



ལྷན་ཁྲིམས་པོ་ལ་འཕགས་པའི་རྒྱུ་རྩའི་ལྷན་ཁྲིམས་
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 15-Jun-2025(+ve:import, +ve:export)						
Report Details	Date	Time		National Coincidental Peak Load (MW)		Load
	June 14, 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	79.68	400kV THP - Siliguri Line - I	14.03	400kV THP-Siliguri Line -IV on Standby. Unit-III & Unit VI on Standby.
		Unit- II	55.36	400kV THP - Siliguri Line - II	12.49	
		Unit- III	0.00	400kV THP - Siliguri Line- IV	0.00	
		Unit- IV	100.84	400kV THP - Malbase Line - III	319.13	
		Unit- V	109.34	400kV Malbase - Siliguri Line	-50.68	
		Unit- VI	0.00	-	-	
		Total	345.22	Auxiliary Consumption & Transformation Losses at Generator end	-0.12%	
2	4 x 180MW MHP	Unit-I	82.34	400kV MHP - Jigmeling Line - I	126.88	Unit III under shutdown. 400kV MHP-JLG line- III on Standby. 132kV MHP_Yurmoo Line- I not in Service. 220kV Tsirang-Jigmeling Line kept open for Shutdown of 220kV Jigmeling-Dagapela Line.
		Unit-II	154.84	400kV MHP - Jigmeling Line - II	126.46	
		Unit-III	0.00	400kV MHP - Jigmeling Line - III	0.00	
		Unit-IV	155.24	400kV MHP - Jigmeling Line - IV	123.06	
		-	-	132kV MHP - Yurmo Line - I	0.00	
		-	-	132kV MHP - Yurmo Line - II	61.60	
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	117.09	
		-	-	400kV Jigmeling - Alipurduar Line - I : direct lines	384.73	
		-	-	400kV Jigmeling - Alipurduar Line - II :	384.00	
		-	-	80MVA, 220/132kV ICT - I (HV)	-58.05	
		-	-	80MVA, 220/132kV ICT - II (HV)	-57.63	
		-	-	220kV Tsirang - Jigmeling Line	0.00	
		-	-	132kV Gelephu - Salakati Line	32.40	
		Total	392.42	Auxiliary Consumption & Transformation Losses at Generator end	-0.24%	
3	6 x 170MW PHP-II	Unit- I	169.36	400kV PHP II - Jigmeling -I	258.18	Unit-IV on Standby.
		Unit- II	170.31	400kV PHP II - Jigmeling -II	256.73	
		Unit- III	179.13	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	518.80	Auxiliary Consumption & Transformation Losses at Generator end	0.75%	
4	4 x 84MW CHP	Unit- I	66.57	220kV CHP - Birpara Line - I	-61.35	Unit-II under shutdown.
		Unit- II	0.00	220kV CHP - Birpara Line - II	-60.74	
		Unit- III	60.73	220kV CHP - Gedu	-25.07	
		Unit- IV	57.99	220kV CHP - Jamjee (old) - I	111.25	
		-	-	220kV CHP - Jamjee - II (new)	109.87	
		-	-	220kV CHP - Jamjee - III (new)	106.29	
		-	-	220kV Malbase - Birpara Line	-38.85	
		-	-	66kV CHP - Gedu Line	4.82	
		-	-	3x3MVA, 66/11kV TFR	1.24	
		Total	185.29	Auxiliary Consumption & Transformation Losses at Generator end	-0.55%	
5	2 x 12MW BHP (U/S)	Unit- I	0.00	220kV BHP - Semtokha Line	-24.30	U/S Unit-I & L/S Unit-I on Standby.
		Unit- II	5.90	66kV BHP - Lobeyza Line	18.28	
		Total	5.90	220kV BHP - Tsirang Line	22.37	
6	2 x 20MW BHP (L/S)	Unit- I	0.00	5MVA, 66/11kV TFR	0.41	
		Unit- II	11.10	30MVA ICT, 220/66kV (HV)	12.77	
		Total	11.10	Auxiliary Consumption & Transformation Losses at Generator end	1.41%	
7	2 x 63MW DHP	Unit-I	0.00	220kV DHP - Tsirang Line	-20.53	DHP Unit-I on Standby. 220kV Jigmeling_ Dagapela under Shutdown.
		Unit-II	25.81	220kV DHP - Dagapela Line	45.90	
		-	-	220kV Jigmeling - Dagapela Line	0.00	
		-	-	5MVA, 220/33kV TFR	0.20	
		Total	25.81	Auxiliary Consumption & Transformation Losses at Generator end	0.93%	
8	4 x 15MW KHP	Unit- I	15.06	132kV KHP - Nangkhor Line	37.07	
		Unit-II	15.06	132kV KHP - Kilikhar Line	22.39	
		Unit- III	15.14	5MVA, 132/11kV TFR	0.29	
		Unit- IV	15.13	132kV Motanga - Rangia Line	47.25	
		Total	60.39	Auxiliary Consumption & Transformation Losses at Generator end	1.06%	
9	2 x 59MW NHP	Unit-I	19.97	132kV NHP-MHP-I	24.80	
		Unit-II	24.94	132kV NHP-MHP-II	19.82	
		Total	44.91	Auxiliary Consumption & Transformation Losses at Generator end	0.65%	
10	2 x 9MW SHP	Unit- I	5.00	66kV SHP-Damdhum (Samtse)	0.00	Interim measure: evacuation is through 33kV system.
		Unit- II	4.00	-	-	
		Total	9.00	Auxiliary Consumption & Transformation Losses at Generator end	100.00%	

