

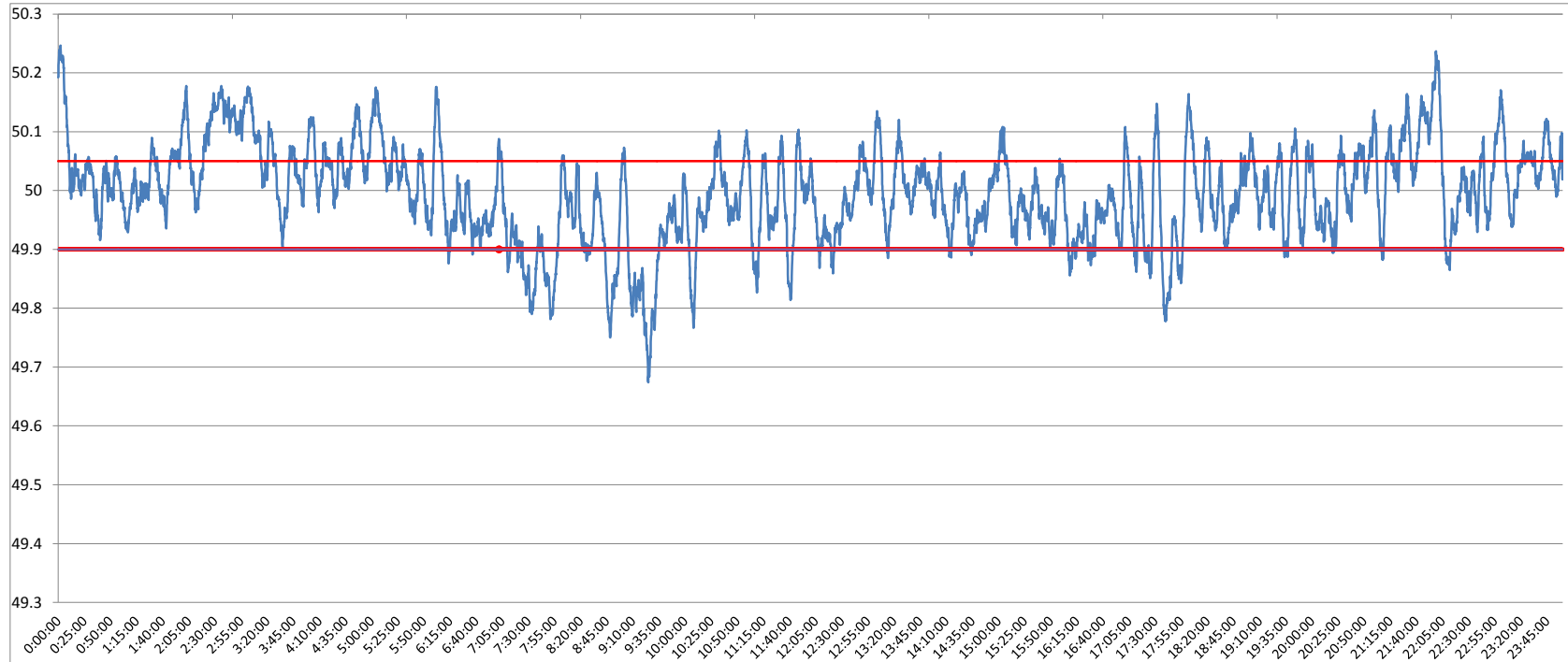


**POWER SYSTEM OPERATION CORPORATION LIMITED**  
NATIONAL LOAD DESPATCH CENTRE NEW DELHI

SLPR4:Frequency

National Grid Frequency Profile for

12-Dec-16



| <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     | 0.12  | 10.58  | 37.78  | 1.66      | 8.81      | 40.30     | 39.44     | 9.07      | 64.44       | 99.28     | 28.24       | 15.32      | 49.03 | 33.98  | 24.98  | 0.60  |

|                          |              |                                    |              |                             |              |
|--------------------------|--------------|------------------------------------|--------------|-----------------------------|--------------|
| <b>Average Frequency</b> | <b>50.00</b> | <b>Frequency Variation Index :</b> | <b>0.068</b> | <b>Standard Deviation :</b> | <b>0.082</b> |
|--------------------------|--------------|------------------------------------|--------------|-----------------------------|--------------|

| Instantaneous Frequency |       | 15 minute average Frequency |     | No. of excursion above 50.03 Hz |          |                                 |     |
|-------------------------|-------|-----------------------------|-----|---------------------------------|----------|---------------------------------|-----|
| Max                     | 50.25 | 0:02:10                     | Max | 50.146                          | 22:00:00 | No. of excursion below 49.97 Hz | 116 |
| Min                     | 49.67 | 9:24:40                     | Min | 49.780                          | 9:30:00  | No. of excursion above 50.00 Hz | 117 |
|                         |       |                             |     |                                 |          | No. of excursion below 50.00 Hz | 116 |

|                                                            |                |                                                                 |                |
|------------------------------------------------------------|----------------|-----------------------------------------------------------------|----------------|
| <b>Average time freq remains below 49.97 per excursion</b> | <b>0:04:41</b> | <b>Average time frequency remains above 50.03 per excursion</b> | <b>0:04:07</b> |
|------------------------------------------------------------|----------------|-----------------------------------------------------------------|----------------|