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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 26-May-2025(-ve:import, +ve:export)						
Report Details		Date	Time	National Coincidental Peak Load (MW)		
		May 25, 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	Unit-I under Shutdown. Unit-II on Standby. 400kV THP-Siliguri Line -I under Shutdown.
		Unit- II	0.00	400kV THP - Siliguri Line - II	92.45	
		Unit- III	148.99	400kV THP - Siliguri Line- IV	85.85	
		Unit- IV	171.24	400kV THP - Malbase Line - III	292.25	
		Unit- V	10.52	400kV Malbase - Siliguri Line	43.27	
		Unit- VI	139.19	-	-	
		Total	469.94	Auxiliary Consumption & Transformation Losses at Generator end	-0.13%	
2	4 x 180MW MHP	Unit-I	169.85	400kV MHP - Jigmeling Line - I	266.81	Unit-3 on Standby. 400kV MHP-JLG line- II & III on Standby. 132kV MHP_Yumoo Line- I not in Service.
		Unit-II	141.89	400kV MHP - Jigmeling Line - II	0.00	
		Unit-III	0.00	400kV MHP - Jigmeling Line - III	0.00	
		Unit-IV	170.11	400kV MHP - Jigmeling Line - IV	267.98	
		-	-	132kV MHP - Yurno Line - I	0.00	
		-	-	132kV MHP - Yurno Line - II	62.62	
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	-54.38	
		-	-	400kV Jigmeling - Alipurduar Line - I	336.73	
		-	-	400kV Jigmeling - Alipurduar Line - II	335.27	
		-	-	80MVA, 220/132kV ICT - I (HV)	35.09	
		-	-	80MVA, 220/132kV ICT - II (HV)	34.83	
		-	-	220kV Tsirang - Jigmeling Line	-127.56	
		-	-	132kV Gelephu - Salakati Line	7.84	
		Total	481.85	Auxiliary Consumption & Transformation Losses at Generator end	0.05%	
		Unit- I	180.95	400kV PHP II - Jigmeling -I	364.46	Unit-3 opened @ 08:21hrs for emergency shutdown. 400kV PHP II-JIG II tripped @ 08:21hrs.
3	6 x 170MW PHP-II	Unit- II	184.94	400kV PHP II - Jigmeling -II	0.00	
		Unit- III	0.00	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	365.89	Auxiliary Consumption & Transformation Losses at Generator end	0.39%	
4	4 x 84MW CHP	Unit- I	73.65	220kV CHP - Birpara Line - I	-21.53	Unit-IV under Shutdown.
		Unit- II	73.26	220kV CHP - Birpara Line - II	-21.45	
		Unit- III	72.76	220kV CHP - Gedu	58.17	
		Unit- IV	0.00	220kV CHP - Jamjee (old) - I	66.31	
		-	-	220kV CHP - Jamjee - II (new)	65.60	
		-	-	220kV CHP - Jamjee - III (new)	63.60	
		-	-	220kV Malbase - Birpara Line	-38.29	
		-	-	66kV CHP - Gedu Line	7.03	
		-	-	3x3MVA, 66/11kV TFR	1.39	
		Total	219.67	Auxiliary Consumption & Transformation Losses at Generator end	0.25%	
5	2 x 12MW BHP (U/S)	Unit- I	4.72	220kV BHP - Semtokha Line	118.00	
		Unit- II	5.27	66kV BHP - Lobeysa Line	24.78	
		Total	9.99	220kV BHP - Tsirang Line	-122.23	
6	2 x 20MW BHP (L/S)	Unit- I	5.51	5MVA, 66/11kV TFR	0.39	
		Unit- II	5.32	30MVA ICT, 220/66kV (HV)	15.55	
		Total	10.83	Auxiliary Consumption & Transformation Losses at Generator end	-0.58%	
7	2 x 63MW DHP	Unit-I	27.24	220kV DHP - Tsirang Line	0.00	220kV DHP- Tsirang line kept on Standby. DHP Unit II on Standby.
		Unit-II	0.00	220kV DHP - Dagapela Line	27.05	
		-	-	220kV Jigmeling - Dagapela Line	22.00	
		-	-	5MVA, 220/33kV TFR	0.18	
		Total	27.24	Auxiliary Consumption & Transformation Losses at Generator end	0.04%	
8	4 x 15MW KHP	Unit- I	16.54	132kV KHP - Nangkhor Line	43.32	
		Unit-II	16.52	132kV KHP - Kilikhar Line	21.95	
		Unit- III	16.58	5MVA, 132/11kV TFR	0.29	
		Unit- IV	16.54	132kV Motanga - Rangia Line	31.18	
		Total	66.18	Auxiliary Consumption & Transformation Losses at Generator end	0.94%	
9	2 x 59MW NHP	Unit-I	64.47	132kV NHP-MHP-I	51.79	
		Unit-II	52.01	132kV NHP-MHP-II	64.01	
		Total	116.48	Auxiliary Consumption & Transformation Losses at Generator end	0.58%	
10	2 x 9MW SHP	Unit- I	4.65	66kV SHP-Damdhum (Samtse)	0.00	Interim measure: evacuation is through 33kV system.
		Unit- II	4.55	-	-	
		Total	9.20	Auxiliary Consumption & Transformation Losses at Generator end	100.00%	

