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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 10-May-2025(-ve:import, +ve:export)						
Report Details		Date	Time	National Coincidental Peak Load (MW)		
		May 9, 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	5.73	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	30.25	400kV THP - Malbase Line - III	225.16	
		Unit- V	138.95	400kV Malbase - Siliguri Line	-40.79	
		Unit- VI	61.69	-	-	
		Total	230.89	Auxiliary Consumption & Transformation Losses at Generator end	0.00%	
2	4 x 180MW MHP	Unit-I	140.78	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_Yurmo Line-I not in Service.
		Unit-II	0.00	400kV MHP - Jigmeling Line - II	0.00	
		Unit-III	50.36	400kV MHP - Jigmeling Line - III	122.74	
		Unit-IV	70.36	400kV MHP - Jigmeling Line - IV	122.05	
		-	-	132kV MHP - Yurmo Line - I	0.00	
		-	-	132kV MHP - Yurmo Line - II	60.76	
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	210.55	
		-	-	400kV Jigmeling - Alipurduar Line - I	193.40	
		-	-	400kV Jigmeling - Alipurduar Line - II	192.73	
		-	-	80MVA, 220/132kV ICT - I (HV)	-32.38	
		-	-	80MVA, 220/132kV ICT - II (HV)	-32.24	
		-	-	220kV Tsirang - Jigmeling Line	-118.15	
		-	-	132kV Gelephu - Salakati Line	-1.28	
		Total	261.50	Auxiliary Consumption & Transformation Losses at Generator end	0.37%	
3	6 x 170MW PHP-II	Unit- I	180.60	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	360.00	
		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	360.27	Auxiliary Consumption & Transformation Losses at Generator end	0.07%	
4	4 x 84MW CHP	Unit- I	75.95	220kV CHP - Birpara Line - I	-44.78	Unit-IV under Shutdown.
		Unit- II	0.00	220kV CHP - Birpara Line - II	-44.38	
		Unit- III	75.15	220kV CHP - Gedu	21.93	
		Unit- IV	0.00	220kV CHP - Jamjee (old) - I	70.71	
		-	-	220kV CHP - Jamjee - II (new)	69.95	
		-	-	220kV CHP - Jamjee - III (new)	67.51	
		-	-	220kV Malbase - Birpara Line	-48.42	
		-	-	66kV CHP - Gedu Line	9.19	
		-	-	3x3MVA, 66/11kV TFR	1.26	
		Total	151.10	Auxiliary Consumption & Transformation Losses at Generator end	-0.19%	
5	2 x 12MW BHP (U/S)	Unit- I	5.11	220kV BHP - Semtokha Line	104.40	U/S Unit II under shutdown. LS unit I on standby
		Unit- II	0.00	66kV BHP - Lobeyza Line	22.88	
		Total	5.11	220kV BHP - Tsirang Line	-111.07	
6	2 x 20MW BHP (L/S)	Unit- I	0.00	5MVA, 66/11kV TFR	0.41	
		Unit- II	11.40	30MVA ICT, 220/66kV (HV)	18.48	
		Total	11.40	Auxiliary Consumption & Transformation Losses at Generator end	-0.67%	
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	17.99	220kV DHP - Dagapela Line	17.76	
		-	-	220kV Jigmeling - Dagapela Line	31.53	
		-	-	5MVA, 220/33kV TFR	0.20	
		Total	17.99	Auxiliary Consumption & Transformation Losses at Generator end	0.17%	
8	4 x 15MW KHP	Unit- I	14.41	132kV KHP - Nangkhor Line	26.67	Unit II on standby
		Unit-II	0.00	132kV KHP - Kilikhar Line	16.01	
		Unit- III	14.51	5MVA, 132/11kV TFR	0.27	
		Unit- IV	14.48	132kV Motanga - Rangia Line	15.84	
		Total	43.40	Auxiliary Consumption & Transformation Losses at Generator end	1.04%	
9	2 x 59MW NHP	Unit-I	0.00	132kV NHP-MHP-I	45.02	Unit-I under Shutdown. 132kV NHP-MHP line-II on Standby.
		Unit-II	45.03	132kV NHP-MHP-II	0.00	
		Total	45.03	Auxiliary Consumption & Transformation Losses at Generator end	0.02%	
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	5.59	-	-	
		Total	5.59	Auxiliary Consumption & Transformation Losses at Generator end	100.00%	

Note: Generation-Load Summary (MW) for 09-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)	1,132.28	904.23	228.05

Note: Generation-Load Summary (MW) for 09-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)	558.14	869.19	-317.23

