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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 12-May-2025(-ve:import, +ve:export)						
Report Details		Date	Time	National Coincidental Peak Load (MW)		
		May 11, 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	25.22	Unit-I, II & III under shutdown for Penstock Cleaning. 400kV THP-SIL Line II & IV on Standby. 400kV MAL-SIL line under ideal charged at our end.
		Unit- II	0.00	400kV THP - Siliguri Line - II	0.00	
		Unit- III	0.00	400kV THP - Siliguri Line- IV	0.00	
		Unit- IV	65.10	400kV THP - Malbase Line - III	265.23	
		Unit- V	84.34	400kV Malbase - Siliguri Line	0.00	
		Unit- VI	141.06	-	-	
		Total	290.50	Auxiliary Consumption & Transformation Losses at Generator end	0.02%	
2	4 x 180MW MHP	Unit-I	134.23	400kV MHP - Jigmeling Line - I	0.00	Unit-II under Shutdown. 400kV MHP-JLG Line-I&II on Standby. 132kV MHP_Yumoo Line- I not in Service.
		Unit-II	0.00	400kV MHP - Jigmeling Line - II	0.00	
		Unit-III	65.11	400kV MHP - Jigmeling Line - III	148.69	
		Unit-IV	133.45	400kV MHP - Jigmeling Line - IV	148.93	
		-	-	132kV MHP - Yurno Line - I	61.61	
		-	-	132kV MHP - Yurno Line - II	0.00	
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	212.73	
		-	-	400kV Jigmeling - Alipurduar Line - I : <i>direct lines</i>	239.27	
		-	-	400kV Jigmeling - Alipurduar Line - II :	237.82	
		-	-	80MVA, 220/132kV ICT - I (HV)	-24.13	
		-	-	80MVA, 220/132kV ICT - II (HV)	-23.88	
		-	-	220kV Tsirang - Jigmeling Line	-118.15	
		-	-	132kV Gelephu - Salakati Line	-5.62	
		Total	332.79	Auxiliary Consumption & Transformation Losses at Generator end	0.40%	
3	6 x 170MW PHP-II	Unit- I	170.00	400kV PHP II - Jigmeling -I	0.00	400kV PHP-II - Jigmeling Line-II under shutdown.
		Unit- II	180.23	400kV PHP II - Jigmeling -II	400.00	
		Unit- III	50.33	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	400.56	Auxiliary Consumption & Transformation Losses at Generator end	0.14%	
4	4 x 84MW CHP	Unit- I	45.00	220kV CHP - Birpara Line - I	-48.83	Unit-IV under Shutdown.
		Unit- II	49.69	220kV CHP - Birpara Line - II	-48.23	
		Unit- III	41.06	220kV CHP - Gedu	32.58	
		Unit- IV	0.00	220kV CHP - Jamjee (old) - I	64.98	
		-	-	220kV CHP - Jamjee - II (new)	64.27	
		-	-	220kV CHP - Jamjee - III (new)	62.22	
		-	-	220kV Malbase - Birpara Line	-61.84	
		-	-	66kV CHP - Gedu Line	8.29	
		-	-	3x3MVA, 66/11kV TFR	1.36	
		Total	135.75	Auxiliary Consumption & Transformation Losses at Generator end	-0.66%	
5	2 x 12MW BHP (U/S)	Unit- I	4.90	220kV BHP - Semtokha Line	121.18	U/S Unit II on Standby.
		Unit- II	0.00	66kV BHP - Lobeysa Line	23.68	
		Total	4.90	220kV BHP - Tsirang Line	-129.28	
6	2 x 20MW BHP (L/S)	Unit- I	5.73	5MVA, 66/11kV TFR	0.38	
		Unit- II	5.54	30MVA ICT, 220/66kV (HV)	19.38	
		Total	11.27	Auxiliary Consumption & Transformation Losses at Generator end	1.30%	
7	2 x 63MW DHP	Unit-I	18.96	220kV DHP - Tsirang Line	0.00	DHP- Tsirang line kept on idle charge. Unit-II is standby.
		Unit-II	0.00	220kV DHP - Dagapela Line	18.72	
		-	-	220kV Jigmeling - Dagapela Line	30.00	
		-	-	5MVA, 220/33kV TFR	0.20	
		Total	18.96	Auxiliary Consumption & Transformation Losses at Generator end	0.21%	
8	4 x 15MW KHP	Unit- I	16.21	132kV KHP - Nangkhor Line	30.71	Unit II on standby.
		Unit-II	0.00	132kV KHP - Kilikhar Line	17.28	
		Unit- III	16.27	5MVA, 132/11kV TFR	0.29	
		Unit- IV	16.25	132kV Motanga - Rangia Line	8.52	
		Total	48.73	Auxiliary Consumption & Transformation Losses at Generator end	0.92%	
9	2 x 59MW NHP	Unit-I	0.00	132kV NHP-MHP-I	27.76	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	0.79%	
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	5.08	-	-	
		Total	5.08	Auxiliary Consumption & Transformation Losses at Generator end	100.00%	

Note: Generation-Load Summary (MW) for 11-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)	1,276.52	930.21	346.31

Note: Generation-Load Summary (MW) for 11-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)	500.44	68.00	-386.49

