

THE DAILY BHUTAN POWER SYSTEM OPERATOR LOAD-GENERATION BALANCE REPORT & ENERGY FIGURES ISSUED ON 19-Oct-2024(-ve:import, +ve:export)							
Report Details	Date	Time	National Coincidental Peak Load (MW)		Date	Time	Load
	18-Oct-2024	19:00 hrs			30-Dec-2023	18:00 hrs	955.51
Sl. No.	Hydropower Plant	Unit	MW	Transmission Lines and Elements	Load (MW)	Remarks	
1	6 x 170MW THP	Unit-I	138.93	400kV THP - Siliguri Line - I	153.61		
		Unit-II	185.19	400kV THP - Siliguri Line - II	153.15		
		Unit-III	153.73	400kV THP - Siliguri Line - IV	147.70		
		Unit-IV	51.73	400kV THP - Malbase Line - III	313.06		
		Unit-V	150.99	400kV Malbase - Siliguri Line	109.06		
		Unit-VI	89.42	-	-		
		Total	769.99	Auxiliary Consumption & Transformation Losses at Generator end	0.32%		
2	4 x 180MW MHP	Unit-I	150.28	400kV MHP - Jigmeling Line - I	0.00	400kV MHP-JLG Line I under Breakdown. 132kV MHP_Yurmo Line-I not in Service. 400kV JLG_ALI Interim Line II on Standby.	
		Unit-II	197.60	400kV MHP - Jigmeling Line - II	202.34		
		Unit-III	155.90	400kV MHP - Jigmeling Line - III	209.39		
		Unit-IV	80.44	400kV MHP - Jigmeling Line - IV	207.65		
		-	-	132kV MHP - Yurmo Line - I	0.00		
		-	-	132kV MHP - Yurmo Line - II	62.67		
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	123.64		
		-	-	400kV Jigmeling - Puna - Alipurduar Line - I	122.91		
		-	-	400kV Jigmeling - Puna - Alipurduar Line - II	0.00		
		-	-	400kV Jigmeling - Alipurduar Line - I	183.27		
		-	-	400kV Jigmeling - Alipurduar Line - II	185.46		
		-	-	80MVA, 220/132kV ICT - I (HV)	28.03		
		-	-	80MVA, 220/132kV ICT - II (HV)	27.80		
		-	-	220kV Tsirang - Jigmeling Line	-15.15		
		-	-	132kV Gelephu - Salakati Line	12.00		
		Total	584.22	Auxiliary Consumption & Transformation Losses at Generator end	0.27%		
		3	4 x 84MW CHP	Unit-I	80.09		
Unit-II	86.27			220kV CHP - Birpara Line - II	3.93		
Unit-III	67.08			220kV CHP - Gedu	98.53		
Unit-IV	86.47			220kV CHP - Jamjee (old) - I	71.48		
-	-			220kV CHP - Jamjee - II (new)	71.91		
-	-			220kV CHP - Jamjee - III (new)	69.45		
-	-			220kV Malbase - Birpara Line	-26.62		
-	-			66kV CHP - Gedu Line	0.00		
-	-			3x3MVA, 66/11kV TFR	1.00		
Total	319.91			Auxiliary Consumption & Transformation Losses at Generator end	-0.10%		
4	2 x 12MW BHP (U/S)	Unit-I	9.13	220kV BHP - Sentokha Line	120.90		
		Unit-II	9.89	66kV BHP - Lobeyasa Line	28.89		
		Total	19.02	220kV BHP - Tsirang Line	-98.08		
5	2 x 20MW BHP (L/S)	Unit-I	16.81	5MVA, 66/11kV TFR	0.56		
		Unit-II	16.19	30MVA ICT, 220/66kV (HV)	11.10		
		Total	33.00	Auxiliary Consumption & Transformation Losses at Generator end	-0.48%		
6	2 x 63MW DHP	Unit-I	47.77	220kV DHP - Tsirang Line	95.08	220kV DHP_Dagapela Line on Standby.	
		Unit-II	47.77	220kV DHP - Dagapela Line	0.31		
		-	-	220kV Jigmeling - Dagapela Line	53.06		
		-	-	5MVA, 220/33kV TFR	0.20		
Total	95.54	Auxiliary Consumption & Transformation Losses at Generator end	-0.05%				
7	4 x 15MW KHP	Unit-I	16.54	132kV KHP - Nangkor Line	41.36		
		Unit-II	16.55	132kV KHP - Kilikhar Line	23.81		
		Unit-III	16.57	5MVA, 132/11kV TFR	0.35		
		Unit-IV	16.59	132kV Motanga - Rangia Line	45.28		
		Total	66.25	Auxiliary Consumption & Transformation Losses at Generator end	1.10%		
8	2 x 59MW NHP	Unit-I	50.03	132kV NHP-MHP-I	49.77		
		Unit-II	49.98	132kV NHP-MHP-II	49.65		
		Total	100.01	Auxiliary Consumption & Transformation Losses at Generator end	0.59%		

Note: Generation-Load Summary (MW) for 18-Oct-2024 at 19:00 hrs

Sl. No.	Region	Total Generation	Total Load (Gen. - Exp.)	Total Load (Feeder Summation)	Total Export/Import	Auxiliary Consumption & Transformation Losses
1	Western Grid	1,237.46	707.86	705.69	544.75	2.17
2	Eastern Grid	750.48	186.41	183.50	548.92	2.91
	Total	1,987.94	894.27	889.19	1,093.67	5.08

Note: Generation-Load Summary (MW) for 18-Oct-2023, at 19:00 hrs

Sl. No.	Region	Total Generation	Total Load (Gen. - Exp.)	Total Load (Feeder Summation)	Total Export/Import	Auxiliary Consumption & Transformation Losses
1	Western Grid	975.39	665.61	660.87	367.43	4.74
2	Eastern Grid	388.30	188.99	187.88	141.66	1.11
	Total	1,363.69	854.60	848.75	509.09	5.85

Note: Daily Energy (MUs) and Power(MW) Statistics for 18-Oct-2024

Sl. No.	Net Energy Export (Bilateral)	Net Energy Import (Bilateral)	Daily Energy Met	Total Energy Generation	Peak Cross-border (MW)	Imp./Exp. through Exchange (MUs)
1	25.93	0.00	20.13	47.84	1,327.46	1.72

- The Instantaneous load balance, calculated as (Total generation - (Total export-Import) - Total domestic load), do not tend towards zero. This could be due to the following reasons:
 - Not all the meters are digital and nor are all the meter at all locations can be read at same time (say 9:00hrs) due to many meter to be read manually.
 - The clocks of all the locations are not synchronized.
- This report, compiled using the SCADA data, is prepared to give an overall idea of the generation & load flow for the system at a particular instant. This report also gives energy and import/export figures.
- When SCADA data are unavailable for certain stations due to technical issues, required data are collected from the site.