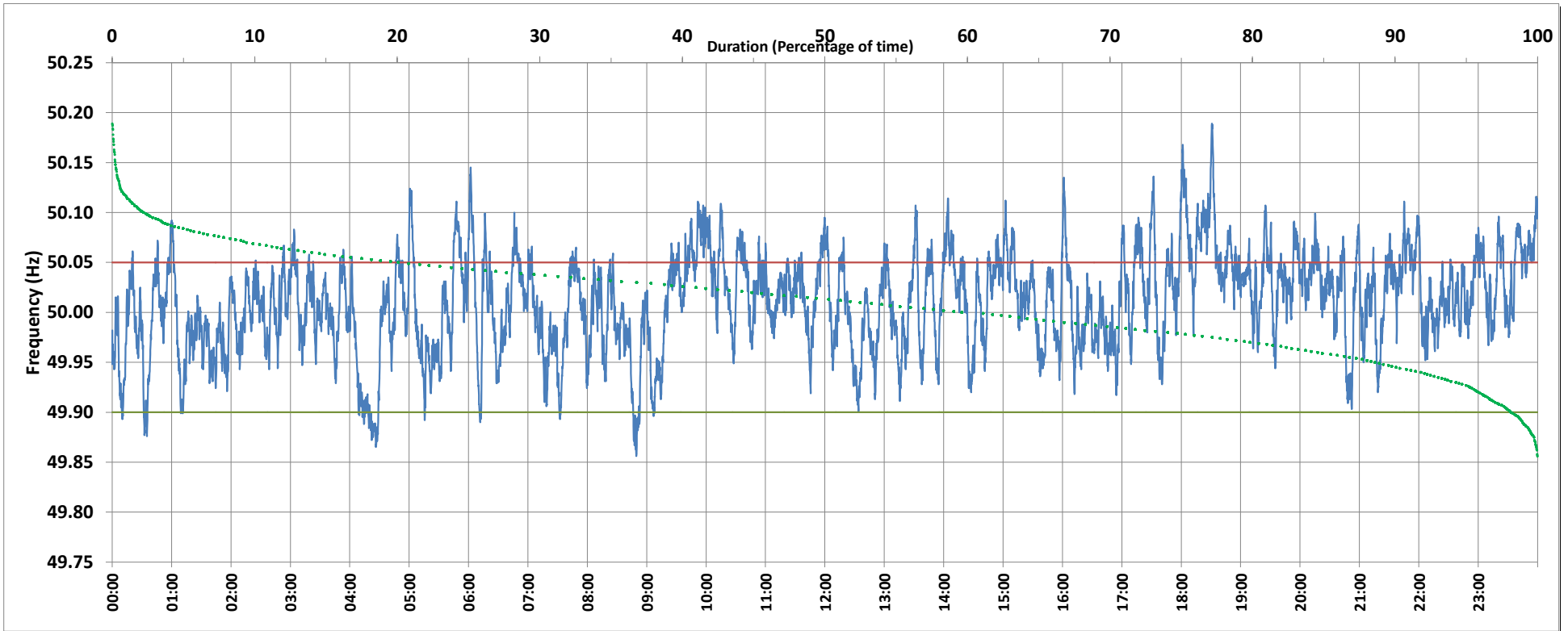


POWER SYSTEM OPERATION CORPORATION LIMITED

NATIONAL LOAD DESPATCH CENTRE, NEW DELHI



Frequency profile for 10-Nov-2019 (Sunday)



|       |        |        |           |           |           |           |           |             |           |             |            |       |        |        |       |        |             |             |
|-------|--------|--------|-----------|-----------|-----------|-----------|-----------|-------------|-----------|-------------|------------|-------|--------|--------|-------|--------|-------------|-------------|
| <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 |
| 0.00  | 1.76   | 19.57  | 0.00      | 1.76      | 37.15     | 58.76     | 2.33      | 78.18       | 100.00    | 43.65       | 18.60      | 59.59 | 36.78  | 20.06  | 0.00  | 11.11  | 68.83       | 9.35        |

|                            |                                    |                             |               |           |
|----------------------------|------------------------------------|-----------------------------|---------------|-----------|
| Average Frequency : 50.010 | Frequency Variation Index : 0.0245 | Standard Deviation : 0.0484 | Mileage: 53.2 | FDI: 21.8 |
|----------------------------|------------------------------------|-----------------------------|---------------|-----------|

| Instantaneous Frequency |        |          |
|-------------------------|--------|----------|
| Max                     | 50.189 | 18:31:00 |
| Min                     | 49.856 | 8:49:20  |

| 15 minute Average Frequency |        |          |
|-----------------------------|--------|----------|
| Max                         | 50.090 | 18:30:00 |
| Min                         | 49.893 | 4:30:00  |

| No. of excursions |     |
|-------------------|-----|
| above 50.03 Hz    | 198 |
| below 49.97 Hz    | 114 |
| above 50.00 Hz    | 131 |
| below 50.00 Hz    | 137 |

| Average time freq per excursion remains |         |
|---|---------|
| below 49.97                             | 0:02:28 |
| above 50.03                             | 0:02:41 |

|   |         |
|---|---------|
| No. of hours freq outside 49.9-50.05 Hz | 5:14:10 |
|---|---------|

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