



ལྷན་ཁྲིམས་པོ་ལ་འཕུལ་བའི་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 03-Jun-2025(-ve:import, +ve:export)						
Report Details		Date	Time	National Coincidental Peak Load (MW)		Load
		June 2, 2025	9:00 AM			1026.44
Sl. No.	Hydropower Plant	Unit	MW	Transmission Lines and Elements	Load (MW)	Remarks
1	6 x 170MW THP	Unit-I	89.83	400kV THP - Siliguri Line - I	0.00	400kV THP-Siliguri Line -I under Shutdown.
		Unit-II	80.14	400kV THP - Siliguri Line - II	172.51	
		Unit-III	82.45	400kV THP - Siliguri Line- IV	162.38	
		Unit-IV	80.13	400kV THP - Malbase Line - III	338.60	
		Unit-V	167.89	400kV Malbase - Siliguri Line	121.71	
		Unit-VI	170.00	-	-	
		Total	670.44	Auxiliary Consumption & Transformation Losses at Generator end	-0.45%	
2	4 x 180MW MHP	Unit-I	140.74	400kV MHP - Jigmeling Line - I	193.93	400kV MHP-JLG line- II on Standby, 132kV MHP_Yumoo Line- I not in Service.
		Unit-II	145.18	400kV MHP - Jigmeling Line - II	0.00	
		Unit-III	146.51	400kV MHP - Jigmeling Line - III	201.94	
		Unit-IV	155.65	400kV MHP - Jigmeling Line - IV	201.08	
		-	-	132kV MHP - Yurno Line - I	0.00	
		-	-	132kV MHP - Yurno Line - II	59.71	
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	198.18	
		-	-	400kV Jigmeling - Alipurduar Line - I	464.73	
		-	-	400kV Jigmeling - Alipurduar Line - II	464.00	
		-	-	80MVA, 220/132kV ICT - I (HV)	-39.98	
		-	-	80MVA, 220/132kV ICT - II (HV)	-39.65	
		-	-	220kV Tsirang - Jigmeling Line	-102.61	
		-	-	132kV Gelephu - Salakati Line	20.44	
		Total	588.08	Auxiliary Consumption & Transformation Losses at Generator end	0.16%	
		3	6 x 170MW PHP-II	Unit- I	179.10	
Unit- II	179.98			400kV PHP II - Jigmeling -II	269.09	
Unit- III	184.70			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	543.78			Auxiliary Consumption & Transformation Losses at Generator end	0.26%	
4	4 x 84MW CHP	Unit- I	91.33	220kV CHP - Birpara Line - I	19.70	
		Unit- II	91.33	220kV CHP - Birpara Line - II	19.20	
		Unit- III	91.54	220kV CHP - Gedu	133.95	
		Unit- IV	91.71	220kV CHP - Jamjee (old) - I	61.07	
		-	-	220kV CHP - Jamjee - II (new)	60.55	
		-	-	220kV CHP - Jamjee - III (new)	58.57	
		-	-	220kV Malbase - Birpara Line	-28.06	
		-	-	66kV CHP - Gedu Line	10.91	
		-	-	3x3MVA, 66/11kV TFR	1.36	
		Total	365.91	Auxiliary Consumption & Transformation Losses at Generator end	0.16%	
5	2 x 12MW BHP (U/S)	Unit- I	4.80	220kV BHP - Semtokha Line	119.80	
		Unit- II	4.50	66kV BHP - Lobeysa Line	24.00	
		Total	9.30	220kV BHP - Tsirang Line	-124.00	
6	2 x 20MW BHP (L/S)	Unit- I	5.60	5MVA, 66/11kV TFR	0.43	
		Unit- II	5.50	30MVA ICT, 220/66kV (HV)	15.50	
		Total	11.10	Auxiliary Consumption & Transformation Losses at Generator end	0.83%	
7	2 x 63MW DHP	Unit-I	29.27	220kV DHP - Tsirang Line	0.00	220kV DHP- Tsirang line kept on Standby.
		Unit-II	27.99	220kV DHP - Dagapela Line	56.46	
		-	-	220kV Jigmeling - Dagapela Line	-8.87	
		-	-	5MVA, 220/33kV TFR	0.40	
		Total	57.26	Auxiliary Consumption & Transformation Losses at Generator end	0.70%	
8	4 x 15MW KHP	Unit- I	15.75	132kV KHP - Nangkhor Line	42.59	
		Unit-II	15.93	132kV KHP - Kilikhar Line	21.32	
		Unit- III	16.31	5MVA, 132/11kV TFR	0.33	
		Unit- IV	16.55	132kV Motanga - Rangia Line	19.60	
		Total	64.54	Auxiliary Consumption & Transformation Losses at Generator end	0.46%	
9	2 x 59MW NHP	Unit-I	44.96	132kV NHP-MHP-I	24.80	
		Unit-II	25.01	132kV NHP-MHP-II	44.70	
		Total	69.97	Auxiliary Consumption & Transformation Losses at Generator end	0.67%	
10	2 x 9MW SHP	Unit- I	5.00	66kV SHP-Damdhum (Samtse)	0.00	Interim measure: evacuation is through 33kV system.
		Unit- II	5.00	-	-	
		Total	10.00	Auxiliary Consumption & Transformation Losses at Generator end	100.00%	
Note: Generation-Load Summary (MW) for 02-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)	2,390.38	954.17		1,436.21	
Note: Generation-Load Summary (MW) for 02-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)	976.93	733.32		243.61	

