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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 09-May-2025(-ve:import, +ve:export)						
Report Details		Date	Time	National Coincidental Peak Load (MW)		
		May 8, 2025	9:00 AM			
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	14.52	Unit-I, II & III under shutdown for Penstock Cleaning. 400kV THP-SIL Line II & IV on Standby.
		Unit- II	0.00	400kV THP - Siliguri Line - II	0.00	
		Unit- III	0.00	400kV THP - Siliguri Line- IV	0.00	
		Unit- IV	84.36	400kV THP - Malbase Line - III	246.38	
		Unit- V	84.22	400kV Malbase - Siliguri Line	-34.18	
		Unit- VI	91.60	-	-	
		Total	260.18	Auxiliary Consumption & Transformation Losses at Generator end	-0.28%	
2	4 x 180MW MHP	Unit-I	75.24	400kV MHP - Jigmeling Line - I	0.00	Unit-II under Shutdown. 400kV MHP-JLG line-I Standby. 400kV MHP-JLG line-II standby 132kV MHP_Yummo Line- I not in Service.
		Unit-II	0.00	400kV MHP - Jigmeling Line - II	0.00	
		Unit-III	75.52	400kV MHP - Jigmeling Line - III	99.39	
		Unit-IV	81.36	400kV MHP - Jigmeling Line - IV	98.79	
		-	-	132kV MHP - Yurno Line - I	0.00	
		-	-	132kV MHP - Yurno Line - II	61.36	
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	198.91	
		-	-	400kV Jigmeling - Alipurduar Line - I : direct lines	176.73	
		-	-	400kV Jigmeling - Alipurduar Line - II :	175.27	
		-	-	80MVA, 220/132kV ICT - I (HV)	-24.73	
		-	-	80MVA, 220/132kV ICT - II (HV)	-24.53	
		-	-	220kV Tsirang - Jigmeling Line	-118.13	
		-	-	132kV Gelephu - Salakati Line	-2.58	
		Total	232.12	Auxiliary Consumption & Transformation Losses at Generator end	0.17%	
		Unit- I	180.00	400kV PHP II - Jigmeling -I	0.00	Unit II on standby 400kV PHP-II - Jigmeling Line-I on Standby.
3	6 x 170MW PHP-II	Unit- II	0.00	400kV PHP II - Jigmeling -II	360.00	
		Unit- III	180.00	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	360.00	Auxiliary Consumption & Transformation Losses at Generator end	0.00%	
4	4 x 84MW CHP	Unit- I	26.48	220kV CHP - Birpara Line - I	-46.45	Unit-IV under Shutdown.
		Unit- II	83.17	220kV CHP - Birpara Line - II	-46.00	
		Unit- III	25.63	220kV CHP - Gedu	14.86	
		Unit- IV	0.00	220kV CHP - Jamjee (old) - I	69.67	
		-	-	220kV CHP - Jamjee - II (new)	69.04	
		-	-	220kV CHP - Jamjee - III (new)	66.50	
		-	-	220kV Malbase - Birpara Line	-46.00	
		-	-	66kV CHP - Gedu Line	7.39	
		-	-	3x3MVA, 66/11kV TFR	1.33	
		Total	135.28	Auxiliary Consumption & Transformation Losses at Generator end	-0.78%	
5	2 x 12MW BHP (U/S)	Unit- I	5.81	220kV BHP - Semtokha Line	107.73	U/S Unit II on Standby.
		Unit- II	0.00	66kV BHP - Lobeysa Line	23.09	
		Total	5.81	220kV BHP - Tsirang Line	-114.80	
6	2 x 20MW BHP (L/S)	Unit- I	5.33	5MVA, 66/11kV TFR	0.38	
		Unit- II	5.15	30MVA ICT, 220/66kV (HV)	18.40	
		Total	10.48	Auxiliary Consumption & Transformation Losses at Generator end	-0.68%	
7	2 x 63MW DHP	Unit-I	0.00	220kV DHP - Tsirang Line	0.00	DHP- Tsirang line kept on Idle charge. Unit-I on Standby.
		Unit-II	24.00	220kV DHP - Dagapela Line	23.59	
		-	-	220kV Jigmeling - Dagapela Line	31.00	
		-	-	5MVA, 220/33kV TFR	0.40	
		Total	24.00	Auxiliary Consumption & Transformation Losses at Generator end	0.04%	
8	4 x 15MW KHP	Unit- I	13.83	132kV KHP - Nangkhor Line	34.13	
		Unit-II	13.83	132kV KHP - Kilikhar Line	20.33	
		Unit- III	13.81	5MVA, 132/11kV TFR	0.33	
		Unit- IV	13.85	132kV Motanga - Rangia Line	7.98	
		Total	55.32	Auxiliary Consumption & Transformation Losses at Generator end	0.96%	
9	2 x 59MW NHP	Unit-I	0.00	132kV NHP-MHP-I	27.81	Unit-I under Shutdown. 132kV NHP-MHP line-II on Standby.
		Unit-II	28.00	132kV NHP-MHP-II	0.00	
		Total	28.00	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 under Shutdown Interim measure: evacuation is through 33kV system.
		Unit- II	4.83	-	-	
		Total	4.83	Auxiliary Consumption & Transformation Losses at Generator end	100.00%	

Note: Generation-Load Summary (MW) for 08-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)	1,116.02	916.73	199.29

Note: Generation-Load Summary (MW) for 08-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)	574.65	893.56	-318.91

THE DAILY BHUTAN POWER SYSTEM OPERATOR LOAD-GENERATION BALANCE REPORT & ENERGY FIGURES ISSUED ON 09-May-2025(-ve:import, +ve:export)						
Report	Date	Time	National Coincidental Peak Load (MW)		Date	Time
Details	May 8, 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	19.58	Unit-I, II & III under shutdown for Penstock Cleaning. 400kV THP-SIL Line II & IV on Standby.
		Unit- II	0.00	400kV THP - Siliguri Line - II	0.00	
		Unit- III	0.00	400kV THP - Siliguri Line - IV	0.00	
		Unit- IV	119.54	400kV THP - Malbase Line - III	291.05	
		Unit- V	109.09	400kV Malbase - Siliguri Line	-41.45	
		Unit- VI	81.51	-	-	
		Total	310.14	Auxiliary Consumption & Transformation Losses at Generator end	-0.16%	
2	4 x 180MW MHP	Unit-I	85.81	400kV MHP - Jigmeling Line - I	0.00	Unit-II under Shutdown. 400kV MHP-JLG line-I on Standby. 400kV MHP-JLG line-II on Standby. 132kV MHP_Yurmoo Line-I not in Service.
		Unit-II	0.00	400kV MHP - Jigmeling Line - II	0.00	
		Unit-III	75.52	400kV MHP - Jigmeling Line - III	100.47	
		Unit-IV	75.38	400kV MHP - Jigmeling Line - IV	100.04	
		-	-	132kV MHP - Yurmoo Line - I	0.00	
		-	-	132kV MHP - Yurmoo Line - II	61.36	
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	219.24	
		-	-	400kV Jigmeling - Alipurduar Line - I ; direct lines	106.91	
		-	-	400kV Jigmeling - Alipurduar Line - II ; direct lines	104.73	
		-	-	80MVA, 220/132kV ICT - I (HV)	34.85	
		-	-	80MVA, 220/132kV ICT - II (HV)	34.20	
		-	-	220kV Tsirang - Jigmeling Line	-117.39	
		-	-	132kV Gelephu - Salakati Line	-11.30	
		Total	236.71	Auxiliary Consumption & Transformation Losses at Generator end	1.12%	
3	6 x 170MW PHP-II	Unit- I	50.00	400kV PHP II - Jigmeling -I	0.00	Unit-II under breakdown. 400kV PHP-II - Jigmeling Line-I on Standby.
		Unit- II	0.00	400kV PHP II - Jigmeling -II	234.89	
		Unit- III	185.00	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	235.00	Auxiliary Consumption & Transformation Losses at Generator end	0.05%	
4	4 x 84MW CHP	Unit- I	67.80	220kV CHP - Birpara Line - I	-45.72	Unit-IV under Shutdown. Unit II on standby
		Unit- II	0.00	220kV CHP - Birpara Line - II	-45.40	