Note: Generation-Load Summary (MW) for 25-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)	1,777.27	925.95	851.32

Note: Generation-Load Summary (MW) for 25-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)	925.41	859.83	65.58

THE DAILY BHUTAN POWER SYSTEM OPERATOR LOAD-GENERATION BALANCE REPORT & ENERGY FIGURES ISSUED ON 26-May-2025(-ve:import, +ve:export)						
Report	Date	Time	National Coincidental Peak Load (MW)		Date	Time
Details	May 25, 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	Unit-I under Shutdown. Unit- II on Standby. 400kV THP-Siliguri Line -I under Shutdown.
		Unit- II	0.00	400kV THP - Siliguri Line - II	77.09	
		Unit- III	148.80	400kV THP - Siliguri Line - IV	71.10	
		Unit- IV	147.19	400kV THP - Malbase Line - III	304.09	
		Unit- V	10.54	400kV Malbase - Siliguri Line	23.62	
		Unit- VI	144.36	-	-	
		Total	450.89	Auxiliary Consumption & Transformation Losses at Generator end	-0.31%	
2	4 x 180MW MHP	Unit-I	131.20	400kV MHP - Jigmeling Line - I	196.48	Unit III on Standby. 400kV MHP-JLG line-II & III on Standby. 132kV MHP_Yurmoo Line- I not in Service.
		Unit-II	135.26	400kV MHP - Jigmeling Line - II	0.00	
		Unit-III	0.00	400kV MHP - Jigmeling Line - III	0.00	
		Unit-IV	136.17	400kV MHP - Jigmeling Line - IV	197.15	
		-	-	132kV MHP - Yurmo Line - I	0.00	
		-	-	132kV MHP - Yurmo Line - II	63.46	
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	221.46	
		-	-	400kV Jigmeling - Alipurduar Line - I ; direct lines	264.00	
		-	-	400kV Jigmeling - Alipurduar Line - II ;	264.00	
		-	-	80MVA, 220/132kV ICT - I (HV)	-37.99	
		-	-	80MVA, 220/132kV ICT - II (HV)	-37.65	
		-	-	220kV Tsirang - Jigmeling Line	-102.61	
		-	-	132kV Gelephu - Salakati Line	2.62	
		Total	402.63	Auxiliary Consumption & Transformation Losses at Generator end	0.01%	
3	6 x 170MW PHP-II	Unit- I	180.00	400kV PHP II - Jigmeling -I	360.73	400kV PHP II - Jigmeling Line II & Unit-III under Shutdown.
		Unit- II	184.62	400kV PHP II - Jigmeling -II	0.00	
		Unit- III	0.00	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	364.62	Auxiliary Consumption & Transformation Losses at Generator end	1.07%	
4	4 x 84MW CHP	Unit- I	66.73	220kV CHP - Birpara Line - I	-25.55	Unit- IV under Shutdown.
		Unit- II	66.39	220kV CHP - Birpara Line - II	-25.34	
		Unit- III	76.77	220kV CHP - Gedu	38.82	
		Unit- IV	0.00	220kV CHP - Jamjee - I	72.32	
		-	-	220kV CHP - Jamjee - II	71.70	
		-	-	220kV CHP - Jamjee - III	69.27	
		-	-	220kV Malbase - Birpara Line	-30.51	
		-	-	66kV CHP - Gedu Line	6.64	
		-	-	3x3MVA, 66/11kV TFR	1.61	
		Total	209.89	Auxiliary Consumption & Transformation Losses at Generator end	0.20%	
5	2 x 12MW BHP (U/S)	Unit- I	3.46	220kV BHP - Semtokha Line	118.50	
		Unit- II	4.79	66kV BHP - Lobeysa Line	26.50	
		Total	8.25	220kV BHP - Tsirang Line	-118.32	
6	2 x 20MW BHP (L/S)	Unit- I	9.94	5MVA, 66/11kV TFR	0.67	
		Unit- II	9.58	30MVA ICT, 220/66kV (HV)	19.06	
		Total	19.52	Auxiliary Consumption & Transformation Losses at Generator end	1.51%	
7	2 x 63MW DHP	Unit-I	27.27	220kV DHP - Tsirang Line	0.00	220kV DHP-TSI line on Standby. Unit-II on standby.
		Unit-II	0.00	220kV DHP - