) Directive on Demand Side Management in Agriculture:

In view of the urgent need for conserving energy for the benefit of the consumers in the State, the Commission had directed the BESCOM to take up replacement of inefficient Irrigation Pumps with energy efficient Pumps approved by the Bureau of Energy Efficiency, at least in one sub-division, in its jurisdiction and report compliance thereon.

Compliance by the BESCOM:

The BESCOM has taken up Surya Raitha as a pilot project to arrange solar power supply to 310 number of IP sets connected to 11kV Harobele feeder of Kanakapura division. Further details of the project are as mentioned below:

- Awarded to M/s Sun Edison & M/s Eshaan Solar during 2015 & 2016 respectively.
- Loan repayment period is 15 to 18 years.
- Report on Analysis for benefits submitted by ISEC- ADRTC, Bengaluru on 105 samples.

Analysis for benefits

- Irrigated area increased by 3% due to day time power supply.
- No well failures as each farmer owned only one well with a Solar connection.
- Annual maintenance cost significantly reduced from Rs. 13,526/- to Rs.2400/-.
- Average net income increased to 50% (agricultural activities) i.e., from Rs. 96,369/- to Rs.1,55,847/-. This is due to shifting from agricultural crops to sericulture & horticulture crops.
- Rate of out-migration decreased from 11.43% to 2.86% and in-migration increased.
- Landless farmers involved in agricultural / irrigation activities in lease land, buying water from Solar pump owners.

Commission's Views:

The Commission notes an undue delay in implementation of DSM scheme in Kanakapura division. Further, the BESCOM has not taken any action to implement DSM measures in the other parts of its area, so as to conserve energy and also precious water, for the benefit of farmers. **Therefore, the BESCOM should take up DSM initiatives in other parts of its jurisdiction also and submit the suitable proposals to the Commission for approval.**

13) Directive on Lifeline Supply to Un-Electrified households:

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

Compliance by the BESCOM:**DDUGJY Scheme**

The Work Awards for electrification of un-electrified BPL households under DDUGJY scheme have been issued in eight districts to qualified Agencies on March, 2017 for six districts and on May, 2017 for two districts. The Letter of Intent was also issued on January, 2017 for six districts and on March, 2017 for two districts. Time-line fixed for completion of the works in all aspects is within 24 months from the date of issue of Letter of Intent to the Agencies.

The status of the work as at the end of October, 2018 is as detailed below:

Sl. No	Name of District	DDUGJY Scheme			
		BPL Households identified for electrification	Total No of BPL HH identified as per survey (Revised)	Progress as at the end of OCTOBER-2018	Percentage Progress (%) WRT survey
1	Davanagere	5885	5833	3577	61.32%
2	Chitradurga	36817	23620	23468	99.36%
3	Tumakuru	50694	36103	30938	85.69%
4	Kolar	4563	9852	4418	44.84%
5	Chikkaballapura	4173	7572	3082	40.70%
6	Ramanagara	7689	5899	5899	100.00%
7	Bangalore Rural	4315	3807	3532	92.78%
8	Anekal of Bangalore Urban	5523	3545	3094	87.28%
Total		119659	96231	78008	81.06%

As at the end of October 2018, 78,008 numbers of households are achieved as against the 96,231 numbers of households identified as per revised survey. The BESCOM is committed to completing the electrification of identified BPL households under DDUGJY scheme within the stipulated time fixed by the REC in all aspects, i.e., before March 2019.

However, in respect of non-BPL households, the work will be taken up and completed immediately as and when the applicants file their applications duly following the KERC norms in arranging power supply.

SAUBHAGYA Scheme

16,481 numbers of un-electrified households were proposed under SAUBHAGYA scheme on November 2017. As per the census report of 2011, there were 1,36,140 numbers (excluding 97,752 numbers, which are electrified under RGGVY XII plan scheme) of un-electrified households in the jurisdiction of BESCOM. By taking this as base data, 1,19,659 un-electrified households were proposed under DDUGJY scheme and the balance 16,481 numbers were proposed under SAUBHAGYA scheme.

The number of un-electrified households actually identified during the survey under DDUGJY scheme is 96,231. Whereas, 1,19,659 number of households were proposed to be taken up in the scheme. Hence, 16,481 numbers of un-electrified households proposed under SAUBHAGYA scheme can be covered under DDUGJY scheme itself, and hence, BESCOM is not taking up the SAUBHAGYA scheme.

Commission's Views:

The Commission notes that the progress achieved in electrification of un-electrified households under DDUGJY scheme is less than 81.06 per cent as at the end of October, 2018. The BESCOM needs to hasten up the progress of electrification of un-electrified households for timely completion of the project.

The BESCOM is therefore, directed to expedite the task of providing electricity to all the un-electrified households within the targeted period and report compliance to the Commission giving the details of the monthly progress

achieved from March, 2019 onwards. The Commission, has already indicated in the earlier Tariff Orders, that it would be constrained to initiate penalty proceedings under Section 142 of the Electricity Act, 2003, against BESCOM in the event of non-compliance in the matter.