Note: Generation-Load Summary (MW) for 14-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)	1,598.84	935.56	663.28

Note: Generation-Load Summary (MW) for 14-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)	1,820.47	875.85	866.76

THE DAILY BHUTAN POWER SYSTEM OPERATOR LOAD-GENERATION BALANCE REPORT & ENERGY FIGURES ISSUED ON 15-Jun-2025(-ve:import, +ve:export)						
Report	Date	Time	National Coincidental Peak Load (MW)		Date	Time
Details	June 14, 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	80.06	400kV THP - Siliguri Line - I	35.73	Unit-III & VI on Standby. 400kV THP-Siliguri Line -IV on Standby.
		Unit- II	85.24	400kV THP - Siliguri Line - II	34.40	
		Unit- III	0.00	400kV THP - Siliguri Line - IV	0.00	
		Unit- IV	110.66	400kV THP - Malbase Line - III	344.98	
		Unit- V	138.65	400kV Malbase - Siliguri Line	-33.04	
		Unit- VI	0.00	-	-	
		Total	414.61	Auxiliary Consumption & Transformation Losses at Generator end	-0.12%	
2	4 x 180MW MHP	Unit-I	82.34	400kV MHP - Jigmeling Line - I	126.88	Unit-III under Shutdown. 400kV MHP-JLG line- III on Standby. 132kV MHP_Yurmo Line- I not in Service. 220kV Tsirang-Jigmeling Line kept open for Shutdown of 220kV Jigmeling-Dagapela Line.
		Unit-II	154.84	400kV MHP - Jigmeling Line - II	126.46	
		Unit-III	0.00	400kV MHP - Jigmeling Line - III	0.00	
		Unit-IV	155.24	400kV MHP - Jigmeling Line - IV	123.06	
		-	-	132kV MHP - Yurmo Line - I	0.00	
		-	-	132kV MHP - Yurmo Line - II	61.60	
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	116.00	
		-	-	400kV Jigmeling - Alipurduar Line - I ; direct lines	385.46	
		-	-	400kV Jigmeling - Alipurduar Line - II ; direct lines	383.27	
		-	-	80MVA, 220/132kV ICT - I (HV)	-58.60	
		-	-	80MVA, 220/132kV ICT - II (HV)	-58.05	
		-	-	220kV Tsirang - Jigmeling Line	0.00	
		-	-	132kV Gelephu - Salakati Line	40.67	
		Total	392.42	Auxiliary Consumption & Transformation Losses at Generator end	-0.25%	
3	6 x 170MW PHP-II	Unit- I	184.79	400kV PHP II - Jigmeling -I	272.00	Unit-II under Shutdown.
		Unit- II	0.00	400kV PHP II - Jigmeling -II	272.00	
		Unit- III	180.84	400kV PHP II - Alipurduar -I	0.00	
		Unit- IV	184.33	400kV PHP II - Alipurduar -II	0.00	
		Unit- V	0.00	-	-	
		Unit- VI	0.00	-	-	
		Total	549.96	Auxiliary Consumption & Transformation Losses at Generator end	1.08%	
4	4 x 84MW CHP	Unit- I	71.57	220kV CHP - Birpara Line - I	-55.69	Unit-II on standby
		Unit- II	0.00	220kV CHP - Birpara Line - II	-55.21	
		Unit- III	65.75	220kV CHP - Gedu	-36.81	
		Unit- IV	57.93	220kV CHP - Jamjee - I	114.30	
		-	-	220kV CHP - Jamjee - II	113.17	
		-	-	220kV CHP - Jamjee - III	109.60	
		-	-	220kV Malbase - Birpara Line	-22.44	
		-	-	66kV CHP - Gedu Line	4.76	
		-	-	3x3MVA, 66/11kV TFR	1.32	
		Total	195.25	Auxiliary Consumption & Transformation Losses at Generator end	-0.10%	
5	2 x 12MW BHP (U/S)	Unit- I	0.00	220kV BHP - Semtokha Line	-26.58	L/S Unit I & U/S Unit-I on Standby.
		Unit- II	6.05	66kV BHP - Lobeysa Line	18.68	
		Total	6.05	220kV BHP - Tsirang Line	23.64	
				5MVA, 66/11kV TFR	0.55	
6	2 x 20MW BHP (L/S)	Unit- I	0.00	30MVA ICT, 220/66kV (HV)	13.45	
		Unit- II	10.84			
		Total	10.84	Auxiliary Consumption & Transformation Losses at Generator end	3.55%	
7	2 x 63MW DHP	Unit-I	0.00	220kV DHP - Tsirang Line	-21.69	Unit I on Standby. 220kV JLG-DAG line under Shutdown.
		Unit-II	26.01	220kV DHP - Dagapela Line	47.47	
		-	-	220kV Jigmeling - Dagapela Line	0.00	
		-	-	5MVA, 220/33kV TFR	0.20	
		Total	26.01	Auxiliary Consumption & Transformation Losses at Generator end	0.12%	
8	4 x 15MW KHP	Unit- I	16.52	132kV KHP - Nangkhori Line	40.84	
		Unit-II	16.45	132kV KHP - Kilikhar Line	24.35	
		Unit- III	16.47	5MVA, 132/11kV TFR	0.32	
		Unit- IV	16.48	132kV Motanga - Rangia Line	49.00	
		Total	65.92	Auxiliary Consumption & Transformation Losses at Generator end	0.62%	
9	2 x 59MW NHP	Unit-I	19.97	132kV NHP-MHP-I	24.76	
		Unit-II	24.98	132kV NHP-MHP-II	19.82	
		Total	44.95	Auxiliary Consumption & Transformation Losses at Generator end	0.82%	
10	2 x 9MW SHP	Unit- I	0.00	66kV SHP-Damdhum (Samtse)	-	Unit-I & II under shutdown Interim measure: evacuation is through 33kV system.
		Unit- II	0.00	-	-	
		Total	0.00	Auxiliary Consumption & Transformation Losses at Generator end	0.00%	

Note: Generation-Load Summary (MW) for 14-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)	1,706.01	943.86	762.15

Note: Generation-Load Summary (MW) for 14-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)	1,866.57	887.31	979.26

Note: Daily Energy (MUs) and Power(MW) Statistics for 14-Jun-2025

Sl. No.	Total Energy Generation	Daily Energy Met	Net Energy Import (IEX and Solar)	Net Energy Export	Peak Cross-border (MW)
1	39.29	21.67	0.00	17.75	811.87

- 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.