



ལྷན་ཁྲིམས་པོ་ལ་འཕུལ་བའི་རྒྱུ་རྩུག་གི་འཕུལ་བའི་ལྷན་ཁྲིམས་པོ།
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 28-May-2025(-ve:import, +ve:export)							
Report Details	Date	Time		National Coincidental Peak Load (MW)	Date	Time	Load
	May 27, 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	0.00	400kV THP - Siliguri Line - I	0.00	Unit-I under Shutdown. 400kV THP-Siliguri Line -I under Shutdown.	
		Unit- II	89.39	400kV THP - Siliguri Line - II	183.70		
		Unit- III	158.61	400kV THP - Siliguri Line- IV	172.94		
		Unit- IV	157.31	400kV THP - Malbase Line - III	383.79		
		Unit- V	158.35	400kV Malbase - Siliguri Line	125.88		
		Unit- VI	163.70	-	-		
		Total	727.36	Auxiliary Consumption & Transformation Losses at Generator end	-1.80%		
2	4 x 180MW MHP	Unit-I	0.00	400kV MHP - Jigmeling Line - I	293.12	Unit-1 on standby 400kV MHP-JLG line- II & III on Standby. 132kV MHP_Yurnoo Line- I not in Service.	
		Unit-II	197.96	400kV MHP - Jigmeling Line - II	0.00		
		Unit-III	195.39	400kV MHP - Jigmeling Line - III	0.00		
		Unit-IV	198.02	400kV MHP - Jigmeling Line - IV	294.04		
		-	-	132kV MHP - Yurnoo Line - I	0.00		
		-	-	132kV MHP - Yurnoo Line - II	62.38		
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	224.36		
		-	-	400kV Jigmeling - Alipurduar Line - I	452.36		
		-	-	400kV Jigmeling - Alipurduar Line - II	453.09		
		-	-	80MVA, 220/132kV ICT - I (HV)	-42.77		
		-	-	80MVA, 220/132kV ICT - II (HV)	-42.43		
		-	-	220kV Tsirang - Jigmeling Line	-102.61		
		-	-	132kV Gelephu - Salakati Line	20.94		
		Total	591.37	Auxiliary Consumption & Transformation Losses at Generator end	0.24%		
		3	6 x 170MW PHP-II	Unit- I	185.48		
Unit- II	184.75			400kV PHP II - Jigmeling -II	274.18		
Unit- III	184.94			400kV PHP II - Alipurduar -I	0.00		
Unit- IV	0.00			400kV PHP II - Alipurduar -II	0.00		
Unit- V	0.00			-	-		
Unit- VI	0.00			-	-		
Total	555.17			Auxiliary Consumption & Transformation Losses at Generator end	1.23%		
4	4 x 84MW CHP	Unit- I	91.70	220kV CHP - Birpara Line - I	1.96	Unit-IV under Shutdown.	
		Unit- II	91.32	220kV CHP - Birpara Line - II	2.05		
		Unit- III	92.13	220kV CHP - Gedu	84.87		
		Unit- IV	0.00	220kV CHP - Jamjee (old) - I	59.27		
		-	-	220kV CHP - Jamjee - II (new)	59.05		
		-	-	220kV CHP - Jamjee - III (new)	56.77		
		-	-	220kV Malbase - Birpara Line	-19.69		
		-	-	66kV CHP - Gedu Line	9.57		
		-	-	3x3MVA, 66/11kV TFR	1.32		
		Total	275.15	Auxiliary Consumption & Transformation Losses at Generator end	0.11%		
5	2 x 12MW BHP (U/S)	Unit- I	5.74	220kV BHP - Sentokha Line	130.63		
		Unit- II	6.41	66kV BHP - Lobeyasa Line	25.06		
		Total	12.15	220kV BHP - Tsirang Line	-121.19		
6	2 x 20MW BHP (L/S)	Unit- I	11.31	5MVA, 66/11kV TFR	0.38		
		Unit- II	10.92	30MVA ICT, 220/66kV (HV)	13.78		
		Total	22.23	Auxiliary Consumption & Transformation Losses at Generator end	-1.45%		
7	2 x 63MW DHP	Unit-I	35.27	220kV DHP - Tsirang Line	0.00	220kV DHP- Tsirang line kept on Standby. DHP Unit II on Standby.	
		Unit-II	0.00	220kV DHP - Dagapela Line	35.05		
		-	-	220kV Jigmeling - Dagapela Line	13.00		
		-	-	5MVA, 220/33kV TFR	0.18		
		Total	35.27	Auxiliary Consumption & Transformation Losses at Generator end	0.11%		
8	4 x 15MW KHP	Unit- I	16.44	132kV KHP - Nangkhori Line	43.22		
		Unit-II	16.51	132kV KHP - Kilikhar Line	22.03		
		Unit- III	16.60	5MVA, 132/11kV TFR	0.27		
		Unit- IV	16.54	132kV Motanga - Rangia Line	32.05		
		Total	66.09	Auxiliary Consumption & Transformation Losses at Generator end	0.86%		
9	2 x 59MW NHP	Unit-I	39.98	132kV NHP-MHP-I	19.83		
		Unit-II	20.02	132kV NHP-MHP-II	39.77		
		Total	60.00	Auxiliary Consumption & Transformation Losses at Generator end	0.67%		
10	2 x 9MW SHP	Unit- I	4.50	66kV SHP-Damdhum (Samtse)	0.00	Interim measure: evacuation is through 33kV system.	
		Unit- II	4.42	-	-		
		Total	8.92	Auxiliary Consumption & Transformation Losses at Generator end	100.00%		

