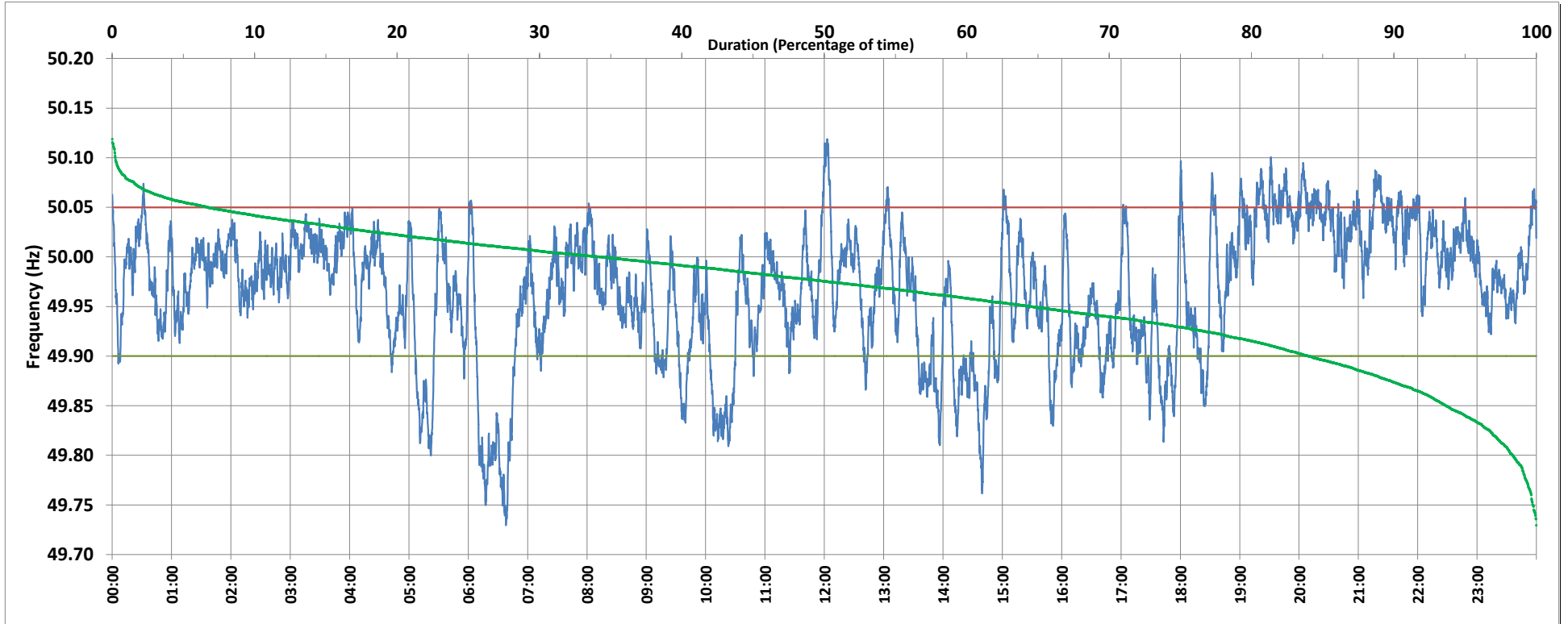


POWER SYSTEM OPERATION CORPORATION LIMITED

NATIONAL LOAD DESPATCH CENTRE, NEW DELHI



Frequency profile for 15-Oct-2018 (Monday)



<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
0.00	15.95	46.60	1.64	14.31	49.66	34.16	0.23	77.31	100.00	37.55	6.54	34.32	15.86	6.74	0.00	35.43	57.84	19.48

Average Frequency : 49.966	Frequency Variation Index : 0.054	Standard Deviation : 0.065	Mileage: 44.2	FDI: 22.7
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Instantaneous Frequency		
Max	50.119	12:02:50
Min	49.730	6:38:00

15 minute Average Frequency		
Max	50.059	21:30:00
Min	49.784	6:45:00

No. of excursions	
above 50.03 Hz	98
below 49.97 Hz	127
above 50.00 Hz	160
below 50.00 Hz	159