14) Directive on Implementation of Financial Management Framework:

The present organizational set up of the ESCOMs at the field level appears to be mainly oriented towards maintenance 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 the ESCOMs to effectively account the input energy and its sale in different sub-divisions of the ESCOM in line with the revenue realization rate fixed by the Commission, urgently calls for a change of approach by the ESCOMs, so that the field level functionaries are made accountable for ensuring realization of revenues vis-à-vis the input energy supplied to the jurisdiction of sub-division / division.

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

Compliance by the BESCOM:

In pursuance of the Commission's directives, the BESCOM has designed and implemented the Financial Management Framework Model from 26.07.2017 across BESCOM from Zonal Office level to the Sub-division Office level.

BESCOM has submitted a soft copy of Highlights of First Quarter of FY19 in the previous Meeting. Revised Targets are set for T&D Loss and ARR for FY19 on 21.7.2018 & 24.09.2018.

In FY19, BESCOM adopted the FFWM Business Report as Agenda No.1 in the Monthly Revenue Review Meetings at all levels.

Highlights of FFWM Business Report for II Quarter of FY19 is submitted herewith in the following table:

Zone-wise Statement

Name of the Zone	Target Distribution Loss for FY-18 (in %)	Target ARR for FY-18 (in Rs.)	Target Distribution Loss for FY-19 (in %)	Target ARR (Without Tax) for FY-19	Input Energy Q-2(FY-19)	Sales (MU) Q-2(FY-19)	Actual Distribution Loss in % Q-2 (FY-19)	Actual ARR (in Rs.) Q-2 (FY-19)
BMAZ South	6.03	7.79	5.70	8.37	1964	1744	11.19	8.28
BMAZ North	5.87	7.93	5.58	8.40	1719	1544	10.22	8.35
BRAZ	9.54	5.83	8.51	6.64	2174	1997	8.13	6.41
CTAZ	13.08	4.27	11.25	4.93	1489	1273	14.51	5.20

Circle-wise Statement

Name of the Circle	Target Distribution Loss for FY-18 (in %)	Target ARR for FY-18 (in Rs.)	Target Distribution Loss for FY-19 (in %)	Target ARR (Without Tax) for FY-19	Input Energy Q-2 (FY-19)	Sales (MU) Q-2 (FY-19)	Actual Distribution Loss in % Q-2 (FY-19)	Actual ARR (in Rs.) Q-2 (FY-19)
East	5.71	8.25	5.49	8.76	965	875	9.33	8.68
Rural	9.07	6.40	8.25	7.05	585	480	17.94	7.07
South	5.85	8.19	5.61	8.83	1271	1168	8.07	8.74
Kolar	11.76	4.59	10.06	5.72	857	747	12.82	5.41
North	6.09	7.51	5.71	7.93	750	669	10.82	7.91
West	6.43	6.93	5.89	7.42	622	576	7.44	7.35
Ramanagara	7.70	6.61	7.25	7.19	821	770	6.26	6.98
Tumakuru	12.98	4.23	11.14	4.92	814	687	15.57	5.10
Davanageri	13.20	4.33	11.37	4.94	692	586	15.38	5.30

Commission's Views:

The Commission notes that the BESCOM has implemented the financial framework model designed by it, so that the performance of the divisions / sub-divisions is linked to the quantum of energy received, sold and cost thereon and they conduct its business purely on commercial principles. However, the BESCOM is not submitting the compliance in respect of implementation of Financial Management Framework, on quarterly basis, to the Commission, as directed.

The consumers and stake holders have raised concerns in the public hearing held by the Commission about the accumulation of revenue arrears and failure to recover the long standing arrears which is causing adverse impact on the BESCOM's Cash flows. The Commission directs BESCOM to chalk out a robust action plan to recover the long standing accumulated arrears from all category of consumers including local bodies, statutory authorities etc.

The Commission directs the BESCOM to review the performance of the divisions & sub-divisions in terms of the energy received, sold, average revenue realization and average cost of supply using the Financial Management Framework Model developed by it. Further, the BESCOM is directed to continue to analyze the following parameters each month to monitor the performance of the divisions / sub-divisions, at corporate level:

- a) Target losses fixed and the achievement at each stage.
- b) Target revenue to be billed and achievement against each tariff category of consumers.
- c) Target revenue to be collected and achievement under all tariff categories.
- d) Target revenue arrears to be collected.
- e) Targeted distribution loss reduction when compared to previous years' losses.
- f) Comparison of high performance divisions in sales with low performance divisions.
- g) Targeted achievement in performing the energy audit, feeder wise, DTC wise, and the performance in achieving the reduction in energy losses of feeders, DTCs by setting right the lacuna's / issues viz., tagging of consumers properly etc.,

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

The Commission reiterates its directive that the BESCOM shall continue to implement the Financial Management Framework Model and regularly report compliance thereon on a quarterly basis to the Commission. BESCOM shall identify the sub-divisions and divisions which are not collecting the required rate of ARR and take remedial measures to ensure full recovery of revenue.

15) Directive on Prevention of Electrical Accidents:

On a review of the electrical accidents that have taken place in the State during the year 2017-18, it is seen that the major causes of the accidents are due to snapping of LT / HT lines, accidental contact with live LT / HT / EHT lines / equipment in the streets, live wires hanging around the electric poles / transformers, violation / neglect of safety measures, lack of supervision, inadequate / lack of maintenance, etc., posing great danger to human lives.

Considering the above facts, the Commission hereby directs the BESCOM to prepare an action plan to effect improvements in its distribution network and implement safety measures to prevent electrical accidents. A detailed division-wise action plan shall be submitted by the BESCOM to the Commission.

Compliance by the BESCOM:

- 1) Instructions have been issued from the Corporate Office to rectify the identified hazardous locations on top priority regularly in a systematic way.
- 2) Third Saturday of every month is conducted as safety day and instructions are issued from the Corporate Office to the field-staff to conduct safety day every month wherein officers have to educate the field-staff regarding safety and to take at least one feeder maintenance work every month in each division.
- 3) Several circulars are issued from the Corporate Office regarding safety of staff and public.
- 4) Instructions have been issued from the Corporate Office to attend the observations of DTCs and Line work executed by the Electrical Inspectorate.
- 5) Instructions have also been issued to all the field staff to immediately rectify the dangling wires on transformers / poles, raise the aerial fuse boards to

safe height, prune the trees along the HT / LT lines, clean the transformer / RMU surroundings, maintain feeder pillar boxes and LTD boxes etc.

- 6) Action has been initiated to give advertisements in the media like Cinema halls, Television, Radio and Railway stations to create awareness among the public about usage of electricity and safety aspects.
- 7) BESCOM has conducted drawing / painting competitions to create safety awareness on electricity among children and youth, on 3rd and 5th November 2018, in coordination with the education department, in all 52 taluks of BESCOM jurisdiction. **5,219** number of Government school and PU students participated in the competition.
- 8) BESCOM has conducted safety awareness programme among the public and School children on 02.11.2018, in Malur sub-division in coordination with the education department. 1,000 number of students participated from Government & Private schools.

The details of the Electrical accidents during 2nd Quarter of FY19 is as detailed below:

Name of the ESCOMs	Month	Total no. of accidents	Fatal				Non-Fatal		
			Human			Live stock	Human		
			Dept.	Non-Dept.	Total		Deptl.	Non-Deptl.	Total
BESCOM	Jul-18	34	1	13	14	10	6	4	10
	Aug-18	26	0	13	13	6	4	3	7
	Sep-18	20	2	6	8	2	6	4	10
	FY19 2 nd Qtr	80	3	32	35	18	16	11	27

Details of the hazardous locations identified and rectified during FY18, FY19 till September 2018 and the action plan rectifying of balance locations is detailed below:

Company	No. of Hazardous Locations Identified as on 31.03.2018	No of Hazardous Locations rectified as on 30.03.2018	Identified FY -19	No of Hazardous Locations rectified as on date	Balance to be Rectified	Jan-19	Feb-19	Mar-19
BESCOM	3,966	1,846	865	1,375	1,610	536	530	544

Details of analysis made on the observations by Deputy Electrical Inspectorate on the electrical accidents occurred during FY19 up to September 2018 and action taken to prevent accidents in future are indicated as follows:

DEI Observations	Action taken
Snapping of Conductor	<ul style="list-style-type: none"> • Replacement of Deteriorated Conductor • Enhancement of Conductor • Replacement of Copper Conductor • Stringing of Loose spans Progress as on September 2018 - 379 Km
Accidental contact with live Electric wire / equipment	Taken up Periodical inspection of lines / Equipment's as pre the guidelines of Safety Manual by KERC
Violation/Neglect of Safety measures/lack of Supervision	<ul style="list-style-type: none"> • By Conducting surprise checks of works, whether the safety materials are used, safety zone is created etc. as per check list provided. • Initiating action for non-observance of safety methods by deducting one-day Casual Leave if any of the staff is not using safety equipment's for three times and issue a notice for the fourth time. • Cancellation of license of the Contractor fails to follow the Safety rules/ line clears. • Use of safety tools and tackles by the field staff, beside imparting necessary training to the field staff at regular intervals and creating safety awareness more effectively among the working staff through short Film with a theme "My Safety My Responsibility".
Inadequate/Lack of maintenance	Maintenance of the feeder undertaken every 3 rd Saturday of the month.

Commission's Views

The Commission notes that the BESCOM has taken several remedial measures to improve its distribution network and also taken up awareness programmes to educate the field staff and public about the electrical safety measures. However, despite these measures, the rate of fatal electrical accidents involving human, animal and livestock is on an increase, which is a matter of serious concern to the Commission. The frequent occurrence of electrical accidents indicates that there is an urgent need for identification and rectification of hazardous installations, more systematically and regularly. Therefore, the BESCOM should continue to focus on identification and rectification of all the hazardous installations including streetlight installations / other electrical works, under the control of local bodies to prevent electrical

accidents. BESCOM should also take up continuous awareness campaigns through visual / print media on safety aspects relating to electricity among public.

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

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

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

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