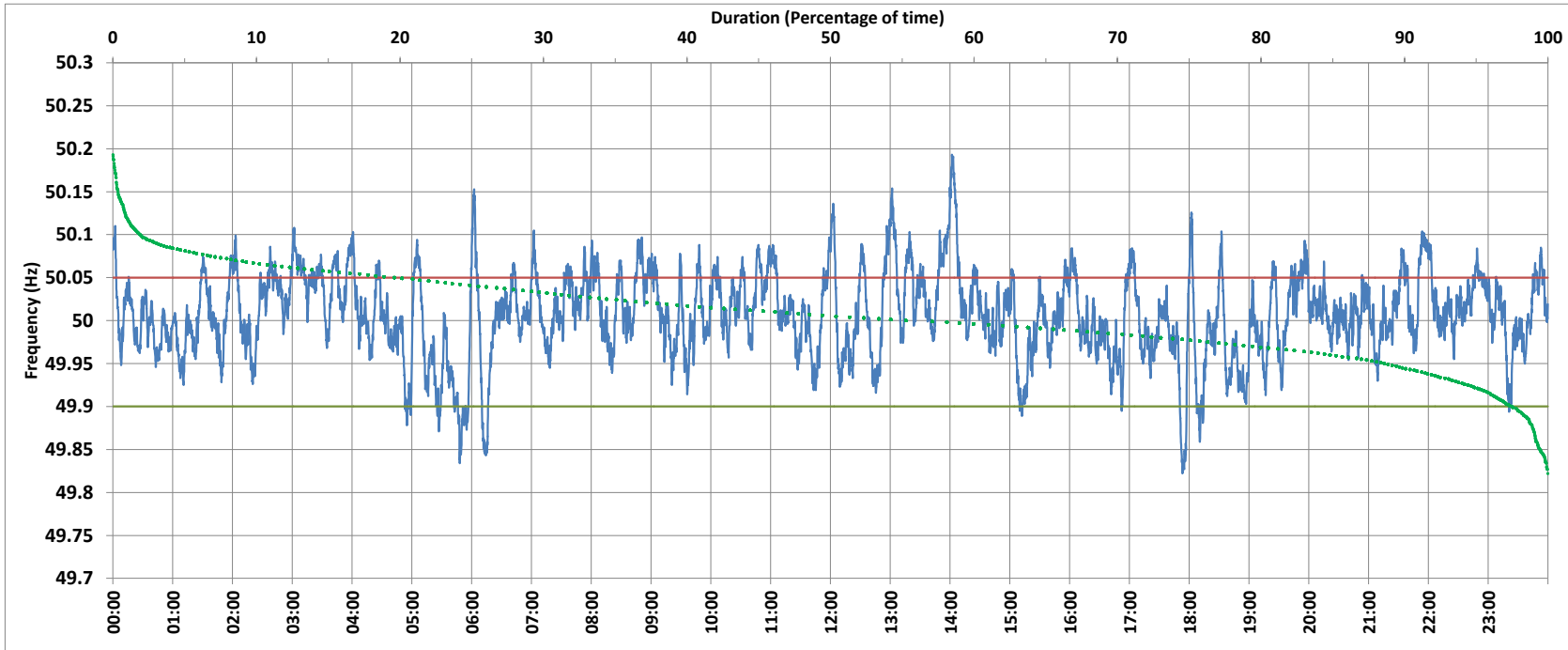


POWER SYSTEM OPERATION CORPORATION LIMITED
NATIONAL LOAD DESPATCH CENTRE NEW DELHI



BAWANA:Frequency

National Grid Frequency Profile for 20-Sep-2017



| | | | | | | | | | | | | | | | |
|-------|--------|--------|-----------|-----------|-----------|-----------|-----------|-------------|-----------|-------------|------------|-------|--------|--------|-------|
| <49.7 | <49.90 | <49.97 | 49.7-49.8 | 49.8-49.9 | 49.9-50.0 | 50.0-50.1 | 50.1-50.2 | 49.90-50.05 | 49.7-50.2 | 49.97-50.03 | 50.05-50.1 | >50 | >50.03 | >50.05 | >50.2 |
| 0.00 | 2.44 | 20.03 | 0.00 | 2.44 | 40.47 | 55.14 | 1.94 | 77.95 | 100.00 | 48.72 | 18.25 | 55.24 | 31.25 | 19.61 | 0.00 |

| | | | | | |
|---------------------|--------|-----------------------------|-------|----------------------|-------|
| Average Frequency : | 50.007 | Frequency Variation Index : | 0.025 | Standard Deviation : | 0.049 |
|---------------------|--------|-----------------------------|-------|----------------------|-------|

| | | |
|-------------------------|--------|----------|
| Instantaneous Frequency | | |
| Max | 50.193 | 14:01:50 |
| Min | 49.822 | 17:53:10 |

| | | |
|-----------------------------|--------|----------|
| 15 minute Average Frequency | | |
| Max | 50.094 | 14:15:00 |
| Min | 49.908 | 6:00:00 |

| | |
|----------------------------------|-----|
| No. of excursions above 50.03 Hz | 122 |
| No. of excursions below 49.97 Hz | 112 |
| No. of excursions above 50.00 Hz | 144 |
| No. of excursions below 50.00 Hz | 136 |

| | | | |
|---|---------|--|---------|
| Average time freq remains below 49.97 per excursion | 0:02:35 | Average time frequency remains above 50.03 per excursion | 0:03:41 |
|---|---------|--|---------|