

**Frequency Response Characteristic and Performance Computation in NorthEastern Region (Based on SCADA data)**

Reporting of generation loss event of approximately 1114 MW at the DB Power Generating Station in the Western Region control areas on 21st October 2024 at 16:49 hrs

S No	Particulars	Dimension	Gen Data		Gen Data		Gen Data		Gen Data		Gen Data		Gen Data		Gen Data		Gen Data		Gen Data		Gen Data	
			Assam GBPS	Agartala GBPS	Bongaigaon TPP	Palatana	Doyang HEP	Kameng HEP	Khandong HEP	Khandong Stg-2	Kopili HEP	Loktak HEP	Panyor HEP	Pare HEP	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Tripura*	NER Region*
1	Actual Net Interchange before the Event (16:49:34)	MW	-146	-73	-754	-525	-25	-303	0	-25	-200	-105	0	0	112	1325	165	218	59	110	307	275
2	Actual Net Interchange after the Event (16:50:20)	MW	-146	-75	-756	-526	-25	-303	0	-26	-203	-105	0	0	112	1326	167	216	59	114	307	280
3	Change in Net Interchange (2 - 1)	MW	-0.6	-1.5	-2.0	-0.6	0.0	0.0	0.0	-0.9	-2.4	-0.1	-0.2	0.0	-0.2	0.8	1.3	-1.4	0.2	3.9	0.2	4.9
4	Generation Loss (+) / Load Throw off (-) during the Event	MW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	Control Area Response (3 - 4)	MW	-0.6	-1.5	-2.0	-0.6	0.0	0.0	0.0	-0.9	-2.4	-0.1	-0.2	0.0	-0.2	0.8	1.3	-1.4	0.2	3.9	0.2	4.9
6	Frequency before the Event	HZ	49.998	49.998	49.998	49.998	49.998	49.998	49.998	49.998	49.998	49.998	49.998	49.998	49.998	49.998	49.998	49.998	49.998	49.998	49.998	49.998
7	Frequency after the Event	HZ	49.965	49.965	49.965	49.965	49.965	49.965	49.965	49.965	49.965	49.965	49.965	49.965	49.965	49.965	49.965	49.965	49.965	49.965	49.965	49.965
8	Change in Frequency (7 - 6)	HZ	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03
9	Frequency Response Characteristic (5 / 8)	MW/HZ	17	44	59	18	0	0	0	27	73	3	5	0	7	-25	-41	-42	-6	-117	-5	-148
10	Frequency Response Obligation (FRO) of control area	MW/HZ	0	0	35	35	3	20	0	2	6	3	16	6	7	108	0	22	6	7	30	306
11	Frequency Response Performance (FRP) (9/10)		NA	NA	1.70	0.52	0.10	0.00	No Gen	16.50	12.48	1.01	No Gen	No Gen	0.92	-0.24	NA	1.89	-1.12	-15.97	-0.18	-0.49
12	Grading of Frequency Response Performance (FRP)		NA	NA	Excellent	Below Average	Poor	Poor	No Gen	Excellent	Excellent	Excellent	No Gen	No Gen	Good	Poor	NA	Excellent	Poor	Poor	Poor	Poor
13	Remarks		Not applicable	Not applicable				FGMO OFF due to spillage	Under Long Outage				No Gen	No Gen			Not applicable					

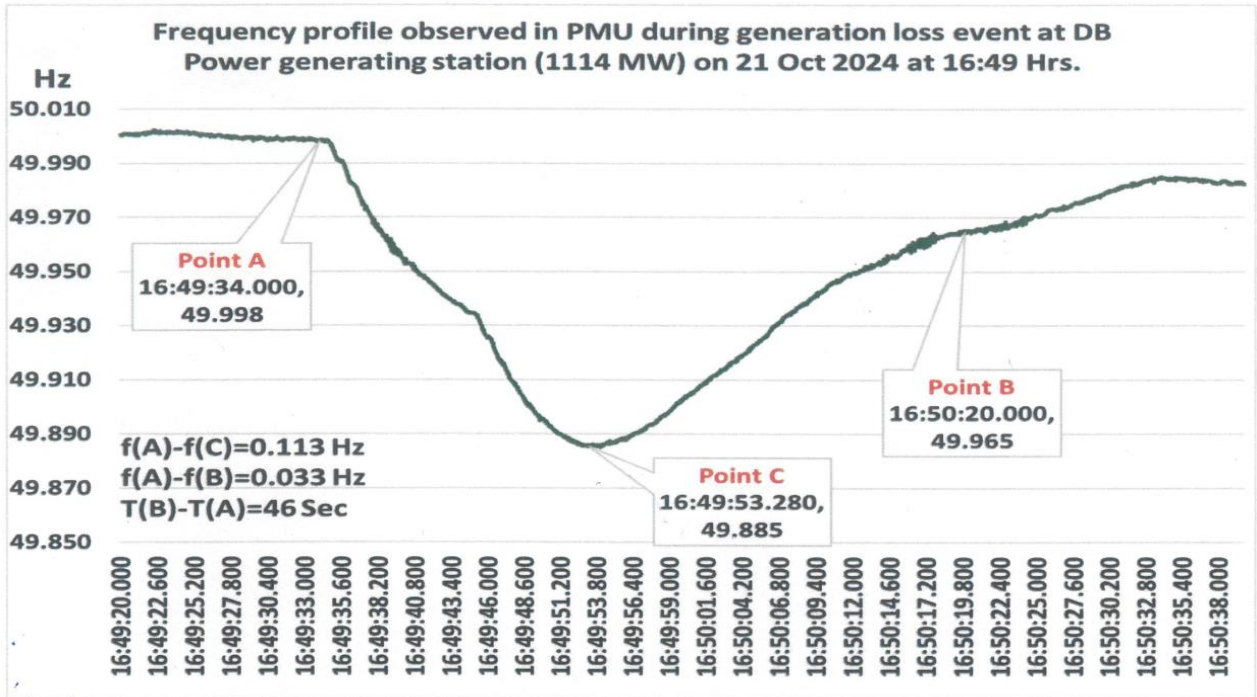


Figure 1: Generation loss event at DB power generating station, WR at 16:49 hrs of 21<sup>st</sup> Oct 2024