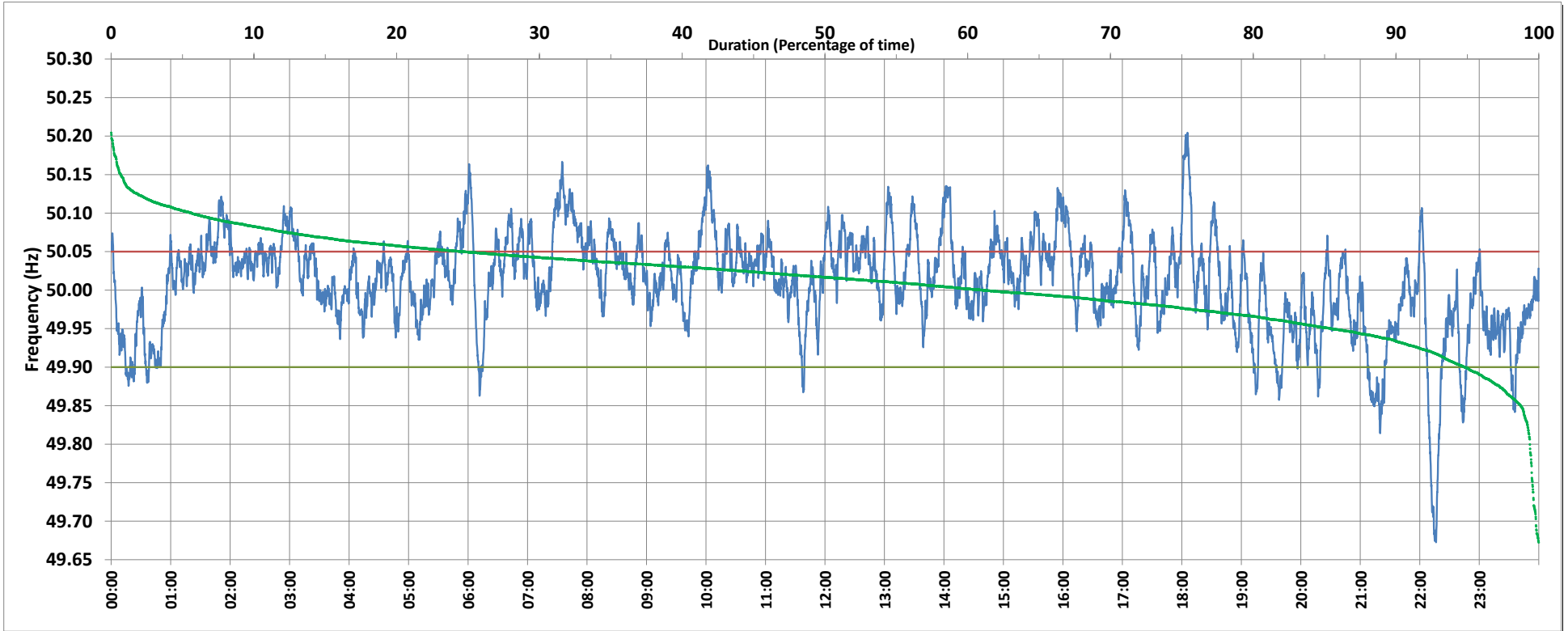


POWER SYSTEM OPERATION CORPORATION LIMITED

NATIONAL LOAD DESPATCH CENTRE, NEW DELHI



Frequency profile for 20-Jul-2019 (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 |
| 0.20 | 5.16 | 21.84 | 0.43 | 4.54 | 33.72 | 55.46 | 5.64 | 70.20 | 99.78 | 37.92 | 19.04 | 61.06 | 40.24 | 24.64 | 0.02 | 14.51 | 60.84 | 9.35 |

| | | | | |
|----------------------------|------------------------------------|-----------------------------|---------------|-----------|
| Average Frequency : 50.010 | Frequency Variation Index : 0.0404 | Standard Deviation : 0.0627 | Mileage: 43.7 | FDI: 29.8 |
|----------------------------|------------------------------------|-----------------------------|---------------|-----------|

| Instantaneous Frequency | | |
|-------------------------|--------|----------|
| Max | 50.204 | 18:05:40 |
| Min | 49.673 | 22:16:20 |

| 15 minute Average Frequency | | |
|-----------------------------|--------|----------|
| Max | 50.119 | 7:45:00 |
| Min | 49.863 | 22:30:00 |

| No. of excursions | |
|-------------------|-----|
| above 50.03 Hz | 161 |
| below 49.97 Hz | 107 |
| above 50.00 Hz | 143 |
| below 50.00 Hz | 141 |

| Average time freq per excursion remains | |
|---|---------|
| below 49.97 | 0:02:56 |
| above 50.03 | 0:03:36 |

| | |
|---|---------|
| No. of hours freq outside 49.9-50.05 Hz | 7:09:10 |
|---|---------|

Source : NTPC-VINDHYACHAL:Frequency 10 Sec. (8640 samples)