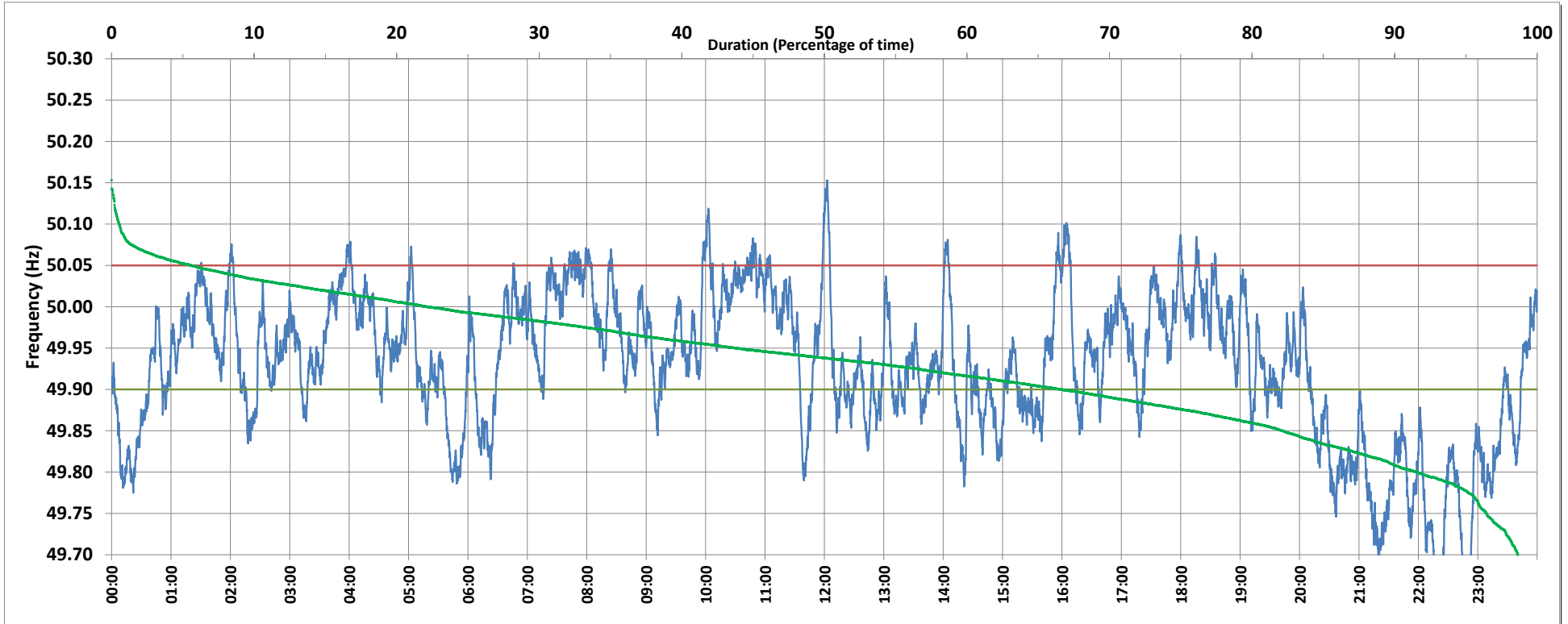


POWER SYSTEM OPERATION CORPORATION LIMITED

NATIONAL LOAD DESPATCH CENTRE, NEW DELHI



Frequency profile for 19-Jun-2018 (Tuesday)



<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
1.3	33.3	64.7	7.1	24.9	44.5	21.6	0.5	61.1	98.7	24.1	5.1	22.2	11.2	5.6	0.0	56.1	38.3	22.8

Average Frequency : 49.929	Frequency Variation Index : 0.127	Standard Deviation : 0.087	Mileage: 45.8	FDI: 38.9
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Instantaneous Frequency		
Max	50.153	12:02:50
Min	49.597	22:20:10

15 minute Average Frequency		
Max	50.047	8:00:00
Min	49.692	22:30:00

No. of excursions	
above 50.03 Hz	82
below 49.97 Hz	93
above 50.00 Hz	90
below 50.00 Hz	91

