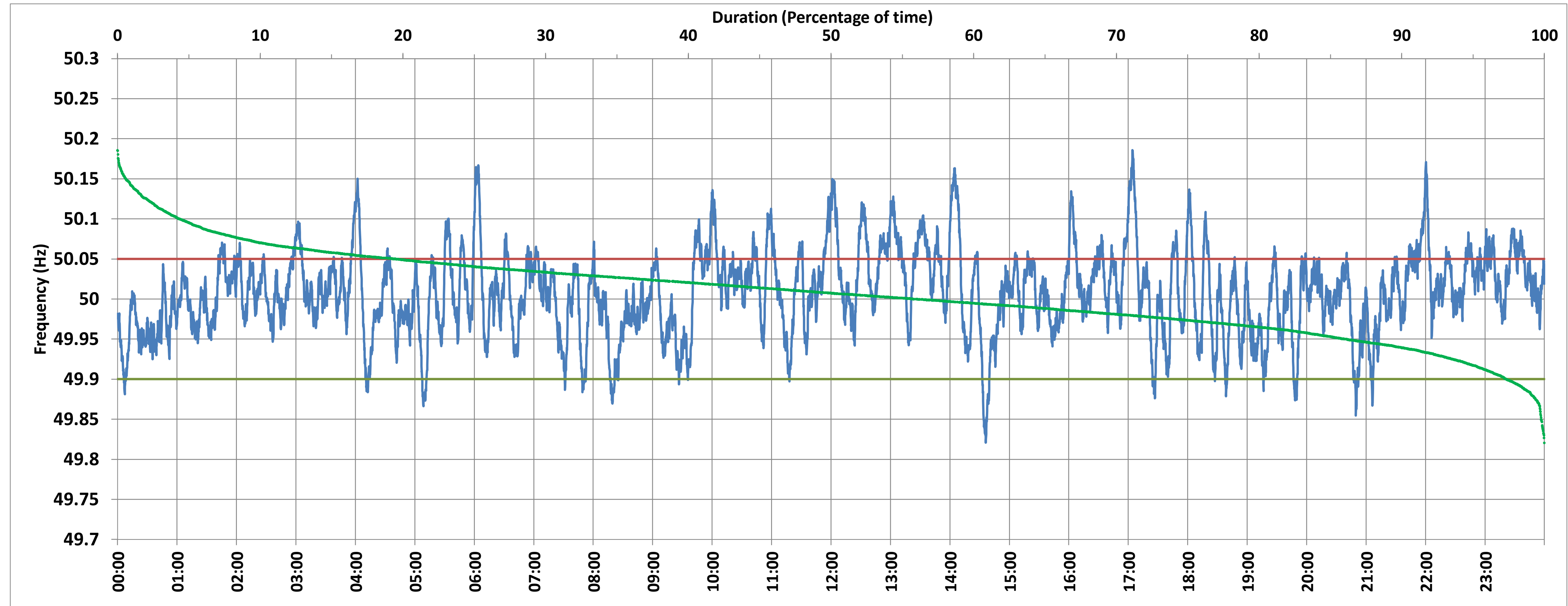


POWER SYSTEM OPERATION CORPORATION LIMITED  
NATIONAL LOAD DESPATCH CENTRE NEW DELHI



NTPC-VINDHYACHAL:Frequency

National Grid Frequency Profile for 11-Feb-2018



|       |        |        |           |           |           |           |           |             |           |             |            |       |        |        |       |
|-------|--------|--------|-----------|-----------|-----------|-----------|-----------|-------------|-----------|-------------|------------|-------|--------|--------|-------|
| <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  | 2.65   | 22.73  | 0.00      | 2.65      | 41.32     | 51.66     | 4.38      | 77.81       | 100.00    | 44.64       | 15.24      | 55.96 | 32.63  | 19.54  | 0.00  |

|                     |        |                             |       |                      |       |         |       |
|---------------------|--------|-----------------------------|-------|----------------------|-------|---------|-------|
| Average Frequency : | 50.007 | Frequency Variation Index : | 0.029 | Standard Deviation : | 0.053 | Mileage | 47.11 |
|---------------------|--------|-----------------------------|-------|----------------------|-------|---------|-------|

|                         |        |          |
|-------------------------|--------|----------|
| Instantaneous Frequency |        |          |
| Max                     | 50.186 | 17:04:10 |
| Min                     | 49.821 | 14:36:10 |

|                             |        |          |
|-----------------------------|--------|----------|
| 15 minute Average Frequency |        |          |
| Max                         | 50.085 | 14:15:00 |
| Min                         | 49.903 | 14:45:00 |

|                                  |     |
|----------------------------------|-----|
| No. of excursions above 50.03 Hz | 171 |
| No. of excursions below 49.97 Hz | 137 |
| No. of excursions above 50.00 Hz | 195 |
| No. of excursions below 50.00 Hz | 196 |

|   |         |  |         |
|---|---------|--|---------|
| Average time freq remains below 49.97 per excursion | 0:02:23 | Average time frequency remains above 50.03 per excursion | 0:02:45 |
|---|---------|--|---------|