Average time freq per excursion remains	
below 49.97	0:05:17
above 50.03	0:02:20

No. of hours freq outside 49.9-50.05 Hz	5:26:40
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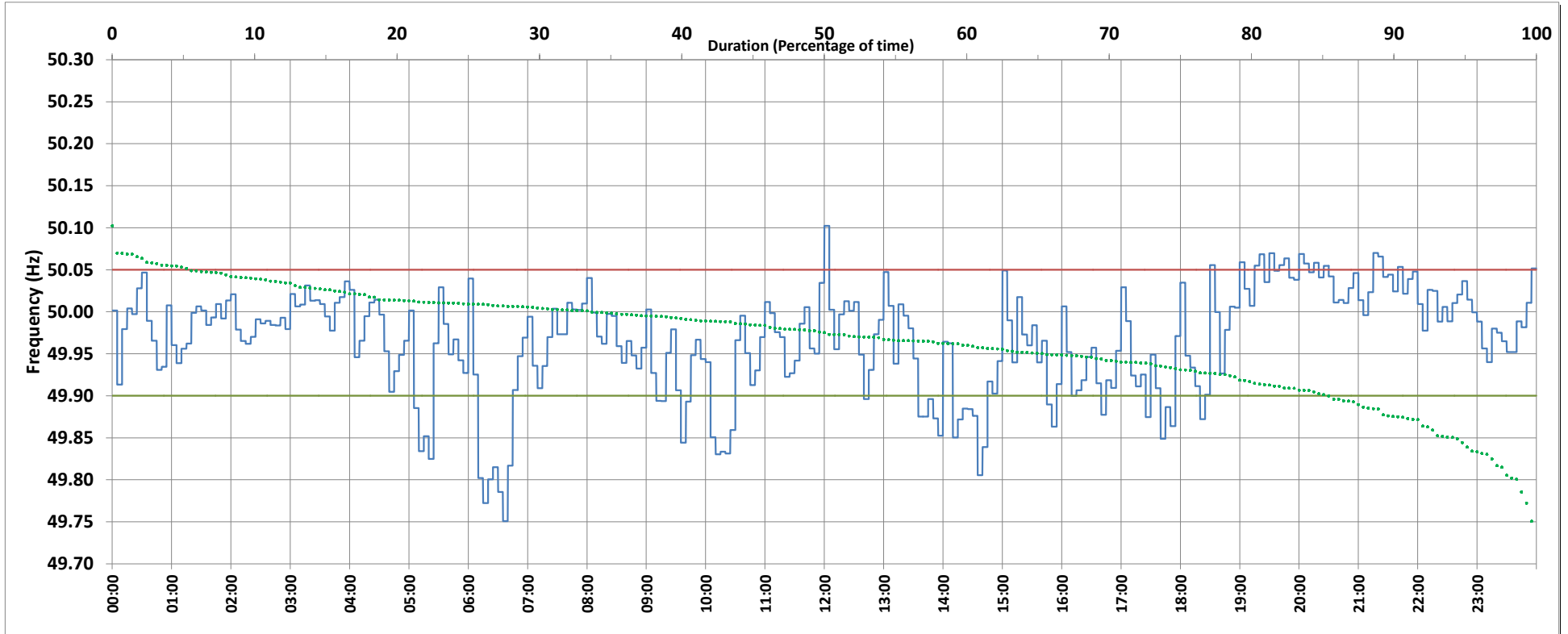
Source : MPPTCL BINA:Frequency 10 Sec. (8640 samples)

POWER SYSTEM OPERATION CORPORATION LIMITED

NATIONAL LOAD DESPATCH CENTRE, NEW DELHI



5 Min. Average Frequency profile for 15-Oct-2018 (Monday)



<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
0.00	14.58	47.22	1.04	13.54	51.74	33.33	0.35	79.86	100.00	39.58	5.21	33.68	13.19	5.56	0.00	34.4	60.1	19.8

Average Frequency : 49.966	Frequency Variation Index : 0.050	Standard Deviation : 0.062	Mileage: 9.4	FDI: 20.1
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Instantaneous Frequency		
Max	50.119	12:02:50
Min	49.730	6:38:00

5 minute Average Frequency		
Max	50.102	12:05:00
Min	49.751	6:45:00

No. of excursions	
above 50.03 Hz	18
below 49.97 Hz	30
above 50.00 Hz	34
below 50.00 Hz	33

