

Frequency Response Characteristic and Performance Computation in NorthEastern Region

On 19th April 2024, at 10:28 hrs generation loss of around 1040 MW occurred in RE complex of Rajasthan.The net generation loss of 1040 MW has been considered for the Frequency Response Characteristics(FRC) computation.

S No	Particulars	Dimension	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 (10:28:29)	MW	-170	-70	-446	-448	0	-510	0	0	0	-5	0	0	98	955	124	257	55	90	140	169
2	Actual Net Interchange after the Event (10:29:29)	MW	-170	-70	-453	-451	0	-522	0	0	0	-5	0	0	99	952	124	259	54	90	137	131
3	Change in Net Interchange (2 - 1)	MW	-0.3	0.3	-6.6	-3.2	0.0	-11.7	0.0	0.0	0.0	0.0	0.0	0.0	0.3	-2.6	-0.5	1.6	-1.2	-0.1	-3.6	-38.0
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	-0.3	0.3	-6.6	-3.2	0.0	-11.7	0.0	0.0	0.0	0.0	0.0	0.0	0.3	-2.6	-0.5	1.6	-1.2	-0.1	-3.6	-38.0
6	Frequency before the Event	HZ	50.059	50.059	50.059	50.059	50.059	50.059	50.059	50.059	50.059	50.059	50.059	50.059	50.059	50.059	50.059	50.059	50.059	50.059	50.059	50.059
7	Frequency after the Event	HZ	50.007	50.007	50.007	50.007	50.007	50.007	50.007	50.007	50.007	50.007	50.007	50.007	50.007	50.007	50.007	50.007	50.007	50.007	50.007	50.007
8	Change in Frequency (7 - 6)	HZ	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05
9	Frequency Response Characteristic (5 / 8)	MW/Hz	5	-6	126	61	0	224	0	0	0	-1	0	0	-5	50	9	-30	23	2	69	729
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	273
11	Frequency Response Performance (FRP) (9-10)		NA	NA	3.62	1.74	No Gen	11.04	No Gen	No Gen	No Gen	-0.36	No Gen	No Gen	-0.69	0.46	NA	-1.37	4.10	0.34	2.31	2.67

Frequency Profile during RE generation loss event in Rajasthan(NR) on 19th April 2024 at 10:28 hrs