THE DAILY BHUTAN POWER SYSTEM OPERATOR LOAD-GENERATION BALANCE REPORT & ENERGY FIGURES ISSUED ON 03-Jun-2025(-ve:import, +ve:export)						
Report	Date	Time	National Coincidental Peak Load (MW)		Date	Time
Details	June 2, 2025	19:00:00			25-Dec-2024	18:36
Sl. No.	Hydropower Plant	Unit	MW	Transmission Lines and Elements	Load (MW)	Remarks
1	6 x 170MW THP	Unit- I	99.82	400kV THP - Siliguri Line - I	0.00	400kV THP-Siliguri Line -I under Shutdown.
		Unit- II	80.26	400kV THP - Siliguri Line - II	149.20	
		Unit- III	81.47	400kV THP - Siliguri Line - IV	139.80	
		Unit- IV	90.06	400kV THP - Malbase Line - III	370.08	
		Unit- V	138.83	400kV Malbase - Siliguri Line	88.31	
		Unit- VI	168.83	-	-	
		Total	659.27	Auxiliary Consumption & Transformation Losses at Generator end	0.03%	
2	4 x 180MW MHP	Unit-I	150.25	400kV MHP - Jigmeling Line - I	168.28	400kV MHP-JLG line-II on Standby. 132kV MHP_Yurmoo Line- I not in Service.
		Unit-II	150.24	400kV MHP - Jigmeling Line - II	0.00	
		Unit-III	144.14	400kV MHP - Jigmeling Line - III	174.80	
		Unit-IV	65.42	400kV MHP - Jigmeling Line - IV	174.41	
		-	-	132kV MHP - Yurmo Line - I	0.00	
		-	-	132kV MHP - Yurmo Line - II	62.17	
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	224.36	
		-	-	400kV Jigmeling - Alipurdwar Line - I	415.27	
		-	-	400kV Jigmeling - Alipurdwar Line - II	415.27	
		-	-	80MVA, 220/132kV ICT - I (HV)	-49.22	
		-	-	80MVA, 220/132kV ICT - II (HV)	-48.80	
		-	-	220kV Tsirang - Jigmeling Line	-102.61	
		-	-	132kV Gelephu - Salakati Line	21.53	
		Total	510.05	Auxiliary Consumption & Transformation Losses at Generator end	-0.04%	
3	6 x 170MW PHP-II	Unit- I	179.66	400kV PHP II - Jigmeling -I	269.09	erstwhile interim lines
		Unit- II	179.89	400kV PHP II - Jigmeling -II	268.36	
		Unit- III	184.09	400kV PHP II - Alipurdwar -I	0.00	
		Unit- IV	0.00	400kV PHP II - Alipurdwar -II	0.00	
		Unit- V	0.00	-	-	
		Unit- VI	0.00	-	-	
		Total	543.64	Auxiliary Consumption & Transformation Losses at Generator end	1.14%	
4	4 x 84MW CHP	Unit- I	71.69	220kV CHP - Birpara Line - I	7.24	
		Unit- II	71.24	220kV CHP - Birpara Line - II	7.18	
		Unit- III	71.73	220kV CHP - Gedu	81.08	