Average time freq per excursion remains	
below 49.97	0:10:01
above 50.03	0:01:58

No. of hours freq outside 49.9-50.05 Hz	9:20:40
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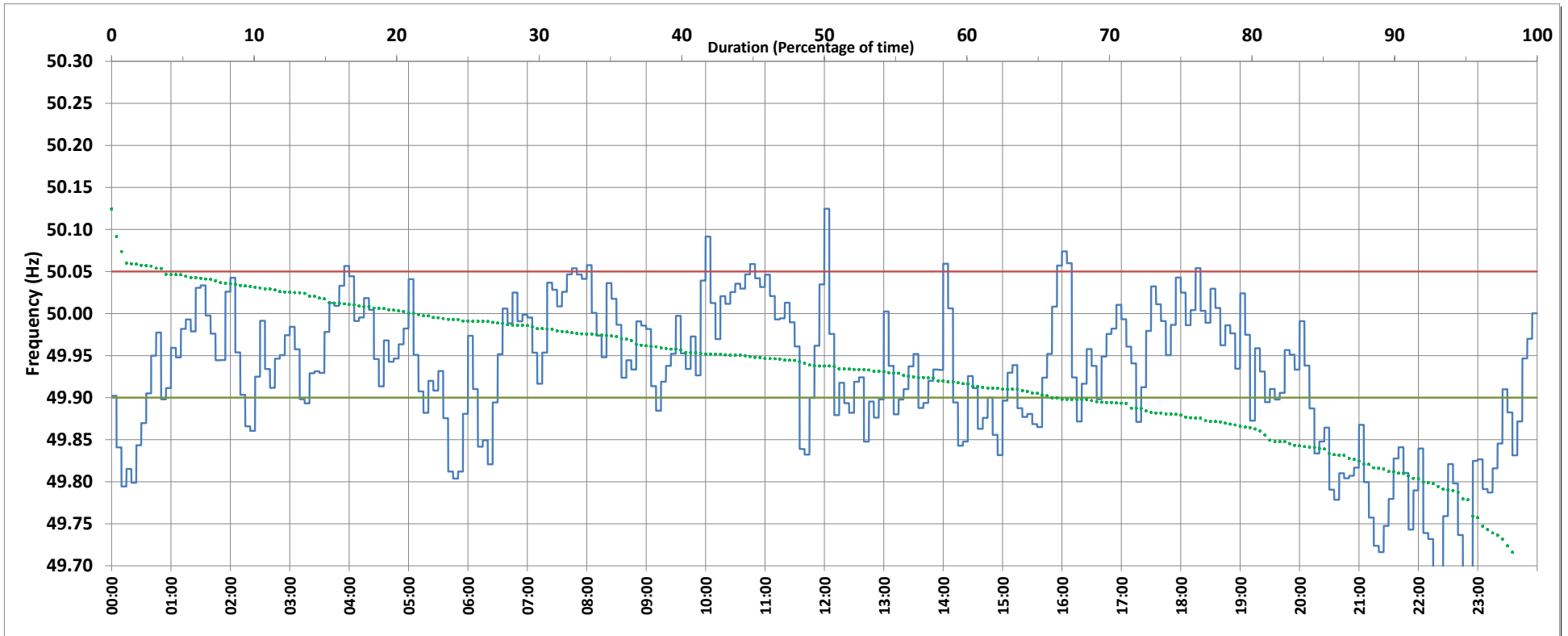
Source : MPPTCL BINA:Frequency 10 Sec. (8640 samples)

POWER SYSTEM OPERATION CORPORATION LIMITED

NATIONAL LOAD DESPATCH CENTRE, NEW DELHI



5 Min. Average Frequency profile for 19-Jun-2018 (Tuesday)



<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
1.39	34.03	64.24	6.60	26.04	44.44	21.18	0.35	62.15	98.61	25.00	3.47	21.53	10.76	3.82	0.00	55.6	40.6	21.5

Average Frequency : 49.929	Frequency Variation Index : 0.123	Standard Deviation : 0.085	Mileage: 10.7	FDI: 37.8
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Instantaneous Frequency		
Max	50.153	12:02:50
Min	49.597	22:20:10

5 minute Average Frequency		
Max	50.125	12:05:00
Min	49.652	22:30:00

No. of excursions	
above 50.03 Hz	16
below 49.97 Hz	27
above 50.00 Hz	23
below 50.00 Hz	23