Average time freq per excursion remains	
below 49.97	0:22:40
above 50.03	0:10:33

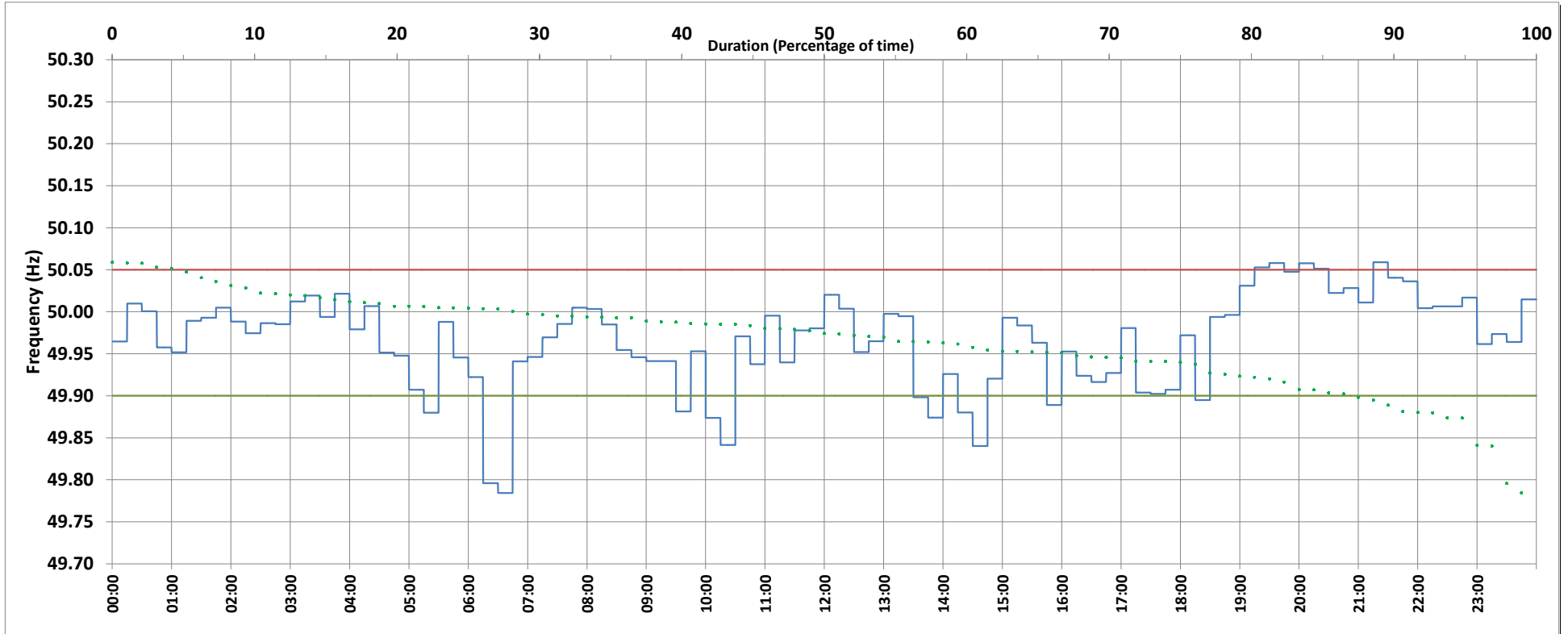
Source : MPPTCL BINA:Frequency 5 Min. (288 samples)

POWER SYSTEM OPERATION CORPORATION LIMITED

NATIONAL LOAD DESPATCH CENTRE, NEW DELHI



15 Min. Average Frequency profile for 15-Oct-2018 (Monday)



<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
0.00	12.50	45.83	2.08	10.42	58.33	29.17	0.00	82.29	100.00	44.79	5.21	29.17	9.38	5.21	0.00	32.3	62.5	19.8

Average Frequency : 49.966	Frequency Variation Index : 0.042	Standard Deviation : 0.056	Mileage: 3.2	FDI: 17.7
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Instantaneous Frequency		
Max	50.119	12:02:50
Min	49.730	6:38:00

15 minute Average Frequency		
Max	50.059	21:30:00
Min	49.784	6:45:00

No. of excursions	
above 50.03 Hz	2
below 49.97 Hz	14
above 50.00 Hz	9
below 50.00 Hz	9

