Summary Analysis - August 2018

Electricity Supply Monitoring Initiative (ESMI) is a program being implemented by Prayas (Energy Group). It aims to improve transparency and provide evidence based feedback about the quality of electricity supply. Under ESMI, specially designed, mobile data enabled monitors are being deployed at each location and supply quality data is published daily at watchyourpower.org. ESMI was selected as a finalist for Google Impact Challenge, India, 2013, given to NGOs using technology for social impact. It was launched in March 2015 and currently covers over 55 districts across India.

This report presents a summary analysis of supply quality data from 202 locations (53 Rural and 149 Urban) for August 2018. This analysis covers three main parameters of supply quality: i) no supply hours, ii) number of interruptions, and, iii) evening hours of supply. The analysis is carried out for mega cities, other cities and rural areas. See notes at the end for more details and explanation.

In August 2018

- **54%** ESMI locations experienced outages for more than 15 hours
- **34%** ESMI locations experienced more than 30 interruptions, each greater than 15 min
- **27%** ESMI locations experienced average daily outage of 30 min or more during evening hours

Map showing current ESMI expanse at district level
## Supply Quality in Mega Cities - August 2018

<table>
<thead>
<tr>
<th>Megacity</th>
<th>ESMI locations</th>
<th>Short - 15 min to hour</th>
<th>Long - 1 hour and more</th>
<th>Average no supply hours per location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kolkata</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Pune</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Nagpur</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Chennai</td>
<td>12</td>
<td>7</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Lucknow</td>
<td>4</td>
<td>14</td>
<td>3</td>
<td>13</td>
</tr>
<tr>
<td>Bengaluru</td>
<td>4</td>
<td>10</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td>Hyderabad</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>16</td>
</tr>
</tbody>
</table>

## Supply Quality in Other Cities - August 2018

### Assam
- Average number of interruptions per location: 13
- Average no supply hours per location: 10

### Odisha
- Average number of interruptions per location: 13
- Average no supply hours per location: 11

### Tamil Nadu
- Average number of interruptions per location: 10
- Average no supply hours per location: 12

### Madhya Pradesh
- Average number of interruptions per location: 11
- Average no supply hours per location: 12

### Karnataka
- Average number of interruptions per location: 15
- Average no supply hours per location: 15

### Maharashtra
- Average number of interruptions per location: 13
- Average no supply hours per location: 15

### Uttaranchal/Uttarakhand
- Average number of interruptions per location: 20
- Average no supply hours per location: 23
- Total: 122

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### State
- **Assam**: 1, 6
- **Odisha**: 1, 4
- **Tamil Nadu**: 2, 5
- **Madhya Pradesh**: 3, 9
- **Karnataka**: 4, 10
- **Maharashtra**: 11, 19
- **Uttaranchal/Uttarakhand**: 2, 4
- **Uttar Pradesh**: 15, 28

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## Supply Quality in Rural Areas - August 2018

### ESMI Locations Receiving Entire Six Hours of Evening Supply

<table>
<thead>
<tr>
<th>Location</th>
<th>ESMI Locations</th>
<th>Average no supply hours per location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maharashtra</td>
<td>13</td>
<td>44</td>
</tr>
<tr>
<td>Karnataka</td>
<td>4</td>
<td>65</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>21</td>
<td>311</td>
</tr>
<tr>
<td>Jharkhand</td>
<td>4</td>
<td>290</td>
</tr>
</tbody>
</table>

- More than three hours
- One to three hours
- 15 Minutes to 1 Hour

### Notes:
- Analysis in this report covers locations with more than 90% data availability during the month.
- Urban locations are State Capitals, District Headquarters and Other Municipal Areas.
- Mega Cities are urban locations as defined by Central Electricity Authority (Typically with population more than 20 lakh).
- Other cities are urban locations that are not mega cities.
- Rural areas are those governed by Gram Panchayats (village councils).
- Agricultural locations covered under ESMI are excluded from this analysis.
- Analyses, except evening hours of supply consider interruptions of more than 15 minutes.

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**Electricity Supply Monitoring Initiative**

- **ESMI**: Smart Voltage Meter
- **Internet**: Cloud
- **GSM network**: Website watchyourpower.org

**www.watchyourpower.org**

esmi@prayaspune.org

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**Prayas (Energy Group)**

www.prayaspune.org/peg