Average time freq per excursion remains	
below 49.97	0:34:16
above 50.03	0:09:41

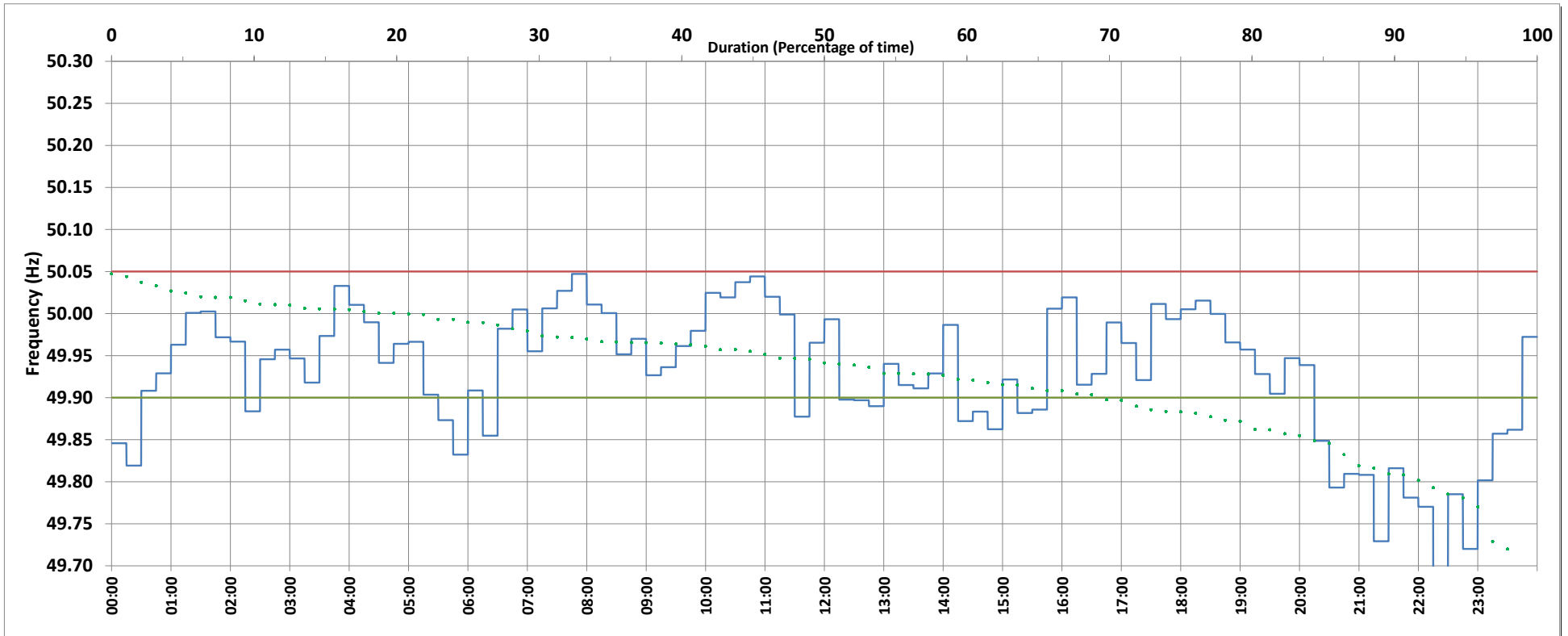
Source : MPPTCL BINA:Frequency 5 Min. (288 samples)

POWER SYSTEM OPERATION CORPORATION LIMITED

NATIONAL LOAD DESPATCH CENTRE, NEW DELHI



15 Min. Average Frequency profile for 19-Jun-2018 (Tuesday)



<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
1.04	30.21	66.67	6.25	22.92	48.96	20.83	0.00	69.79	98.96	29.17	0.00	20.83	4.17	0.00	1.04	53.1	46.9	22.9

Average Frequency : 49.929	Frequency Variation Index : 0.111	Standard Deviation : 0.078	Mileage: 3.8	FDI: 30.2
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Instantaneous Frequency		
Max	50.153	12:02:50
Min	49.597	22:20:10

15 minute Average Frequency		
Max	50.047	8:00:00
Min	49.692	22:30:00

No. of excursions	
above 50.03 Hz	3
below 49.97 Hz	11
above 50.00 Hz	8
below 50.00 Hz	9

