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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 16-May-2025(-ve:import, +ve:export)						
Report Details		Date	Time	National Coincidental Peak Load (MW)		Load
		May 15, 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	52.28	Unit-I & III under shutdown for Penstock Cleaning. 400kV THP-SIL Line IV on Standby. 400kV MAL-SIL1 line tripped at 8:11hrs.
		Unit- II	80.19	400kV THP - Siliguri Line - II	53.25	
		Unit- III	0.00	400kV THP - Siliguri Line- IV	0.00	
		Unit- IV	80.49	400kV THP - Malbase Line - III	211.81	
		Unit- V	79.36	400kV Malbase - Siliguri Line	0.00	
		Unit- VI	82.67	-	-	
		Total	322.71	Auxiliary Consumption & Transformation Losses at Generator end	1.66%	
2	4 x 180MW MHP	Unit-I	189.93	400kV MHP - Jigmeling Line - I	0.00	Unit-IV tripped @5:47hrs. Unit-II under Shutdown. 400kV MHP-JLG line-I & II on Standby. 132kV MHP_Yummo Line- I not in Service.
		Unit-II	0.00	400kV MHP - Jigmeling Line - II	0.00	
		Unit-III	181.45	400kV MHP - Jigmeling Line - III	168.74	
		Unit-IV	0.00	400kV MHP - Jigmeling Line - IV	168.10	
		-	-	132kV MHP - Yurno Line - I	0.00	
		-	-	132kV MHP - Yurno Line - II	61.00	
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	203.27	
		-	-	400kV Jigmeling - Alipurduar Line - I	320.73	
		-	-	400kV Jigmeling - Alipurduar Line - II	320.73	
		-	-	80MVA, 220/132kV ICT - I (HV)	-26.92	
		-	-	80MVA, 220/132kV ICT - II (HV)	-26.76	
		-	-	220kV Tsirang - Jigmeling Line	-118.15	
		-	-	132kV Gelephu - Salakati Line	3.30	
		Total	371.38	Auxiliary Consumption & Transformation Losses at Generator end	0.33%	
3	6 x 170MW PHP-II	Unit- I	170.30	400kV PHP II - Jigmeling -I	255.10	erstwhile interim lines
		Unit- II	170.70	400kV PHP II - Jigmeling -II	255.20	
		Unit- III	169.80	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	510.80	Auxiliary Consumption & Transformation Losses at Generator end	0.10%	
4	4 x 84MW CHP	Unit- I	80.76	220kV CHP - Birpara Line - I	-21.71	Unit-IV under Shutdown.
		Unit- II	79.52	220kV CHP - Birpara Line - II	-21.41	
		Unit- III	65.12	220kV CHP - Gedu	73.04	
		Unit- IV	0.00	220kV CHP - Jamjee (old) - I	63.20	
		-	-	220kV CHP - Jamjee - II (new)	62.97	
		-	-	220kV CHP - Jamjee - III (new)	60.55	
		-	-	220kV Malbase - Birpara Line	-49.65	
		-	-	66kV CHP - Gedu Line	7.42	
		-	-	3x3MVA, 66/11kV TFR	1.31	
		Total	225.40	Auxiliary Consumption & Transformation Losses at Generator end	0.01%	
5	2 x 12MW BHP (U/S)	Unit- I	4.20	220kV BHP - Semtokha Line	124.75	
		Unit- II	4.52	66kV BHP - Lobeysa Line	24.94	
		Total	8.72	220kV BHP - Tsirang Line	-120.89	
6	2 x 20MW BHP (L/S)	Unit- I	10.26	5MVA, 66/11kV TFR	0.38	
		Unit- II	9.88	30MVA ICT, 220/66kV (HV)	16.94	
		Total	20.14	Auxiliary Consumption & Transformation Losses at Generator end	-1.11%	
7	2 x 63MW DHP	Unit-I	0.00	220kV DHP - Tsirang Line	0.00	DHP- Tsirang line kept on idle charge. Unit-I is on standby.
		Unit-II	24.46	220kV DHP - Dagapela Line	24.24	
		-	-	220kV Jigmeling - Dagapela Line	51.56	
		-	-	5MVA, 220/33kV TFR	0.20	
		Total	24.46	Auxiliary Consumption & Transformation Losses at Generator end	0.08%	
8	4 x 15MW KHP	Unit- I	16.47	132kV KHP - Nangkhori Line	43.25	
		Unit-II	16.56	132kV KHP - Kilikhar Line	22.00	
		Unit- III	16.55	5MVA, 132/11kV TFR	0.28	
		Unit- IV	16.50	132kV Motanga - Rangia Line	23.31	
		Total	66.08	Auxiliary Consumption & Transformation Losses at Generator end	0.83%	
9	2 x 59MW NHP	Unit-I	0.00	132kV NHP-MHP-I	27.70	Unit-I under Shutdown. 132kV NHP-MHP line-II on Standby.
		Unit-II	28.02	132kV NHP-MHP-II	0.00	
		Total	28.02	Auxiliary Consumption & Transformation Losses at Generator end	1.14%	
10	2 x 9MW SHP	Unit- I	6.99	66kV SHP-Damdhum (Samtse)	0.00	Unit II under Shutdown. Interim measure: evacuation is through 33kV system.
		Unit- II	0.00	-	-	
		Total	6.99	Auxiliary Consumption & Transformation Losses at Generator end	100.00%	

Note: Generation-Load Summary (MW) for 15-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)	1,584.70	903.87	680.83

Note: Generation-Load Summary (MW) for 15-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)	542.70	826.75	-284.05