THE DAILY BHUTAN POWER SYSTEM OPERATOR LOAD-GENERATION BALANCE REPORT & ENERGY FIGURES ISSUED ON 12-May-2025(-ve:import, +ve:export)						
Report	Date	Time	National Coincidental Peak Load (MW)		Date	Time
Details	May 11, 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	44.74	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	124.84	400kV THP - Malbase Line - III	270.86	
		Unit- V	69.47	400kV Malbase - Siliguri Line	-8.52	
		Unit- VI	121.24	-	-	
		Total	315.55	Auxiliary Consumption & Transformation Losses at Generator end	-0.02%	
2	4 x 180MW MHP	Unit-I	80.79	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	80.22	400kV MHP - Jigmeling Line - III	108.88	
		Unit-IV	75.03	400kV MHP - Jigmeling Line - IV	108.56	
		-	-	132kV MHP - Yurmo Line - I	0.00	
		-	-	132kV MHP - Yurmo Line - II	65.00	
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	220.36	
		-	-	400kV Jigmeling - Alipurduar Line - I ; direct lines	186.10	
		-	-	400kV Jigmeling - Alipurduar Line - II ;	185.46	
		-	-	80MVA, 220/132kV ICT - I (HV)	-29.84	
		-	-	80MVA, 220/132kV ICT - II (HV)	-29.59	
		-	-	220kV Tsirang - Jigmeling Line	-118.15	
		-	-	132kV Gelephu - Salakati Line	-13.82	
		Total	236.04	Auxiliary Consumption & Transformation Losses at Generator end	-0.81%	
3	6 x 170MW PHP-II	Unit- I	154.60	400kV PHP II - Jigmeling -I	380.70	400kV PHP-II - Jigmeling Line-II under shutdown.
		Unit- II	175.60	400kV PHP II - Jigmeling -II	0.00	
		Unit- III	50.30	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	380.50	Auxiliary Consumption & Transformation Losses at Generator end	-0.05%	
4	4 x 84MW CHP	Unit- I	59.79	220kV CHP - Birpara Line - I	-49.23	Unit-IV under Shutdown.
		Unit- II	49.70	220kV CHP - Birpara Line - II	-48.75	
		Unit- III	50.99	220kV CHP - Gedu	26.19	
		Unit- IV	0.00	220kV CHP - Jamjee - I	75.12	
		-	-	220kV CHP - Jamjee - II	74.48	
		-	-	220kV CHP - Jamjee - III	71.67	
		-	-	220kV Malbase - Birpara Line	-58.79	
		-	-	66kV CHP - Gedu Line	9.92	
		-	-	3x3MVA, 66/11kV TFR	1.56	
		Total	160.48	Auxiliary Consumption & Transformation Losses at Generator end	-0.30%	
5	2 x 12MW BHP (U/S)	Unit- I	4.70	220kV BHP - Semtokha Line	112.30	U/S Unit-II & L/S Unit I on standby.
		Unit- II	0.00	66kV BHP - Lobeysa Line	25.28	
		Total	4.70	220kV BHP - Tsirang Line	-125.00	
				5MVA, 66/11kV TFR	0.62	
6	2 x 20MW BHP (L/S)	Unit- I	0.00	30MVA ICT, 220/66kV (HV)	21.20	
		Unit- II	8.70			
		Total	8.70	Auxiliary Consumption & Transformation Losses at Generator end	1.49%	
7	2 x 63MW DHP	Unit-I	17.99	220kV DHP - Tsirang Line	0.00	Unit-II is Standby. 220kV DHP-TSI line kept on idle charge.
		Unit-II	0.00	220kV DHP - Dagapela Line	17.89	
		-	-	220kV Jigmeling - Dagapela Line	30.20	
		-	-	5MVA, 220/33kV TFR	0.20	
		Total	17.99	Auxiliary Consumption & Transformation Losses at Generator end	-0.56%	
8	4 x 15MW KHP	Unit- I	12.06	132kV KHP - Nangkhori Line	18.53	Unit- II on Standby.
		Unit-II	0.00	132kV KHP - Kilikhar Line	17.18	
		Unit- III	12.09	5MVA, 132/11kV TFR	0.36	
		Unit- IV	12.22	132kV Motanga - Rangia Line	2.82	
		Total	36.37	Auxiliary Consumption & Transformation Losses at Generator end	0.82%	
9	2 x 59MW NHP	Unit-I	0.00	132kV NHP-MHP-I	44.48	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	1.07%	
10	2 x 9MW SHP	Unit- I	5.38	66kV SHP-Damdhum (Samtse)	0.00	Interim measure: evacuation is through 33kV system.
		Unit- II	0.00	-	-	
		Total	5.38	Auxiliary Consumption & Transformation Losses at Generator end	100.00%	

Note: Generation-Load Summary (MW) for 11-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)	1,210.67	970.66	240.01

Note: Generation-Load Summary (MW) for 11-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)	21.00	921.37	31.18

Note: Daily Energy (MUs) and Power(MW) Statistics for 11-May-2025

Sl. No.	Total Energy Generation	Daily Energy Met	Net Energy Import (IEX and Solar)	Net Energy Export	Peak Cross-border (MW)
1	29.66	21.57	0.00	7.89	418.44

- 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.