# JOINT ELECTRICITY REGULATORY COMMISSION FOR THE STATE OF GOA AND UNION TERRITORIES GURGAON

Quorum

Shri S.K.Chaturvedi, Chairperson Mrs. Neerja Mathur, Member Petition No. 177/2015

Date of Order: 26.08.2015

# In the matter of

Frequent Power Supply Disruptions in Muthialpet region of coastal area of Puducherry town in UT of Puducherry

### And in the matter of

**Electricity Department, Puducherry** 

.....Respondent

## **Present**

# **For Respondent**

- 1. Shri K. Mathivanan, Superintending Engineer, Electricity Department, Puducherry
- 2. Shri V. Sridharan, Executive Engineer, Electricity Department, Puducherry
- 3. Shri T. Prasannakumar, Executive Engineer, Electricity Department, Puducherry

# **ORDER**

The Commission came across a news item published on 12.08.2015 in "The Hindu" English daily. The news item in brief is that the residents of Muthialpet region of coastal area of Puducherry town in UT of Puducherry resorted to road blockade as they were agitated on frequent power supply disruptions in the area. The residents withdrew the protest on the assurance of streamlining the power supply in the area by senior officials of ED, Puducherry.

The Commission examined the news item and it appeared to the Commission that power supply in the area was affected due to poor maintenance of distribution and transmission lines. The Commission observed that in the earlier Tariff Orders and orders on JERC (Electricity Supply Code) Regulations, 2010 has been emphasizing that ED, Puducherry should undertake strengthening of electric lines, installation of new equipments, laying of new distribution lines and erection / commissioning of new sub-stations, wherever necessary in the interest of the consumers to avail uninterrupted and reliable power supply. The Commission is providing funds for O&M expenses in the Tariff Orders. The Commission also provide funds for Capital Investment to meet the targets of AT&C losses reduction and reliable power supply for 24X7 to all consumers. The Commission in the latest tariff determination exercise issued

directions to the distribution licensees to consolidate their investment requirement to meet the consumer interest and furnish Business Plan for the period of FY 2016-17 to FY 2018-19.

Therefore, keeping in view larger interest of the consumer the Commission started suo-moto hearings in the form of present Petition no. 177/2015 and scheduled hearing on 26.08.2015 and directed the Respondent to submit their explanation on frequent power supply disruptions in the area of Muthialpet region of coastal area of Puducherry town in UT of Puducherry.

ED, Puducherry - Respondent in the report / explanation submitted that Muthialpet region is coastal area of Puducherry town. The area being northern tail of Puducherry town is fed by only one 22 KV HT overhead feeder from 110/22-11KV Marapalam SS about 7 K.M. from the area. The power requirement of Muthialpet area is about 11 MW (peak) and 8 MW (average). The feeder is running through marshy land comprising of protected mangrove trees, private coconut trees and other wild thorny vegetations, which is prone to frequent fouling of tree branches. The Respondent has been taking periodic steps to clear the fouling of tree branches. The protected mangrove trees could not be removed as the same are maintained by Forest Department and a letter dated 22.07.2015 has been sent to the Forest Department in this regard.

Power supply to Muthialpet area was interrupted at about 23.04 hours on 09.08.2015. The cause of failure of power could not be identified inspite of exhaustive ground patrolling by the field staff of the Respondent. However, it was concluded that the interruption could have occurred due to suspected circuit breaker fault at Marapalam 110/22 KV/SS and power supply to Muthialpet area was restored at 02.43 hours on 10.08.2015 after multiple test charging of the feeder. But, power supply to Muthialpet area was again interrupted at 11.40 hours on 10.08.2015 due to failure of pin insulator, which could not be identified earlier in the night of 09.08.2015 during pole to pole inspection of the HT feeder. The power supply was restored after identification and replacement of failed insulator by 14.20 hours on the same day.

On 10.08.2015 in evening there was heavy thunder storm with rain which caused power supply interruption to Muthialpet area at about 19.42 hours. The cause for interruption was identified due to bursting of insulators at multiple locations simultaneously due to heavy lightning and the same were replaced with great difficulty in the late night hours of 10.08.2015 and power supply was restored at about 00.53 hours on 11.08.2015. The multiple power interruptions experienced on 09th and 10<sup>th</sup> of August, 2015 prompted for agitation by the public. The power interruptions occurred on 09<sup>th</sup> and 10<sup>th</sup> of August, 2015 due to inherent nature of overhead 22 KV HT feeder and thunder storms with heavy lightning during seasonal rains was unexpected and beyond the control of ED, Puducherry as lightning during thunder storm weakened several insulators.

