



ལྷན་ཁྲིམས་པོ་ལ་འཕེལ་རྒྱུ་ལྟོ་སྒྲུབ་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 31-May-2025(-ve:import, +ve:export)						
Report Details		Date	Time	National Coincidental Peak Load (MW)		
		May 30, 2025	9:00 AM			
Sl. No.	Hydropower Plant	Unit	MW	Transmission Lines and Elements	Load (MW)	Remarks
1	6 x 170MW THP	Unit- I	185.87	400kV THP - Siliguri Line - I	0.00	400kV THP-Siliguri Line -I under Shutdown.
		Unit- II	179.05	400kV THP - Siliguri Line - II	321.08	
		Unit- III	185.39	400kV THP - Siliguri Line- IV	304.51	
		Unit- IV	186.07	400kV THP - Malbase Line - III	475.96	
		Unit- V	184.96	400kV Malbase - Siliguri Line	258.51	
		Unit- VI	176.14	-	-	
		Total	1,097.48	Auxiliary Consumption & Transformation Losses at Generator end	-0.37%	
2	4 x 180MW MHP	Unit-I	197.76	400kV MHP - Jigmeling Line - I	419.95	400kV MHP-JLG line- II & III on Standby. 132kV MHP_Yumoo Line- I not in Service.
		Unit-II	197.85	400kV MHP - Jigmeling Line - II	0.00	
		Unit-III	192.72	400kV MHP - Jigmeling Line - III	0.00	
		Unit-IV	189.72	400kV MHP - Jigmeling Line - IV	421.25	
		-	-	132kV MHP - Yurno Line - I	0.00	
		-	-	132kV MHP - Yurno Line - II	60.30	
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	156.36	
		-	-	400kV Jigmeling - Alipurduar Line - I	603.64	
		-	-	400kV Jigmeling - Alipurduar Line - II	600.73	
		-	-	80MVA, 220/132kV ICT - I (HV)	-40.23	
		-	-	80MVA, 220/132kV ICT - II (HV)	-39.96	
		-	-	220kV Tsirang - Jigmeling Line	-102.61	
		-	-	132kV Gelephu - Salakati Line	28.66	
		Total	778.05	Auxiliary Consumption & Transformation Losses at Generator end	0.46%	
3	6 x 170MW PHP-II	Unit- I	181.00	400kV PHP II - Jigmeling-I	267.64	erstwhile interim lines
		Unit- II	181.17	400kV PHP II - Jigmeling-II	268.80	
		Unit- III	184.60	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	546.77	Auxiliary Consumption & Transformation Losses at Generator end	1.89%	
4	4 x 84MW CHP	Unit- I	91.57	220kV CHP - Birpara Line - I	36.67	
		Unit- II	91.33	220kV CHP - Birpara Line - II	36.13	
		Unit- III	91.30	220kV CHP - Gedu	139.58	
		Unit- IV	91.46	220kV CHP - Jamjee (old) - I	47.23	
		-	-	220kV CHP - Jamjee - II (new)	46.90	
		-	-	220kV CHP - Jamjee - III (new)	45.14	
		-	-	220kV Malbase - Birpara Line	-6.36	
		-	-	66kV CHP - Gedu Line	10.64	
		-	-	3x3MVA, 66/11kV TFR	1.35	
		Total	365.66	Auxiliary Consumption & Transformation Losses at Generator end	0.55%	
5	2 x 12MW BHP (U/S)	Unit- I	11.95	220kV BHP - Semtokha Line	165.73	
		Unit- II	12.04	66kV BHP - Lobeysa Line	30.31	
		Total	23.99	220kV BHP - Tsirang Line	-131.47	
6	2 x 20MW BHP (L/S)	Unit- I	20.84	5MVA, 66/11kV TFR	0.18	
		Unit- II	20.08	30MVA ICT, 220/66kV (HV)	7.27	
		Total	40.92	Auxiliary Consumption & Transformation Losses at Generator end	0.25%	
7	2 x 63MW DHP	Unit-I	63.33	220kV DHP - Tsirang Line	0.00	220kV DHP- Tsirang line kept on Standby.
		Unit-II	48.97	220kV DHP - Dagapela Line	111.80	
		-	-	220kV Jigmeling - Dagapela Line	-62.38	
		-	-	5MVA, 220/33kV TFR	0.42	
		Total	112.30	Auxiliary Consumption & Transformation Losses at Generator end	0.07%	
8	4 x 15MW KHP	Unit- I	15.53	132kV KHP - Nangkhon Line	41.73	
		Unit-II	15.82	132kV KHP - Kilikhar Line	21.44	
		Unit-III	16.33	5MVA, 132/11kV TFR	0.34	
		Unit- IV	16.49	132kV Motanga - Rangia Line	11.05	
		Total	64.17	Auxiliary Consumption & Transformation Losses at Generator end	1.03%	
9	2 x 59MW NHP	Unit-I	64.02	132kV NHP-MHP-I	63.48	
		Unit-II	63.88	132kV NHP-MHP-II	63.55	
		Total	127.90	Auxiliary Consumption & Transformation Losses at Generator end	0.68%	
10	2 x 9MW SHP	Unit- I	0.00	66kV SHP-Damdhum (Samtse)	0.00	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 30-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)	3,157.24	962.62	2,194.62

Note: Generation-Load Summary (MW) for 30-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)	1,123.14	882.34	240.80

THE DAILY BHUTAN POWER SYSTEM OPERATOR LOAD-GENERATION BALANCE REPORT & ENERGY FIGURES ISSUED ON 31-May-2025(-ve:import, +ve:export)						
Report	Date	Time	National Coincidental Peak Load (MW)		Date	Time
Details	May 30, 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	185.44	400kV THP - Siliguri Line - I	0.00	400kV THP-Siliguri Line -I under Shutdown.
		Unit- II	185.53	400kV THP - Siliguri Line - II	318.77	
		Unit- III	185.42	400kV THP - Siliguri Line - IV	302.69	
		Unit- IV	185.74	400kV THP - Malbase Line - III	495.41	
		Unit- V	184.91	400kV Malbase - Siliguri Line	252.57	
		Unit- VI	186.17	-	-	
		Total	1,113.21	Auxiliary Consumption & Transformation Losses at Generator end	-0.33%	
2	4 x 180MW MHP	Unit-I	197.21	400kV MHP - Jigmeling Line - I	274.50	400kV MHP-JLG line-II on Standby. 132kV MHP_Yurmoo Line- I not in Service.
		Unit-II	197.69	400kV MHP - Jigmeling Line - II	0.00	
		Unit-III	192.63	400kV MHP - Jigmeling Line - III	285.64	
		Unit-IV	194.01	400kV MHP - Jigmeling Line - IV	284.67	
		-	-	132kV MHP - Yurmo Line - I	0.00	
		-	-	132kV MHP - Yurmo Line - II	61.91	
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	161.82	
		-	-	400kV Jigmeling - Alipurdwar Line - I	602.18	
		-	-	400kV Jigmeling - Alipurdwar Line - II	600.00	
		-	-	80MVA, 220/132kV ICT - I (HV)	-46.51	
		-	-	80MVA, 220/132kV ICT - II (HV)	-46.18	
		-	-	220kV Tsirang - Jigmeling Line	-102.61	
		-	-	132kV Gelephu - Salakati Line	29.95	
		Total	781.54	Auxiliary Consumption & Transformation Losses at Generator end	0.23%	
3	6 x 170MW PHP-II	Unit- I	175.00	400kV PHP II - Jigmeling -I	266.18	erstwhile interim lines
		Unit- II	181.17	400kV PHP II - Jigmeling -II	266.18	
		Unit- III	184.60	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	540.77	Auxiliary Consumption & Transformation Losses at Generator end	1.56%	
4	4 x 84MW CHP	Unit- I	91.38	220kV CHP - Birpara Line - I	41.25	
		Unit- II	91.00	220kV CHP - Birpara Line - II	41.00	
		Unit- III	91.30	220kV CHP - Gedu	125.42	
		Unit- IV	91.84	220kV CHP - Jamjee - I	48.80	
		-	-	220kV CHP - Jamjee - II	48.43	
		-	-	220kV CHP - Jamjee - III	46.82	
		-	-	220kV Malbase - Birpara Line	12.57	
		-	-	66kV CHP - Gedu Line	10.73	
		-	-	3x3MVA, 66/11kV TFR	1.51	
		Total	365.52	Auxiliary Consumption & Transformation Losses at Generator end	0.43%	
5	2 x 12MW BHP (U/S)	Unit- I	11.97	220kV BHP - Semtokha Line	171.59	
		Unit- II	12.12	66kV BHP - Lobeysa Line	31.86	
		Total	24.09	220kV BHP - Tsirang Line	-138.52	
6	2 x 20MW BHP (L/S)	Unit- I	20.78	5MVA, 66/11kV TFR	0.55	
		Unit- II	20.06	30MVA ICT, 220/66kV (HV)	9.16	
		Total	40.84	Auxiliary Consumption & Transformation Losses at Generator end	-0.85%	
7	2 x 63MW DHP	Unit-I	63.42	220kV DHP - Tsirang Line	0.00	220kV DHP-TSI line on Standby.
		Unit-II	62.07	220kV DHP - Dagapela Line	124.86	
		-	-	220kV Jigmeling - Dagapela Line	-74.30	
		-	-	5MVA, 220/33kV TFR	0.24	
		Total	125.49	Auxiliary Consumption & Transformation Losses at Generator end	0.31%	
8	4 x 15MW KHP	Unit- I	15.58	132kV KHP - Nangkhor Line	40.85	
		Unit-II	15.82	132kV KHP - Kilikhar Line	22.77	
		Unit- III	16.44	5MVA, 132/11kV TFR	0.39	
		Unit- IV	16.44	132kV Motanga - Rangia Line	13.88	
		Total	64.28	Auxiliary Consumption & Transformation Losses at Generator end	0.42%	
9	2 x 59MW NHP	Unit-I	64.16	132kV NHP-MHP-I	63.51	
		Unit-II	64.02	132kV NHP-MHP-II	63.47	
		Total	128.18	Auxiliary Consumption & Transformation Losses at Generator end	0.94%	
10	2 x 9MW SHP	Unit- I	0.00	66kV SHP-Damdhum (Samtse)	0.00	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 30-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)	3,183.92	969.06	2,214.86

Note: Generation-Load Summary (MW) for 30-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)	954.29	893.18	61.11

Note: Daily Energy (MUs) and Power(MW) Statistics for 30-May-2025

Sl. No.	Total Energy Generation	Daily Energy Met	Net Energy Import (IEX and Solar)	Net Energy Export	Peak Cross-border (MW)
1	72.26	22.10	0.00	50.55	2,382.64

- 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.