		Unit- III	77.85	220kV CHP - Gedu	-3.43	
		Unit- IV	0.00	220kV CHP - Jamjee - I	78.62	
		-	-	220kV CHP - Jamjee - II	77.89	
		-	-	220kV CHP - Jamjee - III	75.16	
		-	-	220kV Malbase - Birpara Line	-28.96	
		-	-	66kV CHP - Gedu Line	7.48	
		-	-	3x3MVA, 66/11kV TFR	1.48	
		Total	145.65	Auxiliary Consumption & Transformation Losses at Generator end	-0.30%	
5	2 x 12MW BHP (U/S)	Unit- I	5.10	220kV BHP - Semtokha Line	103.20	U/S Unit-II & L/S Unit I on standby
		Unit- II	0.00	66kV BHP - Lobeysa Line	25.54	
		Total	5.10	220kV BHP - Tsirang Line	-113.42	
	2 x 20MW BHP (L/S)	Unit- I	0.00	5MVA, 66/11kV TFR	0.64	
		Unit- II	10.80	30MVA ICT, 220/66kV (HV)	21.45	
		Total	10.80	Auxiliary Consumption & Transformation Losses at Generator end	-0.38%	
7	2 x 63MW DHP	Unit-I	0.00	220kV DHP - Tsirang Line	0.00	Unit-I on Standby. 220kV DHP-TSI line kept on Idle charge.
		Unit-II	18.96	220kV DHP - Dagapela Line	18.60	
		-	-	220kV Jigmeling - Dagapela Line	31.03	
		-	-	5MVA, 220/33kV TFR	0.22	
		Total	18.96	Auxiliary Consumption & Transformation Losses at Generator end	0.74%	
8	4 x 15MW KHP	Unit- I	12.11	132kV KHP - Nangkhon Line	18.82	Unit- II on Standby.
		Unit-II	0.00	132kV KHP - Kilikhar Line	16.88	
		Unit- III	12.19	5MVA, 132/11kV TFR	0.38	
		Unit- IV	12.12	132kV Motanga - Rangia Line	13.02	
		Total	36.42	Auxiliary Consumption & Transformation Losses at Generator end	0.93%	
9	2 x 59MW NHP	Unit-I	0.00	132kV NHP-MHP-I	27.80	Unit-I under Shutdown. 132kV NHP-MHP line-II on Standby.
		Unit-II	28.04	132kV NHP-MHP-II	0.00	
		Total	28.04	Auxiliary Consumption & Transformation Losses at Generator end	0.86%	
10	2 x 9MW SHP	Unit- I	2.36	66kV SHP-Damdhum (Samtse)	0.00	Interim measure: evacuation is through 33kV system.
		Unit- II	2.23	-	-	
		Total	4.59	Auxiliary Consumption & Transformation Losses at Generator end	100.00%	

Note: Generation-Load Summary (MW) for 08-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)	1,031.41	960.00	71.41

Note: Generation-Load Summary (MW) for 08-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)	935.38	883.64	51.71

Note: Daily Energy (MUs) and Power(MW) Statistics for 08-May-2025

Sl. No.	Total Energy Generation	Daily Energy Met	Net Energy Import (IEX and Solar)	Net Energy Export	Peak Cross-border (MW)
1	26.06	21.59	0.00	4.40	282.02

- 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.