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Ministry of Energy and Natural Resources
Royal Government of Bhutan
Office of the Bhutan Power System Operator
Thimphu: Bhutan



THE DAILY BHUTAN POWER SYSTEM OPERATOR LOAD-GENERATION BALANCE REPORT & ENERGY FIGURES ISSUED ON 10-Jun-2025(-ve:import, +ve:export)						
Report Details		Date	Time	National Coincidental Peak Load (MW)		
		June 9, 2025	9:00 AM			
				25-Dec-24		
				18:38:16		
				1026.44		
Sl. No.	Hydropower Plant	Unit	MW	Transmission Lines and Elements	Load (MW)	Remarks
1	6 x 170MW THP	Unit-I	95.00	400kV THP - Siliguri Line - I	66.34	400kV THP-Siliguri Line -II on Standby. THP Unit-II & IV on Standby.
		Unit- II	0.00	400kV THP - Siliguri Line - II	0.00	
		Unit- III	119.00	400kV THP - Siliguri Line- IV	60.99	
		Unit- IV	0.00	400kV THP - Malbase Line - III	262.74	
		Unit- V	83.00	400kV Malbase - Siliguri Line	19.60	
		Unit- VI	95.00	-	-	
		Total	392.00	Auxiliary Consumption & Transformation Losses at Generator end	0.49%	
2	4 x 180MW MHP	Unit-I	85.29	400kV MHP - Jigmeling Line - I	124.07	400kV MHP-JLG line- II on Standby. 132kV MHP_Yumoo Line- I not in Service.
		Unit-II	70.20	400kV MHP - Jigmeling Line - II	0.00	
		Unit-III	140.81	400kV MHP - Jigmeling Line - III	128.92	
		Unit-IV	85.60	400kV MHP - Jigmeling Line - IV	128.41	
		-	-	132kV MHP - Yurno Line - I	0.00	
		-	-	132kV MHP - Yurno Line - II	60.00	
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	0.39	
		-	-	400kV Jigmeling - Alipurduar Line - I : direct lines	298.18	
		-	-	400kV Jigmeling - Alipurduar Line - II :	298.18	
		-	-	80MVA, 220/132kV ICT - I (HV)	-40.25	
		-	-	80MVA, 220/132kV ICT - II (HV)	-39.82	
		-	-	220kV Tsirang - Jigmeling Line	-104.41	
		-	-	132kV Gelephu - Salakati Line	15.06	
		Total	381.90	Auxiliary Consumption & Transformation Losses at Generator end	0.13%	
		Unit- I	40.00	400kV PHP II - Jigmeling -I	214.00	Unit-IV under shutdown
3	6 x 170MW PHP-II	Unit- II	153.00	400kV PHP II - Jigmeling -II	215.00	
		Unit- III	187.00	400kV PHP II - Alipurduar -I	0.00	
		Unit- IV	40.00	400kV PHP II - Alipurduar -II	0.00	
		Unit- V	0.00	-	-	
		Unit- VI	0.00	-	-	
4	4 x 84MW CHP	Total	420.00	Auxiliary Consumption & Transformation Losses at Generator end	-2.14%	Unit-IV under shutdown
		Unit- I	70.12	220kV CHP - Birpara Line - I	-11.16	
		Unit- II	69.85	220kV CHP - Birpara Line - II	-10.86	
		Unit- III	61.14	220kV CHP - Gedu	25.62	
		Unit- IV	0.00	220kV CHP - Jamjee (old) - I	68.94	
		-	-	220kV CHP - Jamjee - II (new)	68.28	
		-	-	220kV CHP - Jamjee - III (new)	65.54	
		-	-	220kV Malbase - Birpara Line	0.48	
		-	-	66kV CHP - Gedu Line	1.49	
		-	-	3x3MVA, 66/11kV TFR	0.99	
		Total	201.11	Auxiliary Consumption & Transformation Losses at Generator end	-3.84%	
5	2 x 12MW BHP (U/S)	Unit- I	7.10	220kV BHP - Semtokha Line	98.80	Upper Stage Unit-II on Standby.
		Unit- II	0.00	66kV BHP - Lobeysha Line	22.26	
		Total	7.10	220kV BHP - Tsirang Line	-100.52	
6	2 x 20MW BHP (L/S)	Unit- I	8.50	5MVA, 66/11kV TFR	0.42	
		Unit- II	4.80	30MVA ICT, 220/66kV (HV)	15.89	
		Total	13.30	Auxiliary Consumption & Transformation Losses at Generator end	-2.75%	
7	2 x 63MW DHP	Unit-I	31.00	220kV DHP - Tsirang Line	0.00	DHP Unit-II on Standby. 220kV DHP- Tsirang line kept on Standby.
		Unit-II	0.00	220kV DHP - Dagapela Line	30.80	
		-	-	220kV Jigmeling - Dagapela Line	18.42	
		-	-	5MVA, 220/33kV TFR	0.20	
		Total	31.00	Auxiliary Consumption & Transformation Losses at Generator end	0.26%	
8	4 x 15MW KHP	Unit- I	13.81	132kV KHP - Nangkhor Line	34.88	
		Unit-II	13.85	132kV KHP - Kilikhar Line	19.70	
		Unit- III	13.85	5MVA, 132/11kV TFR	0.22	
		Unit- IV	13.82	132kV Motanga - Rangia Line	27.17	
9	2 x 59MW NHP	Total	55.33	Auxiliary Consumption & Transformation Losses at Generator end	0.96%	
		Unit-I	0.00	132kV NHP-MHP-I	30.00	
		Unit-II	60.01	132kV NHP-MHP-II	30.00	
10	2 x 9MW SHP	Total	60.01	Auxiliary Consumption & Transformation Losses at Generator end	0.02%	Unit-I under inspection.
		Unit- I	4.50	66kV SHP-Damdhum (Samtse)	0.00	
		Unit- II	4.99	-	-	
		Total	9.49	Auxiliary Consumption & Transformation Losses at Generator end	100.00%	Interim measure: evacuation is through 33kV system.