THE DAILY BHUTAN POWER SYSTEM OPERATOR LOAD-GENERATION BALANCE REPORT & ENERGY FIGURES ISSUED ON 10-May-2025(-ve:import, +ve:export)							
Report Details	Date	Time	National Coincidental Peak Load (MW)		Date	Time	Load
	May 9, 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	19.65	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	105.89	400kV THP - Malbase Line - III	288.32		
		Unit- V	99.17	400kV Malbase - Siliguri Line	-38.70		
		Unit- VI	100.52	-	-		
		Total	305.58	Auxiliary Consumption & Transformation Losses at Generator end	-0.78%		
2	4 x 180MW MHP	Unit-I	131.18	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	35.44	400kV MHP - Jigmeling Line - III	80.78		
		Unit-IV	30.26	400kV MHP - Jigmeling Line - IV	80.48		
		-	-	132kV MHP - Yurmoo Line - I	0.00		
		-	-	132kV MHP - Yurmoo Line - II	63.82		
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	230.55		
		-	-	400kV Jigmeling - Alipurduar Line - I	152.73		
		-	-	400kV Jigmeling - Alipurduar Line - II	151.27		
		-	-	80MVA, 220/132kV ICT - I (HV)	-37.26		
		-	-	80MVA, 220/132kV ICT - II (HV)	-37.05		
		-	-	220kV Tsirang - Jigmeling Line	-118.15		
		-	-	132kV Gelephu - Salakati Line	-5.56		
		Total	196.88	Auxiliary Consumption & Transformation Losses at Generator end	-0.19%		
		3	6 x 170MW PHP-II	Unit- I	180.00	400kV PHP II - Jigmeling -I	0.00
Unit- II	0.00			400kV PHP II - Jigmeling -II	359.00		
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	0.28%		
4	4 x 84MW CHP	Unit- I	49.94	220kV CHP - Birpara Line - I	-43.30	Unit-IV under Shutdown.	
		Unit- II	44.68	220kV CHP - Birpara Line - II	-42.86		
		Unit- III	51.02	220kV CHP - Gedu	1.94		
		Unit- IV	0.00	220kV CHP - Jamjee - I	74.85		
		-	-	220kV CHP - Jamjee - II	74.34		
		-	-	220kV CHP - Jamjee - III	71.89		
		-	-	220kV Malbase - Birpara Line	-30.60		
		-	-	66kV CHP - Gedu Line	8.02		
		-	-	3x3MVA, 66/11kV TFR	1.44		
		Total	145.64	Auxiliary Consumption & Transformation Losses at Generator end	-0.47%		
5	2 x 12MW BHP (U/S)	Unit- I	4.90	220kV BHP - Semtokha Line	108.94	U/S Unit-II & L/S Unit I on standby	
		Unit- II	0.00	66kV BHP - Lobeysa Line	24.81		
		Total	4.90	220kV BHP - Tsirang Line	-118.59		
	6	2 x 20MW BHP (L/S)	Unit- I	0.00	5MVA, 66/11kV TFR		
Unit- II			10.50	30MVA ICT, 220/66kV (HV)	20.83		
Total			10.50	Auxiliary Consumption & Transformation Losses at Generator end	-2.21%		
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	17.74	220kV DHP - Dagapela Line	17.63		
		-	-	220kV Jigmeling - Dagapela Line	30.80		
		-	-	5MVA, 220/33kV TFR	0.10		
		Total	17.74	Auxiliary Consumption & Transformation Losses at Generator end	0.06%		
8	4 x 15MW KHP	Unit- I	12.17	132kV KHP - Nangkhori Line	18.63	Unit- II on Standby.	
		Unit-II	0.00	132kV KHP - Kilikhar Line	17.26		
		Unit- III	12.17	5MVA, 132/11kV TFR	0.35		
		Unit- IV	12.21	132kV Motanga - Rangia Line	14.38		
		Total	36.55	Auxiliary Consumption & Transformation Losses at Generator end	0.85%		
9	2 x 59MW NHP	Unit-I	0.00	132kV NHP-MHP-I	27.82	Unit-I under Shutdown. 132kV NHP-MHP line-II on Standby.	
		Unit-II	28.03	132kV NHP-MHP-II	0.00		
		Total	28.03	Auxiliary Consumption & Transformation Losses at Generator end	0.75%		
10	2 x 9MW SHP	Unit- I	0.00	66kV SHP-Damdhum (Samtse)	0.00	Interim measure: evacuation is through 33kV system. Unit-II tripped at 14:52hrs & Unit-I tripped at 18:55hrs.	
		Unit- II	0.00	-	-		
		Total	0.00	Auxiliary Consumption & Transformation Losses at Generator end	0.00%		
Note: Generation-Load Summary (MW) for 09-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)	1,105.82	928.81		177.01		
Note: Generation-Load Summary (MW) for 09-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)	961.17	921.73		34.17		
Note: Daily Energy (MUs) and Power(MW) Statistics for 09-May-2025							
Sl. No.	Total Energy Generation	Daily Energy Met	Net Energy Import (IEX and Solar)	Net Energy Export	Peak Cross-border (MW)		
1	25.19	21.10	0.00	4.02	409.07		

1. 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:

- i) 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.
2. 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.
3. When SCADA data are unavailable for certain stations due to technical issues, required data are collected from the site.