Average time freq per excursion remains	
below 49.97	1:27:16
above 50.03	0:20:00

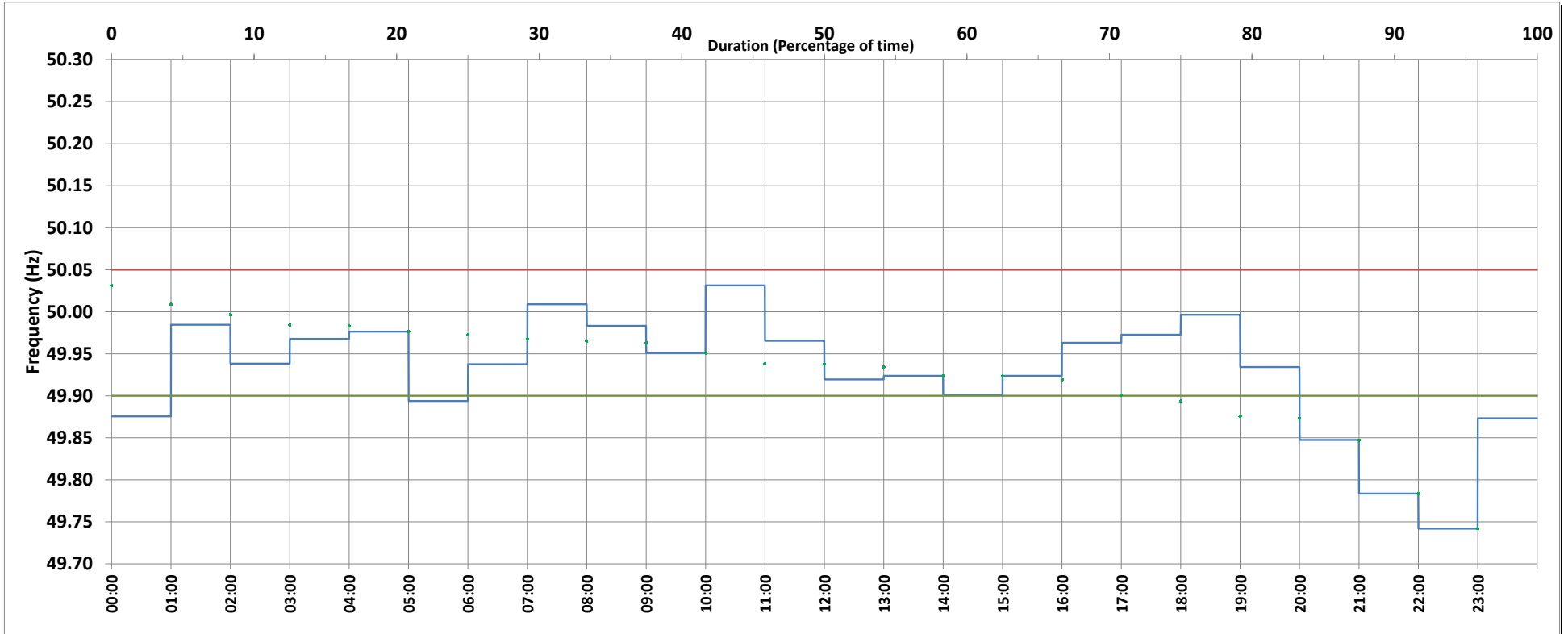
Source : MPPTCL BINA:Frequency 15 Min. (96 samples)

POWER SYSTEM OPERATION CORPORATION LIMITED

NATIONAL LOAD DESPATCH CENTRE, NEW DELHI



Hourly Average Frequency profile for 19-Jun-2018 (Tuesday)



<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	25.00	70.83	8.33	16.67	66.67	8.33	0.00	75.00	91.67	25.00	0.00	8.33	4.17	0.00	8.33	54.2	45.8	29.2

Average Frequency : 49.929	Frequency Variation Index : 0.095	Standard Deviation : 0.067	Mileage: 1.1	FDI: 25.0
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Instantaneous Frequency		
Max	50.153	12:02:50
Min	49.597	22:20:10

An Hour Average Frequency		
Max	50.031	11:00:00
Min	49.742	23:00:00

No. of excursions	
above 50.03 Hz	1
below 49.97 Hz	6
above 50.00 Hz	2
below 50.00 Hz	3

Average time freq per excursion remains	
below 49.97	2:50:00
above 50.03	1:00:00

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