		Unit- IV	74.81	220kV CHP - Jamjee - I	62.35	
		-	-	220kV CHP - Jamjee - II	61.89	
		-	-	220kV CHP - Jamjee - III	59.72	
		-	-	220kV Malbase - Birpara Line	-9.25	
		-	-	66kV CHP - Gedu Line	7.84	
		-	-	3x3MVA, 66/11kV TFR	1.48	
		Total	289.47	Auxiliary Consumption & Transformation Losses at Generator end	0.24%	
5	2 x 12MW BHP (U/S)	Unit- I	5.08	220kV BHP - Semtokha Line	132.10	
		Unit- II	3.64	66kV BHP - Lobeysa Line	25.49	
		Total	8.72	220kV BHP - Tsirang Line	-117.17	
		Unit- I	15.95	5MVA, 66/11kV TFR	0.58	
6	2 x 20MW BHP (L/S)	Unit- II	15.71	30MVA ICT, 220/66kV (HV)	17.79	
		Total	31.66	Auxiliary Consumption & Transformation Losses at Generator end	-1.54%	
7	2 x 63MW DHP	Unit-I	0.00	220kV DHP - Tsirang Line	0.00	132kV DHP_Tsirang Line on Standby
		Unit-II	45.98	220kV DHP - Dagapela Line	45.80	
		-	-	220kV Jigmeling - Dagapela Line	-13.00	
		-	-	5MVA, 220/33kV TFR	0.17	
		Total	45.98	Auxiliary Consumption & Transformation Losses at Generator end	0.02%	
8	4 x 15MW KHP	Unit- I	16.50	132kV KHP - Nangkhor Line	41.14	
		Unit-II	16.50	132kV KHP - Kilikhar Line	24.17	
		Unit- III	16.50	5MVA, 132/11kV TFR	0.26	
		Unit- IV	16.50	132kV Motanga - Rangia Line	35.73	
		Total	66.00	Auxiliary Consumption & Transformation Losses at Generator end	0.65%	
9	2 x 59MW NHP	Unit-I	45.01	132kV NHP-MHP-I	24.75	
		Unit-II	25.00	132kV NHP-MHP-II	44.67	
		Total	70.01	Auxiliary Consumption & Transformation Losses at Generator end	0.84%	
10	2 x 9MW SHP	Unit- I	4.93	66kV SHP-Damdhum (Samtse)	0.00	Interim measure: evacuation is through 33kV system.
		Unit- II	4.97	-	-	
		Total	9.90	Auxiliary Consumption & Transformation Losses at Generator end	100.00%	

Note: Generation-Load Summary (MW) for 02-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)	2,234.70	964.42	1,270.28

Note: Generation-Load Summary (MW) for 02-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)	932.86	715.20	310.70

Note: Daily Energy (MUs) and Power(MW) Statistics for 02-Jun-2025

Sl. No.	Total Energy Generation	Daily Energy Met	Net Energy Import (IEX and Solar)	Net Energy Export	Peak Cross-border (MW)
1	56.56	22.44	0.00	34.26	1,845.81

- 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.