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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 18-May-2025(-ve:import, +ve:export)						
Report Details		Date	Time	National Coincidental Peak Load (MW)		
		May 17, 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	0.00	00kV THP-Siliguri Line -I under Emergency Shutdown. Unit-I under shutdown
		Unit- II	100.17	400kV THP - Siliguri Line - II	91.80	
		Unit- III	81.25	400kV THP - Siliguri Line- IV	85.20	
		Unit- IV	75.21	400kV THP - Malbase Line - III	278.32	
		Unit- V	99.21	400kV Malbase - Siliguri Line	45.13	
		Unit- VI	99.55	-	-	
		Total	455.39	Auxiliary Consumption & Transformation Losses at Generator end	0.02%	
2	4 x 180MW MHP	Unit-I	135.14	400kV MHP - Jigmeling Line - I	0.00	Unit-II under Shutdown. 400kV MHP-JLG line-I & II on Standby. 132kV MHP_Yurmoo Line- I not in Service.
		Unit-II	0.00	400kV MHP - Jigmeling Line - II	0.00	
		Unit-III	113.31	400kV MHP - Jigmeling Line - III	188.57	
		Unit-IV	135.46	400kV MHP - Jigmeling Line - IV	187.85	
		-	-	132kV MHP - Yurmo Line - I	0.00	
		-	-	132kV MHP - Yurmo Line - II	62.19	
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	214.91	
		-	-	400kV Jigmeling - Alipurduar Line - I	352.73	
		-	-	400kV Jigmeling - Alipurduar Line - II	352.00	
		-	-	80MVA, 220/132kV ICT - I (HV)	-25.81	
		-	-	80MVA, 220/132kV ICT - II (HV)	-25.60	
		-	-	220kV Tsirang - Jigmeling Line	-118.15	
		-	-	132kV Gelephu - Salakati Line	2.88	
		Total	383.91	Auxiliary Consumption & Transformation Losses at Generator end	0.08%	
3	6 x 170MW PHP-II	Unit- I	182.67	400kV PHP II - Jigmeling -I	278.50	erstwhile interim lines
		Unit- II	187.00	400kV PHP II - Jigmeling -II	277.90	
		Unit- III	187.00	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	556.67	Auxiliary Consumption & Transformation Losses at Generator end	0.05%	
4	4 x 84MW CHP	Unit- I	74.62	220kV CHP - Birpara Line - I	-19.97	Unit-IV under Shutdown.
		Unit- II	74.33	220kV CHP - Birpara Line - II	-19.68	
		Unit- III	80.66	220kV CHP - Gedu	78.83	
		Unit- IV	0.00	220kV CHP - Jamjee (old) - I	63.46	
		-	-	220kV CHP - Jamjee - II (new)	63.04	
		-	-	220kV CHP - Jamjee - III (new)	61.13	
		-	-	220kV Malbase - Birpara Line	-51.04	
		-	-	66kV CHP - Gedu Line	1.92	
		-	-	3x3MVA, 66/11kV TFR	1.24	
		Total	229.61	Auxiliary Consumption & Transformation Losses at Generator end	-0.16%	
5	2 x 12MW BHP (U/S)	Unit- I	2.90	220kV BHP - Semtokha Line	126.80	
		Unit- II	2.40	66kV BHP - Lobeyza Line	24.19	
		Total	5.30	220kV BHP - Tsirang Line	-136.66	
6	2 x 20MW BHP (L/S)	Unit- I	4.90	5MVA, 66/11kV TFR	0.37	
		Unit- II	4.90	30MVA ICT, 220/66kV (HV)	19.27	
		Total	9.80	Auxiliary Consumption & Transformation Losses at Generator end	2.65%	
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	28.49	220kV DHP - Dagapela Line	28.25	
		-	-	220kV Jigmeling - Dagapela Line	20.65	
		-	-	5MVA, 220/33kV TFR	0.24	
		Total	28.49	Auxiliary Consumption & Transformation Losses at Generator end	0.00%	
8	4 x 15MW KHP	Unit- I	16.53	132kV KHP - Nangkhor Line	43.08	
		Unit-II	16.57	132kV KHP - Kilikhar Line	22.55	
		Unit- III	16.48	5MVA, 132/11kV TFR	0.22	
		Unit- IV	16.67	132kV Motanga - Rangia Line	30.36	
		Total	66.25	Auxiliary Consumption & Transformation Losses at Generator end	0.60%	
9	2 x 59MW NHP	Unit-I	0.00	132kV NHP-MHP-I	55.00	Unit-I under Shutdown. 132kV NHP-MHP line-II on Standby.
		Unit-II	55.03	132kV NHP-MHP-II	0.00	
		Total	55.03	Auxiliary Consumption & Transformation Losses at Generator end	0.05%	
10	2 x 9MW SHP	Unit- I	12.50	66kV SHP-Damdhum (Samtse)	0.00	Unit-II under Shutdown. Interim measure: evacuation is through 33kV system.
		Unit- II	0.00	-	-	
		Total	12.50	Auxiliary Consumption & Transformation Losses at Generator end	100.00%	

Note: Generation-Load Summary (MW) for 17-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)	1,802.95	933.54	869.41

Note: Generation-Load Summary (MW) for 17-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)	639.20	832.49	-193.29

