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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 07-May-2025(-ve:import, +ve:export)						
Report Details		Date	Time	National Coincidental Peak Load (MW)	Date	Time
		May 6, 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	48.36	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	109.97	400kV THP - Malbase Line - III	262.50	
		Unit- V	89.39	400kV Malbase - Siliguri Line	-3.07	
		Unit- VI	111.68	-	-	
		Total	311.04	Auxiliary Consumption & Transformation Losses at Generator end	0.06%	
2	4 x 180MW MHP	Unit-I	76.19	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	75.55	400kV MHP - Jigmeling Line - III	101.83	
		Unit-IV	84.96	400kV MHP - Jigmeling Line - IV	101.15	
		-	-	132kV MHP - Yurno Line - I	0.00	
		-	-	132kV MHP - Yurno Line - II	61.50	
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	177.82	
		-	-	400kV Jigmeling - Alipurduar Line - I : direct lines	125.82	
		-	-	400kV Jigmeling - Alipurduar Line - II :	125.09	
		-	-	80MVA, 220/132kV ICT - I (HV)	-27.70	
		-	-	80MVA, 220/132kV ICT - II (HV)	-27.50	
		-	-	220kV Tsirang - Jigmeling Line	-99.33	
		-	-	132kV Gelephu - Salakati Line	-7.80	
		Total	236.70	Auxiliary Consumption & Transformation Losses at Generator end	-0.03%	
3	6 x 170MW PHP-II	Unit- I	150.30	400kV PHP II - Jigmeling-I	0.00	Unit II on standby 400kV PHP-II - Jigmeling Line-I on Standby.
		Unit- II	0.00	400kV PHP II - Jigmeling -II	229.90	
		Unit- III	81.20	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	231.50	Auxiliary Consumption & Transformation Losses at Generator end	0.69%	
4	4 x 84MW CHP	Unit- I	79.71	220kV CHP - Birpara Line - I	-49.71	Unit-II under AMP. Unit-IV under Shutdown.
		Unit- II	0.00	220kV CHP - Birpara Line - II	-49.11	
		Unit- III	80.79	220kV CHP - Gedu	19.48	
		Unit- IV	0.00	220kV CHP - Jamjee (old) - I	78.71	
		-	-	220kV CHP - Jamjee - II (new)	77.94	
		-	-	220kV CHP - Jamjee - III (new)	75.63	
		-	-	220kV Malbase - Birpara Line	-53.07	
		-	-	66kV CHP - Gedu Line	6.41	
		-	-	3x3MVA, 66/11kV TFR	1.40	
		Total	160.50	Auxiliary Consumption & Transformation Losses at Generator end	-0.16%	
5	2 x 12MW BHP (U/S)	Unit- I	6.72	220kV BHP - Semtokha Line	93.30	U/S Unit II under Shutdown
		Unit- II	0.00	66kV BHP - Lobeysha Line	23.87	
		Total	6.72	220kV BHP - Tsirang Line	-97.40	
6	2 x 20MW BHP (L/S)	Unit- I	6.86	5MVA, 66/11kV TFR	0.42	
		Unit- II	6.62	30MVA ICT, 220/66kV (HV)	17.91	
		Total	13.48	Auxiliary Consumption & Transformation Losses at Generator end	0.05%	
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	26.46	220kV DHP - Dagapela Line	26.10	
		-	-	220kV Jigmeling - Dagapela Line	23.20	
		-	-	5MVA, 220/33kV TFR	0.20	
		Total	26.46	Auxiliary Consumption & Transformation Losses at Generator end	0.60%	
8	4 x 15MW KHP	Unit- I	0.00	132kV KHP - Nangkhor Line	21.75	Unit-I on Standby.
		Unit-II	12.08	132kV KHP - Kilikhar Line	13.96	
		Unit- III	12.11	5MVA, 132/11kV TFR	0.29	
		Unit- IV	12.16	132kV Motanga - Rangia Line	13.89	
		Total	36.35	Auxiliary Consumption & Transformation Losses at Generator end	0.96%	
9	2 x 59MW NHP	Unit-I	0.00	132kV NHP-MHP-I	27.72	Unit-I under Shutdown. 132kV NHP-MHP line-II on Standby.
		Unit-II	27.98	132kV NHP-MHP-II	0.00	
		Total	27.98	Auxiliary Consumption & Transformation Losses at Generator end	0.93%	
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	4.76	-	-	
		Total	4.76	Auxiliary Consumption & Transformation Losses at Generator end	100.00%	

Note: Generation-Load Summary (MW) for 06-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)	1,055.49	905.09	150.40

Note: Generation-Load Summary (MW) for 06-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)	468.71	864.39	-395.68

THE DAILY BHUTAN POWER SYSTEM OPERATOR LOAD-GENERATION BALANCE REPORT & ENERGY FIGURES ISSUED ON 07-May-2025(-ve:import, +ve:export)						
Report	Date	Time	National Coincidental Peak Load (MW)		Date	Time
Details	May 6, 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	53.64	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	119.72	400kV THP - Malbase Line - III	301.57	
		Unit- V	113.85	400kV Malbase - Siliguri Line	-6.22	
		Unit- VI	121.45	-	-	
		Total	355.02	Auxiliary Consumption & Transformation Losses at Generator end	-0.05%	
2	4 x 180MW MHP	Unit-I	86.80	400kV MHP - Jigmeling Line - I	0.00	Unit-II under AMP. 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	88.28	400kV MHP - Jigmeling Line - III	112.92	
		Unit-IV	86.21	400kV MHP - Jigmeling Line - IV	112.36	
		-	-	132kV MHP - Yurmoo Line - I	62.99	
		-	-	132kV MHP - Yurmoo Line - II	0.00	
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	214.91	
		-	-	400kV Jigmeling - Alipurduar Line - I ; direct lines	142.55	
		-	-	400kV Jigmeling - Alipurduar Line - II ;	141.82	
		-	-	80MVA, 220/132kV ICT - I (HV)	-31.26	
		-	-	80MVA, 220/132kV ICT - II (HV)	-31.08	
		-	-	220kV Tsirang - Jigmeling Line	-122.65	
		-	-	132kV Gelephu - Salakati Line	-12.16	
		Total	261.29	Auxiliary Consumption & Transformation Losses at Generator end	0.29%	
3	6 x 170MW PHP-II	Unit- I	49.72	400kV PHP II - Jigmeling -I	0.00	Unit-II on Standby. 400kV PHP-II - Jigmeling Line-I on Standby.
		Unit- II	0.00	400kV PHP II - Jigmeling -II	229.20	
		Unit- III	179.67	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	229.39	Auxiliary Consumption & Transformation Losses at Generator end	0.08%	
4	4 x 84MW CHP	Unit- I	57.88	220kV CHP - Birpara Line - I	-45.93	Unit-IV under Shutdown .
		Unit- II	41.64	220kV CHP - Birpara Line - II	-45.32	
		Unit- III	57.08	220kV CHP - Gedu	2.92	
		Unit- IV	0.00	220kV CHP - Jamjee - I	80.23	
		-	-	220kV CHP - Jamjee - II	79.19	
		-	-	220kV CHP - Jamjee - III	76.81	
		-	-	220kV Malbase - Birpara Line	-35.06	
		-	-	66kV CHP - Gedu Line	7.57	
		-	-	3x3MVA, 66/11kV TFR	1.49	
		Total	156.60	Auxiliary Consumption & Transformation Losses at Generator end	-0.23%	
5	2 x 12MW BHP (U/S)	Unit- I	5.97	220kV BHP - Semtokha Line	107.35	U/S Unit-II on standby
		Unit- II	0.00	66kV BHP - Lobeysa Line	26.01	
		Total	5.97	220kV BHP - Tsirang Line	-117.81	
		-	-	5MVA, 66/11kV TFR	0.53	
6	2 x 20MW BHP (L/S)	Unit- I	4.95	30MVA ICT, 220/66kV (HV)	20.90	
		Unit- II	4.78	-	-	
		Total	9.73	Auxiliary Consumption & Transformation Losses at Generator end	-2.42%	
		-	-	-	-	
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	24.00	220kV DHP - Dagapela Line	23.59	
		-	-	220kV Jigmeling - Dagapela Line	23.77	
		-	-	5MVA, 220/33kV TFR	-	
8	4 x 15MW KHP	Total	24.00	Auxiliary Consumption & Transformation Losses at Generator end	1.71%	Unit- I on Standby.
		Unit- I	0.00	132kV KHP - Nangkhon Line	16.62	
		Unit-II	11.17	132kV KHP - Kilikhar Line	16.26	
		Unit- III	11.16	5MVA, 132/11kV TFR	0.30	
9	2 x 59MW NHP	Unit- IV	11.22	132kV Motanga - Rangia Line	10.80	Unit- I under Shutdown. 132kV NHP-MHP line-II on Standby.
		Total	33.55	Auxiliary Consumption & Transformation Losses at Generator end	1.10%	
		Unit-I	0.00	132kV NHP-MHP-I	27.74	
		Unit-II	28.03	132kV NHP-MHP-II	0.00	
10	2 x 9MW SHP	Total	28.03	Auxiliary Consumption & Transformation Losses at Generator end	1.03%	Interim measure: evacuation is through 33kV system.
		Unit- I	0.00	66kV SHP-Damdhum (Samtse)	0.00	
		Unit- II	4.92	-	-	
		Total	4.92	Auxiliary Consumption & Transformation Losses at Generator end	100.00%	

Note: Generation-Load Summary (MW) for 06-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)	1,108.50	904.38	204.12

Note: Generation-Load Summary (MW) for 06-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)	939.17	884.91	54.26

Note: Daily Energy (MUs) and Power(MW) Statistics for 06-May-2025

Sl. No.	Total Energy Generation	Daily Energy Met	Net Energy Import (IEX and Solar)	Net Energy Export	Peak Cross-border (MW)
1	26.66	21.77	0.00	4.91	292.18

- 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.