The Respondent further submitted that to improve reliability of power to Muthialpet area an action plan was evolved very long back in the year 2010 for erecting one new 22 KV feeder as alternate source of supply to Muthialpet area and necessary Government sanction was obtained vide GO no. 11011(27)/2010-P2 dated 24.11.2010 at an estimated cost of Rs 42,50,638/-. The scheme work could not be undertaken as Indian Railway did not accord permission to ED, Puducherry to lay 22 KV HT Underground Cable crossing the Railway line near Uppalam which is essential to lay the additional feeder. A new 110/11

KV sub-station was commissioned with capacity of 2 X 31.5 MVA at Venkata Nagar to meet the growing power demand in the northern part of Puducherry town. The Project implementation agency had evolved a proposal for conversion of LT Overhead line and services into underground cable system in the entire coastal area of Puducherry under "Coastal Disaster Risk Reduction Project" funded by World Bank. The Respondent requested the World Bank officials in their discussions to provide funds for the HT cable works to feed the coastal areas. The World Bank agreed for the proposal and the Department sent the Proposal to the Project Implementation Agency in 2013 for execution of three HT feeders from Venkata Nagar 110/11 KV sub-station to Muthialpet and the adjoining coastal areas. The Project Implementation Agency after obtaining approval of the World Bank floated tenders for the above works in Jan., 2015. But, no offer had been received. The Project Implementation Agency had obtained approval of the Governing Body and again floated tenders on 17.08.2015 with closing date on 30.09.2015. The time given to complete the works is nine months. However, the Respondent will make all efforts in following up with Project Implementation Agency for early completion of works. On completion of the above works, the reliability of power supply at Muthialpet region would be high.

Meanwhile, the Respondent has decided that without waiting for laying of three 11 KV underground cable feeders to Muthialpet area by Project Implementation Agency, the ED, Puducherry has initiated action to erect one 16 MVA 110/22 KV power transformer at new Venkata Nagar 110 KV/SS and to lay 22 KV underground cable feeder from Venkata Nagar 110/11 KV/SS as an alternate source of HT supply to Muthialpet area immediately. Power interruption to Muthialpet area would be reduced to nearest minimum on implementation of the above works and prayed for dropping the suo-moto proceedings.

The Commission heard the representatives for the Respondent – ED, Puducherry at length and has gone through the report /explanation submitted by the Respondent with accompanying documents and provisions of Sections 23 and 42 of the Electricity Act, 2003 and JERC (Electricity Supply Code) Regulations, 2010 carefully and thoroughly. The Commission also applied its mind on the facts and circumstances for initiating suo-moto proceedings. The Commission observes that under Section 23 of the Electricity Act, 2003, the Commission by an order may provide for regulating electricity supply, distribution, consumption or use thereof if it is necessary or expedient so to do for maintaining efficient electricity supply, securing equitable distribution of electricity and promoting competition. The distribution licensee under Section 42 (1) of the Electricity Act has a duty to develop and maintain an efficient, coordinated and economical distribution system in his area of supply and to supply electricity in accordance with the provisions of the Electricity Act, 2003.

The Commission has also framed JERC (Electricity Supply Code) Regulations, 2010 and under Regulation 3.3 (1) of the said regulations the licensee has an obligation for ensuring up-gradation, extension and strengthening of its distribution system to meet demand of electricity in its area of supply and wherever the existing transmission capacity is loaded up to 80% of its capacity the licensee shall prepare a scheme for augmentation of such transmission capacity.

Therefore, the Commission directs the Respondent - ED, Puducherry to take necessary preventive maintenance activities pre-monsoon and post - monsoon seasons. This includes continuous patrolling of the distribution lines particularly during the monsoon season, installation of insulators compatible to coastal area and heavy rains to avoid tripping of lines, augmentation of distribution and transmission capacity etc. The Commission also directs that such occurrences which disrupt power supply and affect the consumers at large should be avoided by having time bound initiatives. Fresh action taken report is to be submitted by ED-Puducherry to the Commission by 30<sup>th</sup> Sept., 2015, keeping in mind the directives given by the Commission hereinabove.

In the light of above discussions and observations, the suo-moto proceedings and the Petition stands disposed off.

Sd/-

(NEERJA MATHUR) MEMBER Sd/-

(S.K.CHATURVEDI)
CHAIRPERSON

**Certified Copy** 

(D.R.PARMAR)
DIRECTOR (ENGG.)