THE DAILY BHUTAN POWER SYSTEM OPERATOR LOAD-GENERATION BALANCE REPORT & ENERGY FIGURES ISSUED ON 18-May-2025(-ve:import, +ve:export)						
Report	Date	Time	National Coincidental Peak Load (MW)		Date	Time
Details	May 17, 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	0.00	400kV THP-Siliguri Line-I under Emergency Shutdown. Unit-I under shutdown. Unit-IV on Standby.
		Unit- II	85.16	400kV THP - Siliguri Line - II	75.34	
		Unit- III	138.68	400kV THP - Siliguri Line - IV	69.32	
		Unit- IV	0.00	400kV THP - Malbase Line - III	291.02	
		Unit- V	84.37	400kV Malbase - Siliguri Line	23.51	
		Unit- VI	127.54	-	-	
		Total	435.75	Auxiliary Consumption & Transformation Losses at Generator end	0.02%	
2	4 x 180MW MHP	Unit-I	160.80	400kV MHP - Jigmeling Line - I	0.00	Unit-II & IV under Shutdown. 400kV MHP-JLG line-I &II on Standby. 132kV MHP_Yurmoo Line- I not in Service.
		Unit-II	0.00	400kV MHP - Jigmeling Line - II	0.00	
		Unit-III	151.18	400kV MHP - Jigmeling Line - III	138.12	
		Unit-IV	0.00	400kV MHP - Jigmeling Line - IV	137.83	
		-	-	132kV MHP - Yurmo Line - I	0.00	
		-	-	132kV MHP - Yurmo Line - II	62.03	
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	224.36	
		-	-	400kV Jigmeling - Alipurduar Line - I	299.64	
		-	-	400kV Jigmeling - Alipurduar Line - II	298.18	
		-	-	80MVA, 220/132kV ICT - I (HV)	-32.45	
		-	-	80MVA, 220/132kV ICT - II (HV)	-32.20	
		-	-	220kV Tsirang - Jigmeling Line	-118.15	
		-	-	132kV Gelephu - Salakati Line	1.60	
		Total	311.98	Auxiliary Consumption & Transformation Losses at Generator end	0.57%	
3	6 x 170MW PHP-II	Unit- I	182.49	400kV PHP II - Jigmeling -I	278.20	erstwhile interim lines
		Unit- II	187.00	400kV PHP II - Jigmeling -II	278.10	
		Unit- III	187.00	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	556.49	Auxiliary Consumption & Transformation Losses at Generator end	0.03%	
4	4 x 84MW CHP	Unit- I	69.60	220kV CHP - Birpara Line - I	-26.75	Unit-IV under Shutdown.
		Unit- II	69.37	220kV CHP - Birpara Line - II	-26.79	
		Unit- III	70.73	220kV CHP - Gedu	47.37	
		Unit- IV	0.00	220kV CHP - Jamjee - I	70.07	
		-	-	220kV CHP - Jamjee - II	69.60	
		-	-	220kV CHP - Jamjee - III	67.31	
		-	-	220kV Malbase - Birpara Line	-37.99	
		-	-	66kV CHP - Gedu Line	8.16	
		-	-	3x3MVA, 66/11kV TFR	1.52	
		Total	209.70	Auxiliary Consumption & Transformation Losses at Generator end	-0.38%	
5	2 x 12MW BHP (U/S)	Unit- I	5.61	220kV BHP - Semtokha Line	126.44	L/S & U/S Unit II on Standby.
		Unit- II	0.00	66kV BHP - Lobeysa Line	25.98	
		Total	5.61	220kV BHP - Tsirang Line	-135.01	
		Unit- I	12.72	5MVA, 66/11kV TFR	0.59	
6	2 x 20MW BHP (L/S)	Unit- II	0.00	30MVA ICT, 220/66kV (HV)	21.29	
		Total	12.72	Auxiliary Consumption & Transformation Losses at Generator end	1.80%	
		Unit-I	0.00	220kV DHP - Tsirang Line	0.00	
		Unit-II	31.00	220kV DHP - Dagapela Line	30.75	
7	2 x 63MW DHP	-	-	220kV Jigmeling - Dagapela Line	51.56	Unit-I on Standby. 220kV DHP-TSI line kept on idle charge.
		-	-	5MVA, 220/33kV TFR	0.20	
		Total	31.00	Auxiliary Consumption & Transformation Losses at Generator end	0.16%	
		Unit-I	16.52	132kV KHP - Nangkhori Line	40.98	
8	4 x 15MW KHP	Unit-II	16.57	132kV KHP - Kilikhar Line	24.30	
		Unit- III	16.50	5MVA, 132/11kV TFR	0.32	
		Unit- IV	16.61	132kV Motanga - Rangia Line	38.25	
		Total	66.20	Auxiliary Consumption & Transformation Losses at Generator end	0.91%	
9	2 x 59MW NHP	Unit-I	0.00	132kV NHP-MHP-I	27.78	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	0.79%	
10	2 x 9MW SHP	Unit- I	6.50	66kV SHP-Damdhum (Samtse)	0.00	Interim measure: evacuation is through 33kV system.
		Unit- II	6.40	-	-	
		Total	12.90	Auxiliary Consumption & Transformation Losses at Generator end	100.00%	

Note: Generation-Load Summary (MW) for 17-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)	1,670.35	956.04	714.31

Note: Generation-Load Summary (MW) for 17-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)	910.25	569.64	40.61

Note: Daily Energy (MUs) and Power(MW) Statistics for 17-May-2025

Sl. No.	Total Energy Generation	Daily Energy Met	Net Energy Import (IEX and Solar)	Net Energy Export	Peak Cross-border (MW)
1	43.15	21.83	0.00	21.09	1,343.48

- 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.