Note: Generation-Load Summary (MW) for 09-Jun-25 at 09:00 hrs

Sl. No.	Region	Total Generation	Total Domestic Load (Total Generation - Total Export)	Total Export(+ve)/ Import(-ve)
1	Both Eastern & Western (Whole Bhutan)	1,571.32	807.34	763.98

Note: Generation-Load Summary (MW) for 09-Jun-24 at 09:00 hrs

Sl. No.	Region	Total Generation	Total Domestic Load (Total Generation - Total Export)	Total Export(+ve)/ Import(-ve)
1	Both Eastern & Western (Whole Bhutan)	970.32	873.75	96.57

THE DAILY BHUTAN POWER SYSTEM OPERATOR LOAD-GENERATION BALANCE REPORT & ENERGY FIGURES ISSUED ON 10-Jun-2025(-ve:import, +ve:export)						
Report	Date	Time	National Coincidental Peak Load (MW)		Date	Time
Details	June 9, 2025	19:00:00			25-Dec-2024	18:36
						1026.44
Sl. No.	Hydropower Plant	Unit	MW	Transmission Lines and Elements	Load (MW)	Remarks
1	6 x 170MW THP	Unit- I	120.00	400kV THP - Siliguri Line - I	84.22	Unit-II & IV on Standby. 400kV THP-Siliguri Line -II on Standby.
		Unit- II	0.00	400kV THP - Siliguri Line - II	0.00	
		Unit- III	109.00	400kV THP - Siliguri Line - IV	78.38	
		Unit- IV	0.00	400kV THP - Malbase Line - III	312.94	
		Unit- V	119.00	400kV Malbase - Siliguri Line	25.40	
		Unit- VI	130.00	-	-	
		Total	478.00	Auxiliary Consumption & Transformation Losses at Generator end	0.51%	
2	4 x 180MW MHP	Unit-I	85.15	400kV MHP - Jigmeling Line - I	131.64	400kV MHP-JLG line-II on Standby. 132kV MHP_Yurmoo Line- I not in Service.
		Unit-II	75.77	400kV MHP - Jigmeling Line - II	0.00	
		Unit-III	160.56	400kV MHP - Jigmeling Line - III	136.96	
		Unit-IV	85.47	400kV MHP - Jigmeling Line - IV	136.41	
		-	-	132kV MHP - Yurmo Line - I	0.00	
		-	-	132kV MHP - Yurmo Line - II	60.60	
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	214.18	
		-	-	400kV Jigmeling - Alipurduar Line - I	271.27	
		-	-	400kV Jigmeling - Alipurduar Line - II	269.82	
		-	-	80MVA, 220/132kV ICT - I (HV)	50.26	
		-	-	80MVA, 220/132kV ICT - II (HV)	49.86	
		-	-	220kV Tsirang - Jigmeling Line	-100.79	
		-	-	132kV Gelephu - Salakati Line	14.98	
		Total	406.95	Auxiliary Consumption & Transformation Losses at Generator end	0.35%	
3	6 x 170MW PHP-II	Unit- I	188.53	400kV PHP II - Jigmeling -I	185.80	Unit III tripped @ 18:32hrs. Unit II Under Shutdown
		Unit- II	0.00	400kV PHP II - Jigmeling -II	186.20	
		Unit- III	0.00	400kV PHP II - Alipurduar -I		
		Unit- IV	186.00	400kV PHP II - Alipurduar -II		
		Unit- V	-	-	-	
		Unit- VI	-	-	-	
		Total	374.53	Auxiliary Consumption & Transformation Losses at Generator end	0.68%	
4	4 x 84MW CHP	Unit- I	40.30	220kV CHP - Birpara Line - I	-8.20	
		Unit- II	40.08	220kV CHP - Birpara Line - II	-8.40	
		Unit- III	46.40	220kV CHP - Gedu	7.50	