Average time freq per excursion remains	
below 49.97	0:47:09
above 50.03	1:07:30

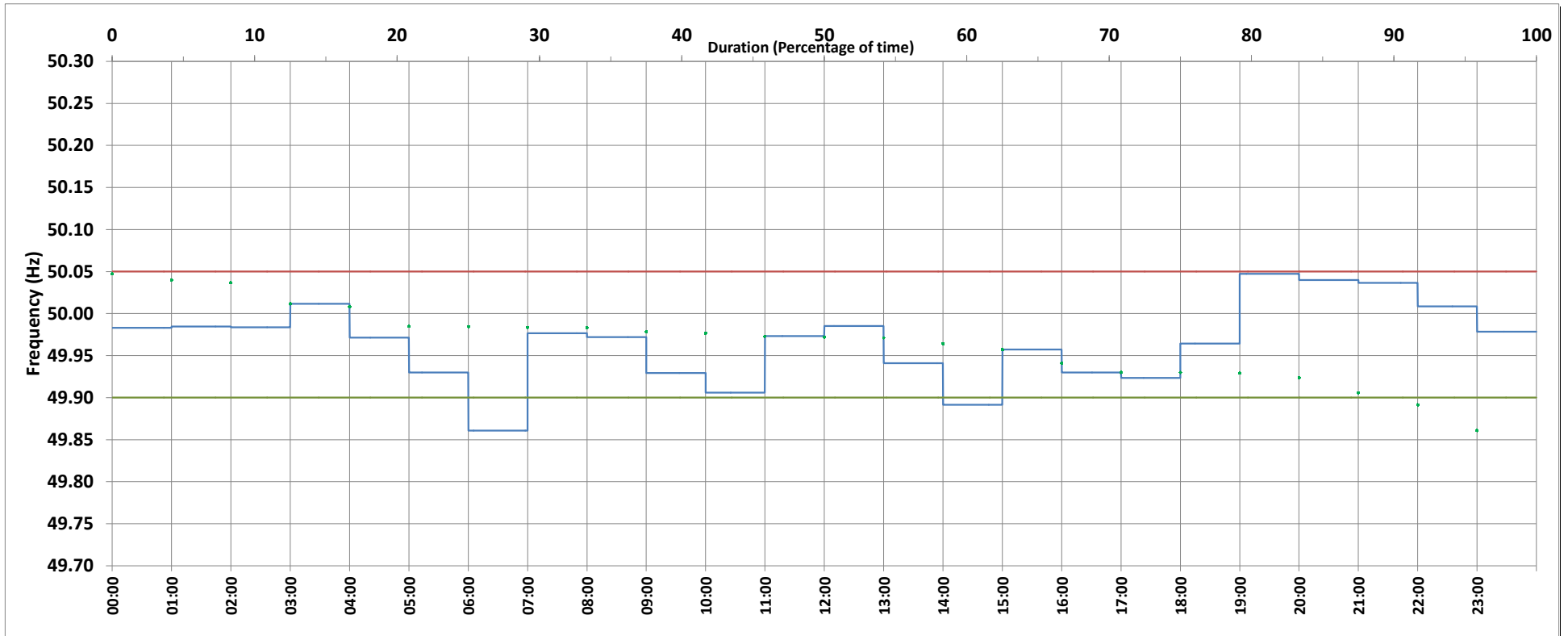
Source : MPPTCL BINA:Frequency 15 Min. (96 samples)

POWER SYSTEM OPERATION CORPORATION LIMITED

NATIONAL LOAD DESPATCH CENTRE, NEW DELHI



Hourly Average Frequency profile for 15-Oct-2018 (Monday)



<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
0.00	8.33	41.67	0.00	8.33	70.83	20.83	0.00	91.67	100.00	45.83	0.00	20.83	12.50	0.00	0.00	33.3	66.7	25.0

Average Frequency : 49.966	Frequency Variation Index : 0.032	Standard Deviation : 0.045	Mileage: 0.8	FDI: 8.3
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Instantaneous Frequency		
Max	50.119	12:02:50
Min	49.730	6:38:00

An Hour Average Frequency		
Max	50.047	20:00:00
Min	49.861	7:00:00

No. of excursions	
above 50.03 Hz	1
below 49.97 Hz	3
above 50.00 Hz	2
below 50.00 Hz	3

Average time freq per excursion remains	
below 49.97	3:20:00
above 50.03	3:00:00

Source : MPPTCL BINA:Frequency 60 Min. (24 samples)