

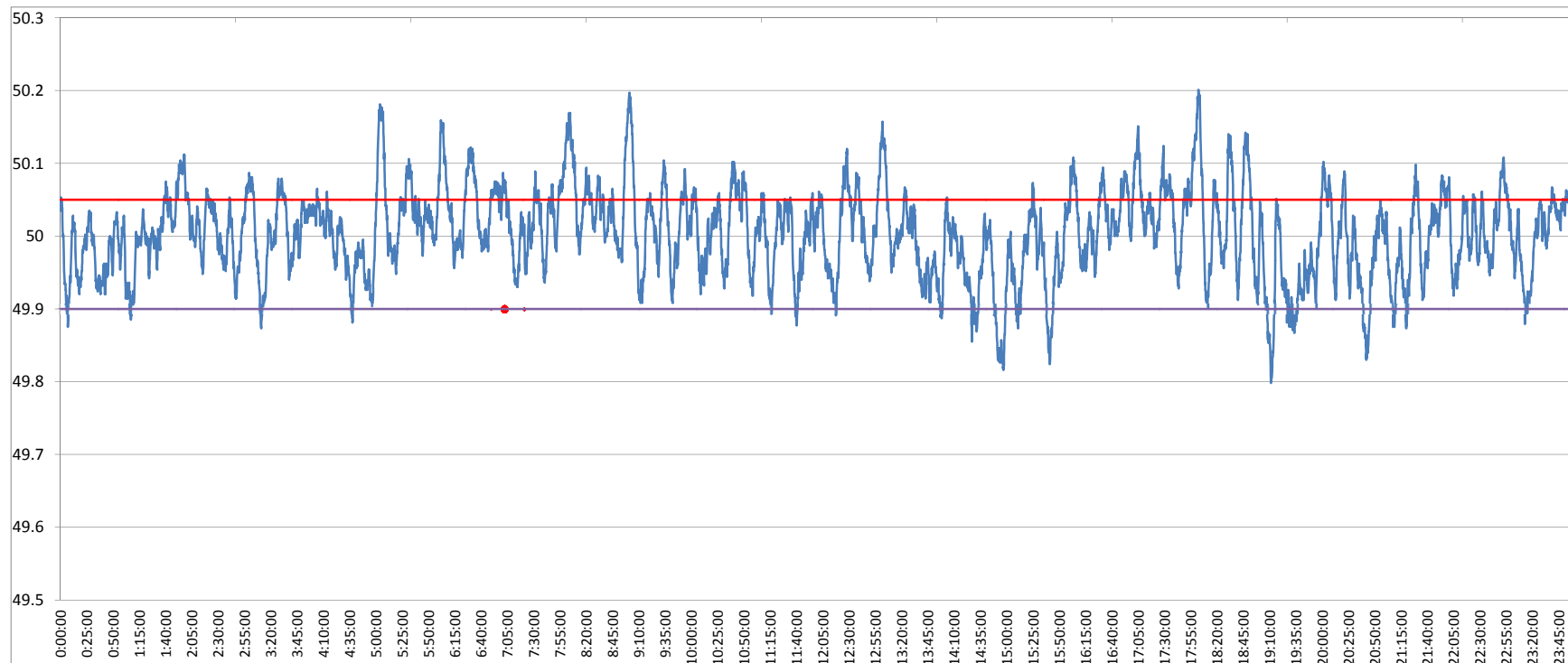


**POWER SYSTEM OPERATION CORPORATION LIMITED**  
NATIONAL LOAD DESPATCH CENTRE NEW DELHI

BALLIA:Frequency

National Grid Frequency Profile for

03-Jul-15



| <49.2 | <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     | 0.00  | 4.35   | 27.88  | 0.01      | 4.34      | 40.79     | 50.06     | 4.78      | 74.80       | 99.98     | 37.60       | 16.23      | 53.48 | 34.51  | 20.84  | 0.02  |

|                          |              |                                    |              |                             |              |
|--------------------------|--------------|------------------------------------|--------------|-----------------------------|--------------|
| <b>Average Frequency</b> | <b>50.00</b> | <b>Frequency Variation Index :</b> | <b>0.036</b> | <b>Standard Deviation :</b> | <b>0.060</b> |
|--------------------------|--------------|------------------------------------|--------------|-----------------------------|--------------|

| Instantaneous Frequency |       |          |
|-------------------------|-------|----------|
| Max                     | 50.2  | 18:02:10 |
| Min                     | 49.80 | 19:11:10 |

| 15 minute average Frequency |        |          |
|-----------------------------|--------|----------|
| Max                         | 50.086 | 8:15:00  |
| Min                         | 49.879 | 15:00:00 |

|                                 |     |
|---------------------------------|-----|
| No. of excursion above 50.03 Hz | 162 |
| No. of excursion below 49.97 Hz | 79  |
| No. of excursion above 50.00 Hz | 103 |
| No. of excursion below 50.00 Hz | 105 |

|  |                |   |                |
|--|----------------|---|----------------|
| <b>Average time freq remains below 49.97 per excursion</b> | <b>0:05:05</b> | <b>Average time frequency remains above 50.03 per excursion</b> | <b>0:03:04</b> |
|--|----------------|---|----------------|