

Electricity Supply Monitoring Initiative (ESMI) is a program by Prayas (Energy Group), a Pune based policy analysis group. It aims to improve transparency, and provide evidence based feedback about the quality of electricity supply. Under ESMI, specially designed, mobile data enabled voltage monitors are deployed at each location and supply quality data as well as monthly summary analysis reports are published at watchyourpower.org. Launched in March 2015, it currently covers over 300 locations across 50 districts in India. ESMI measures supply voltage and hours of outage experienced at various consumer locations. The Electricity Supply Monitoring Initiative (ESMI) was selected as a finalist for the Google Impact Challenge, India, 2013 given to NGOs using technology for social impact.

This report is an aggregation of supply quality data observed in the state of Uttar Pradesh over four months (October 2016 - January 2017). It covers 46 locations (20 rural and 26 urban) for which at least 90% data for the respective month is available. The report provides supply quality data (Daily Average Hours of Supply, Daily Evening Hours of Supply and Average Number of Interruptions per Month) for urban and rural locations. Urban locations are ESMI locations in District Headquarters and Other Municipal Areas, whereas Rural locations are those in Gram Panchayat areas.

Daily Average Hours of Supply

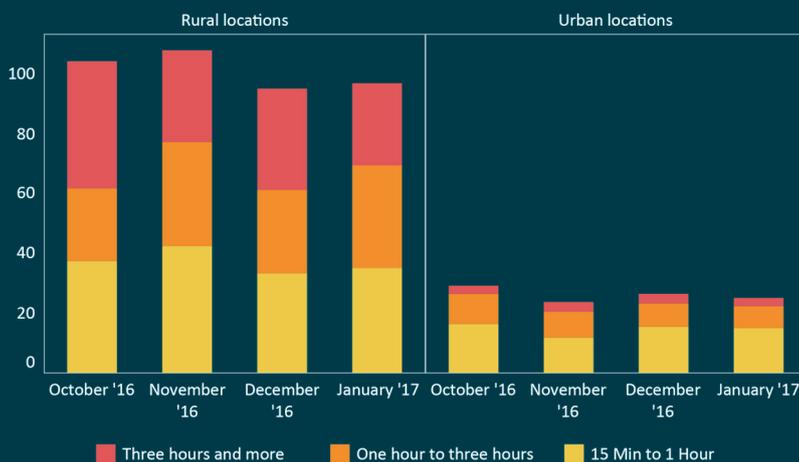
Month	Rural locations			Urban locations
	Hours of low voltage	Hours of normal voltage	Total hours of supply	Total supply hours
October '16	5	6	11	22
November '16	7	7	14	22
December '16	5	8	13	22
January '17	4	11	15	22

Daily Evening Hours of Supply (between 5 and 11 pm)

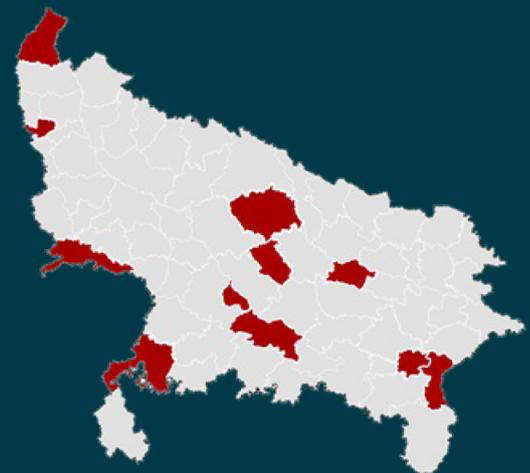
Month	Rural locations	Urban locations
October '16	2	6
November '16	3	6
December '16	2	6
January '17	3	6

Normal voltage range: 205V to 270 V, Low voltage range: 204 V to 131 V
The duration of low voltage for urban locations is insignificant, hence it is not shown separately

Average number of interruptions per location



Districts covered under ESMI in Uttar Pradesh



Distribution of locations by daily hours of supply

Month	Rural locations			Urban locations		
	12 hours or more	16 hours or more	Nearly 24 hours	12 hours or more	16 hours or more	Nearly 24 hours
October '16	54%	0%	0%	100%	100%	40%
November '16	85%	23%	0%	100%	100%	62%
December '16	67%	25%	0%	100%	100%	44%
January '17	90%	35%	0%	100%	100%	42%

Daily supply of 23 hours or more has been considered as nearly 24 hours of supply

Districts and number of locations covered in this report

Location type	Month	Lucknow	Fatehpur	Saharanpur	Kanpur	Varanasi	Chandauli	Jhansi	Sitapur	Agra	Ghaziabad
		Rural locations	October '16					1	2		10
	November '16					1	2		10		
	December '16					1	2		9		
	January '17		2	1		1	2	2	10	2	
Urban locations	October '16	2			7	3	1		1		1
	November '16	2			5	3	1		1		1
	December '16	2			7	3	1		1		4
	January '17	2		1	7	3	1	2	1	5	4