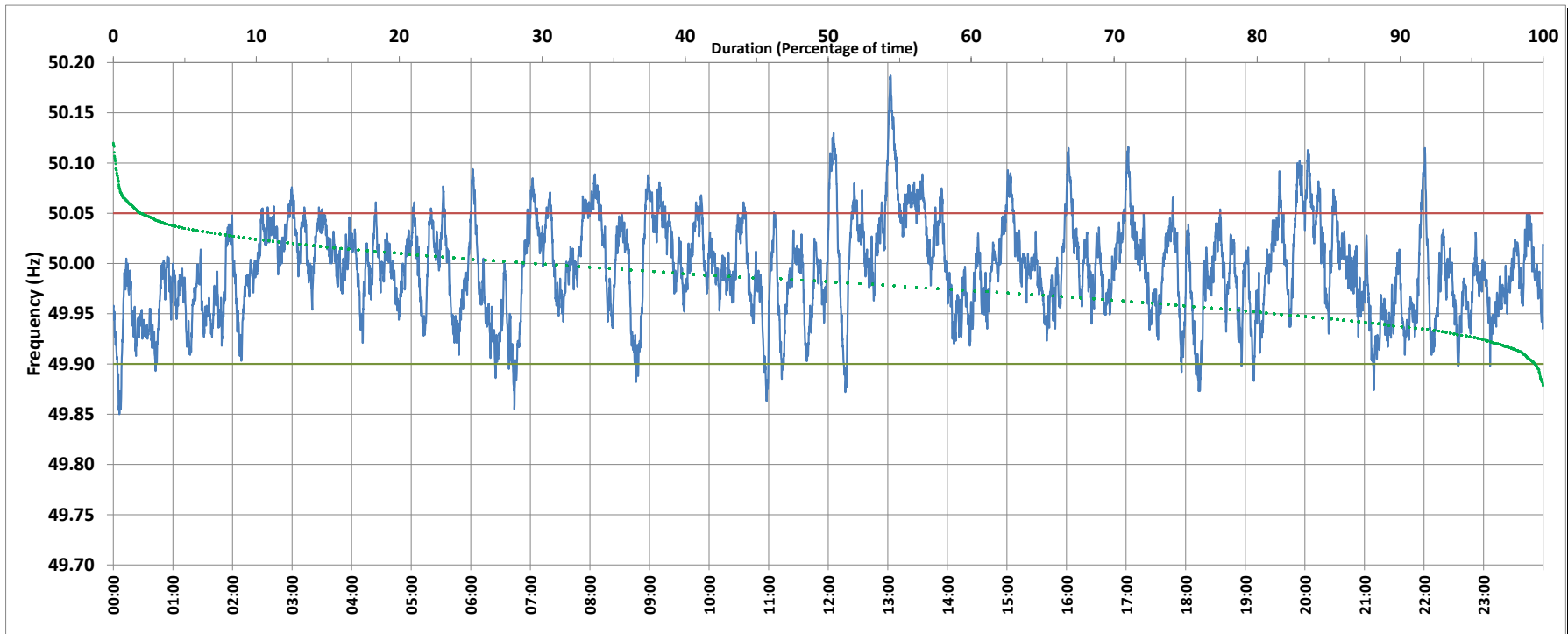


POWER SYSTEM OPERATION CORPORATION LIMITED

NATIONAL LOAD DESPATCH CENTRE, NEW DELHI



Frequency profile for 11-Aug-2018 (Saturday)



|       |        |        |           |           |           |           |           |             |           |             |            |      |        |        |       |        |             |             |
|-------|--------|--------|-----------|-----------|-----------|-----------|-----------|-------------|-----------|-------------|------------|------|--------|--------|-------|--------|-------------|-------------|
| <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 | <49.95 | 49.95-50.05 | 49.90-49.95 |
| 0.0   | 1.8    | 30.2   | 0.0       | 1.8       | 51.5      | 45.3      | 1.4       | 86.6        | 100.0     | 47.3        | 10.8       | 44.7 | 22.5   | 11.6   | 0.0   | 18.3   | 70.1        | 16.5        |

|                            |                                   |                            |               |           |
|----------------------------|-----------------------------------|----------------------------|---------------|-----------|
| Average Frequency : 49.994 | Frequency Variation Index : 0.023 | Standard Deviation : 0.047 | Mileage: 45.4 | FDI: 13.4 |
|----------------------------|-----------------------------------|----------------------------|---------------|-----------|

| Instantaneous Frequency |        |          |
|-------------------------|--------|----------|
| Max                     | 50.188 | 13:02:40 |
| Min                     | 49.850 | 0:06:00  |

| 15 minute Average Frequency |        |          |
|-----------------------------|--------|----------|
| Max                         | 50.106 | 13:15:00 |
| Min                         | 49.928 | 6:30:00  |

| No. of excursions |     |
|-------------------|-----|
| above 50.03 Hz    | 128 |
| below 49.97 Hz    | 148 |
| above 50.00 Hz    | 120 |
| below 50.00 Hz    | 129 |

| Average time freq per excursion remains |         |
|---|---------|
| below 49.97                             | 0:02:56 |
| above 50.03                             | 0:02:32 |

|   |         |
|---|---------|
| No. of hours freq outside 49.9-50.05 Hz | 3:12:40 |
|---|---------|

Source : BALLIA:Frequency 10 Sec. (8640 samples)