Note: Generation-Load Summary (MW) for 27-May-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)	2,353.71	928.43	1,425.28

Note: Generation-Load Summary (MW) for 27-May-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)	1,066.82	840.78	-0.86

THE DAILY BHUTAN POWER SYSTEM OPERATOR LOAD-GENERATION BALANCE REPORT & ENERGY FIGURES ISSUED ON 28-May-2025(-ve:import, +ve:export)						
Report	Date	Time	National Coincidental Peak Load (MW)		Date	Time
Details	May 27, 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	0.00	400kV THP - Siliguri Line - I	0.00	Unit-I under Shutdown. 400kV THP-Siliguri Line -I under Shutdown.
		Unit- II	80.00	400kV THP - Siliguri Line - II	132.20	
		Unit- III	80.00	400kV THP - Siliguri Line - IV	123.90	
		Unit- IV	118.00	400kV THP - Malbase Line - III	344.87	
		Unit- V	155.00	400kV Malbase - Siliguri Line	79.27	
		Unit- VI	170.00	-	-	
		Total	603.00	Auxiliary Consumption & Transformation Losses at Generator end	0.34%	
2	4 x 180MW MHP	Unit-I	155.77	400kV MHP - Jigmeling Line - I	237.52	Unit IV under shutdown. 400kV MHP-JLG line-II & III on Standby. 132kV MHP_Yurmoo Line- I not in Service.
		Unit-II	164.19	400kV MHP - Jigmeling Line - II	0.00	
		Unit-III	166.07	400kV MHP - Jigmeling Line - III	0.00	
		Unit-IV	0.00	400kV MHP - Jigmeling Line - IV	238.42	
		-	-	132kV MHP - Yurmo Line - I	0.00	
		-	-	132kV MHP - Yurmo Line - II	62.20	
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	7.20	
		-	-	400kV Jigmeling - Alipurduar Line - I ; direct lines	387.64	
		-	-	400kV Jigmeling - Alipurduar Line - II ;	386.91	
		-	-	80MVA, 220/132kV ICT - I (HV)	46.56	
		-	-	80MVA, 220/132kV ICT - II (HV)	46.10	
		-	-	220kV Tsirang - Jigmeling Line	-128.80	
		-	-	132kV Gelephu - Salakati Line	13.93	
		Total	486.03	Auxiliary Consumption & Transformation Losses at Generator end	0.49%	
3	6 x 170MW PHP-II	Unit- I	180.45	400kV PHP II - Jigmeling -I	275.80	erstwhile interim lines
		Unit- II	185.40	400kV PHP II - Jigmeling -II	274.60	
		Unit- III	184.80	400kV PHP II - Alipurduar -I	0.00	
		Unit- IV	0.00	400kV PHP II - Alipurduar -II	0.00	
		Unit- V	0.00	-	-	
		Unit- VI	0.00	-	-	
		Total	550.65	Auxiliary Consumption & Transformation Losses at Generator end	0.05%	
4	4 x 84MW CHP	Unit- I	91.64	220kV CHP - Birpara Line - I	-1.20	Unit- IV under Shutdown.