		Unit- IV	80.04	220kV CHP - Jamjee - I	70.93	
		-	-	220kV CHP - Jamjee - II	70.23	
		-	-	220kV CHP - Jamjee - III	67.80	
		-	-	220kV Malbase - Birpara Line	15.00	
		-	-	66kV CHP - Gedu Line	1.50	
		-	-	3x3MVA, 66/11kV TFR	1.22	
		Total	206.82	Auxiliary Consumption & Transformation Losses at Generator end	2.05%	
5	2 x 12MW BHP (U/S)	Unit- I	6.80	220kV BHP - Semtokha Line	94.00	L/S Unit I & U/S Unit-II on Standby
		Unit- II	0.00	66kV BHP - Lobeysa Line	22.28	
		Total	6.80	220kV BHP - Tsirang Line	-96.46	
6	2 x 20MW BHP (L/S)	Unit- I	0.00	5MVA, 66/11kV TFR	0.48	
		Unit- II	13.90	30MVA ICT, 220/66kV (HV)	16.98	
		Total	13.90	Auxiliary Consumption & Transformation Losses at Generator end	1.92%	
7	2 x 63MW DHP	Unit-I	30.57	220kV DHP - Tsirang Line	0.00	Unit II on Standby. 132kV DHP_Tsirang Line on Standby
		Unit-II	0.00	220kV DHP - Dagapela Line	30.20	
		-	-	220kV Jigmeling - Dagapela Line	18.00	
		-	-	5MVA, 220/33kV TFR	0.20	
		Total	30.57	Auxiliary Consumption & Transformation Losses at Generator end	0.56%	
8	4 x 15MW KHP	Unit- I	12.56	132kV KHP - Nangkhon Line	29.24	
		Unit-II	12.64	132kV KHP - Kilikhar Line	20.30	
		Unit- III	12.65	5MVA, 132/11kV TFR	0.24	
		Unit- IV	12.58	132kV Motanga - Rangia Line	35.30	
		Total	50.43	Auxiliary Consumption & Transformation Losses at Generator end	1.29%	
9	2 x 59MW NHP	Unit-I	0.00	132kV NHP-MHP-I	60.10	Unit I on Standby. 132kV NHP-MHP-II on Standby.
		Unit-II	60.70	132kV NHP-MHP-II	0.00	
		Total	60.70	Auxiliary Consumption & Transformation Losses at Generator end	0.99%	
10	2 x 9MW SHP	Unit- I	4.50	66kV SHP-Damdhum (Samtse)	0.00	Interim measure: evacuation is through 33kV system.
		Unit- II	4.50	-	-	
		Total	9.00	Auxiliary Consumption & Transformation Losses at Generator end	100.00%	

Note: Generation-Load Summary (MW) for 09-Jun-2025 at 19:00 hrs

Sl. No.	Region	Total Generation	Total Domestic Load (Total Generation - Total Export)	Total Export(+ve)/ Import(-ve)
1	Both Eastern & Western (Whole Bhutan)	1,637.70	859.93	777.77

Note: Generation-Load Summary (MW) for 09-Jun-2024, at 19:00 hrs

Sl. No.	Region	Total Generation	Total Domestic Load (Total Generation - Total Export)	Total Export(+ve)/ Import(-ve)
1	Both Eastern & Western (Whole Bhutan)	929.35	860.07	62.98

Note: Daily Energy (MUs) and Power(MW) Statistics for 09-Jun-2025

Sl. No.	Total Energy Generation	Daily Energy Met	Net Energy Import (IEX and Solar)	Net Energy Export	Peak Cross-border (MW)
1	38.84	20.01	0.00	18.87	867.12

- 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 now are all the meter at all locations can be read at same time (say 9:00hrs) due to many meter to be read manually. ii) 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.