

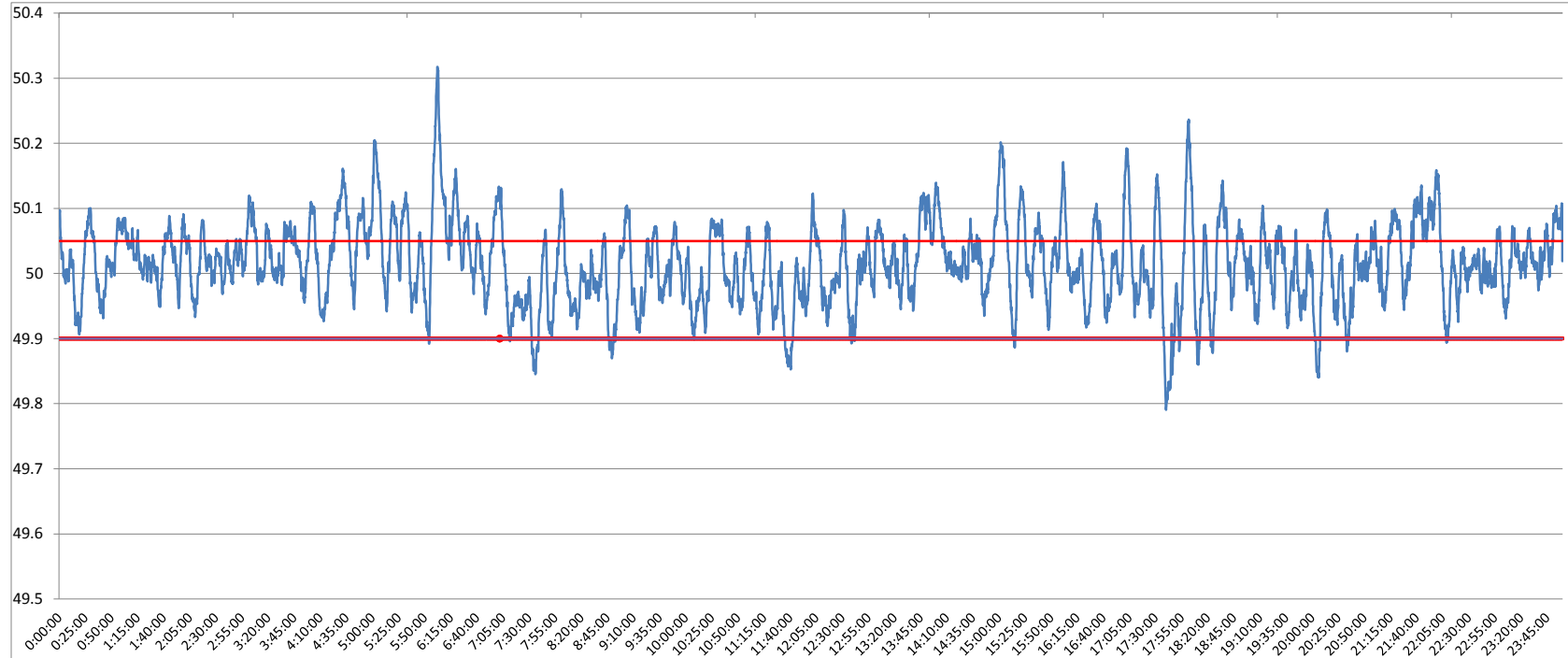


**POWER SYSTEM OPERATION CORPORATION LIMITED**  
NATIONAL LOAD DESPATCH CENTRE NEW DELHI

DURGAPUR:Frequency

National Grid Frequency Profile for

06-Dec-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  | 3.26   | 23.30  | 0.03      | 3.23      | 37.16     | 51.47     | 7.50      | 68.38       | 99.40     | 38.00       | 20.36      | 59.51 | 38.70  | 28.36  | 0.60  |

|                          |              |                                    |              |                             |              |
|--------------------------|--------------|------------------------------------|--------------|-----------------------------|--------------|
| <b>Average Frequency</b> | <b>50.02</b> | <b>Frequency Variation Index :</b> | <b>0.042</b> | <b>Standard Deviation :</b> | <b>0.063</b> |
|--------------------------|--------------|------------------------------------|--------------|-----------------------------|--------------|

|                                |              |                 |
|--------------------------------|--------------|-----------------|
| <b>Instantaneous Frequency</b> |              |                 |
| <b>Max</b>                     | <b>50.32</b> | <b>6:02:10</b>  |
| <b>Min</b>                     | <b>49.79</b> | <b>17:40:00</b> |

|                                    |               |                 |
|------------------------------------|---------------|-----------------|
| <b>15 minute average Frequency</b> |               |                 |
| <b>Max</b>                         | <b>50.150</b> | <b>6:15:00</b>  |
| <b>Min</b>                         | <b>49.915</b> | <b>11:45:00</b> |

|  |            |
|--|------------|
| <b>No. of excursion above 50.03 Hz</b> | <b>146</b> |
| <b>No. of excursion below 49.97 Hz</b> | <b>114</b> |
| <b>No. of excursion above 50.00 Hz</b> | <b>175</b> |
| <b>No. of excursion below 50.00 Hz</b> | <b>172</b> |

|  |                |   |                |
|--|----------------|---|----------------|
| <b>Average time freq remains below 49.97 per excursion</b> | <b>0:02:57</b> | <b>Average time frequency remains above 50.03 per excursion</b> | <b>0:03:49</b> |
|--|----------------|---|----------------|