		Unit- II	91.21	220kV CHP - Birpara Line - II	-1.20	
		Unit- III	91.58	220kV CHP - Gedu	64.51	
		Unit- IV	0.00	220kV CHP - Jamjee - I	67.26	
		-	-	220kV CHP - Jamjee - II	66.61	
		-	-	220kV CHP - Jamjee - III	64.33	
		-	-	220kV Malbase - Birpara Line	-6.86	
		-	-	66kV CHP - Gedu Line	8.39	
		-	-	3x3MVA, 66/11kV TFR	1.50	
		Total	274.43	Auxiliary Consumption & Transformation Losses at Generator end	1.54%	
5	2 x 12MW BHP (U/S)	Unit- I	5.00	220kV BHP - Semtokha Line	123.06	
		Unit- II	4.10	66kV BHP - Lobeysa Line	26.10	
6	2 x 20MW BHP (L/S)	Total	9.10	220kV BHP - Tsirang Line	-123.11	
		Unit- I	8.80	5MVA, 66/11kV TFR	0.64	
		Unit- II	8.90	30MVA ICT, 220/66kV (HV)	17.75	
		Total	17.70	Auxiliary Consumption & Transformation Losses at Generator end	0.41%	
7	2 x 63MW DHP	Unit-I	31.59	220kV DHP - Tsirang Line	0.00	220kV DHP-TSI line on Standby. Unit-II on standby.
		Unit-II	0.00	220kV DHP - Dagapela Line	31.37	
		-	-	220kV Jigmeling - Dagapela Line	16.39	
		-	-	5MVA, 220/33kV TFR	0.23	
		Total	31.59	Auxiliary Consumption & Transformation Losses at Generator end	-0.02%	
8	4 x 15MW KHP	Unit- I	16.52	132kV KHP - Nangkhor Line	42.29	
		Unit-II	16.52	132kV KHP - Kilikhar Line	22.95	
		Unit- III	16.63	5MVA, 132/11kV TFR	0.34	
		Unit- IV	16.55	132kV Motanga - Rangia Line	36.68	
		Total	66.22	Auxiliary Consumption & Transformation Losses at Generator end	0.97%	
9	2 x 59MW NHP	Unit-I	39.95	132kV NHP-MHP-I	14.77	
		Unit-II	15.00	132kV NHP-MHP-II	39.72	
		Total	54.95	Auxiliary Consumption & Transformation Losses at Generator end	0.84%	
10	2 x 9MW SHP	Unit- I	0.00	66kV SHP-Damdhum (Samtse)	0.00	Interim measure: evacuation is through 33kV system. Maintenance work going on for SHP Unit 1.
		Unit- II	8.96	-	-	
		Total	8.96	Auxiliary Consumption & Transformation Losses at Generator end	100.00%	

Note: Generation-Load Summary (MW) for 27-May-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)	2,102.63	951.36	1,151.27

Note: Generation-Load Summary (MW) for 27-May-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)	1,157.41	884.84	3.10

Note: Daily Energy (MUs) and Power(MW) Statistics for 27-May-2025

Sl. No.	Total Energy Generation	Daily Energy Met	Net Energy Import (IEX and Solar)	Net Energy Export	Peak Cross-border (MW)
1	55.34	21.96	0.00	33.16	961.47

- 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.