THE DAILY BHUTAN POWER SYSTEM OPERATOR LOAD-GENERATION BALANCE REPORT & ENERGY FIGURES ISSUED ON 16-May-2025(-ve:import, +ve:export)						
Report	Date	Time	National Coincidental Peak Load (MW)		Date	Time
Details	May 15, 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 & III under shutdown for Penstock Cleaning. 400kV THP-SIL Line IV on Standby.
		Unit- II	139.65	400kV THP - Siliguri Line - II	161.00	
		Unit- III	0.00	400kV THP - Siliguri Line - IV	0.00	
		Unit- IV	139.39	400kV THP - Malbase Line - III	392.74	
		Unit- V	143.63	400kV Malbase - Siliguri Line	100.42	
		Unit- VI	131.20	-	-	
		Total	553.87	Auxiliary Consumption & Transformation Losses at Generator end	0.02%	
2	4 x 180MW MHP	Unit-I	191.82	400kV MHP - Jigmeling Line - I	0.00	Unit-II under Shutdown. Unit-III under emergency 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	0.00	400kV MHP - Jigmeling Line - III	182.16	
		Unit-IV	191.31	400kV MHP - Jigmeling Line - IV	181.69	
		-	-	132kV MHP - Yurmo Line - I	0.00	
		-	-	132kV MHP - Yurmo Line - II	63.40	
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	241.82	
		-	-	400kV Jigmeling - Alipurduar Line - I	334.55	
		-	-	400kV Jigmeling - Alipurduar Line - II	334.55	
		-	-	80MVA, 220/132kV ICT - I (HV)	-39.23	
		-	-	80MVA, 220/132kV ICT - II (HV)	-38.92	
		-	-	220kV Tsirang - Jigmeling Line	-118.15	
		-	-	132kV Gelephu - Salakati Line	3.35	
		Total	383.13	Auxiliary Consumption & Transformation Losses at Generator end	0.17%	
3	6 x 170MW PHP-II	Unit- I	186.50	400kV PHP II - Jigmeling -I	270.00	
		Unit- II	186.80	400kV PHP II - Jigmeling -II	268.00	
		Unit- III	186.30	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	559.60	Auxiliary Consumption & Transformation Losses at Generator end	3.86%	
4	4 x 84MW CHP	Unit- I	77.48	220kV CHP - Birpara Line - I	-13.61	IV under Shutdown.
		Unit- II	77.19	220kV CHP - Birpara Line - II	-13.57	
		Unit- III	78.66	220kV CHP - Gedu	47.77	
		Unit- IV	0.00	220kV CHP - Jamjee - I	101.66	
		-	-	220kV CHP - Jamjee - II	0.00	
		-	-	220kV CHP - Jamjee - III	100.44	
		-	-	220kV Malbase - Birpara Line	-16.47	
		-	-	66kV CHP - Gedu Line	8.86	
		-	-	3x3MVA, 66/11kV TFR	1.56	
		Total	233.33	Auxiliary Consumption & Transformation Losses at Generator end	0.09%	
5	2 x 12MW BHP (U/S)	Unit- I	3.55	220kV BHP - Semtokha Line	128.91	
		Unit- II	3.99	66kV BHP - Lobeysa Line	26.39	
		Total	7.54	220kV BHP - Tsirang Line	-134.69	
6	2 x 20MW BHP (L/S)	Unit- I	6.63	5MVA, 66/11kV TFR	0.65	
		Unit- II	6.40	30MVA ICT, 220/66kV (HV)	19.84	
		Total	13.03	Auxiliary Consumption & Transformation Losses at Generator end	-3.35%	
7	2 x 63MW DHP	Unit-I	25.73	220kV DHP - Tsirang Line	0.00	Unit-I on Standby. 220kV DHP-TSI line kept on idle charge.
		Unit-II	0.00	220kV DHP - Dagapela Line	25.30	
		-	-	220kV Jigmeling - Dagapela Line	23.00	
		-	-	5MVA, 220/33kV TFR	0.20	
		Total	25.73	Auxiliary Consumption & Transformation Losses at Generator end	0.89%	
8	4 x 15MW KHP	Unit- I	15.13	132kV KHP - Nangkhori Line	36.61	
		Unit-II	15.19	132kV KHP - Kilikhar Line	23.21	
		Unit- III	15.27	5MVA, 132/11kV TFR	0.36	
		Unit- IV	15.21	132kV Motanga - Rangia Line	26.62	
		Total	60.80	Auxiliary Consumption & Transformation Losses at Generator end	1.02%	
9	2 x 59MW NHP	Unit-I	0.00	132kV NHP-MHP-I	44.79	Unit-I under Shutdown. 132kV NHP-MHP line-II on Standby.
		Unit-II	44.96	132kV NHP-MHP-II	0.00	
		Total	44.96	Auxiliary Consumption & Transformation Losses at Generator end	0.38%	
10	2 x 9MW SHP	Unit- I	0.00	66kV SHP-Damdhum (Samtse)	0.00	Unit I tripped @18:05hrs Unit-2 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 15-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)	1,881.99	965.15	916.84

Note: Generation-Load Summary (MW) for 15-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)	912.26	873.30	38.96

Note: Daily Energy (MUs) and Power(MW) Statistics for 15-May-2025

Sl. No.	Total Energy Generation	Daily Energy Met	Net Energy Import (IEX and Solar)	Net Energy Export	Peak Cross-border (MW)
1	45.08	21.64	0.00	23.03	1,227.05

- 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.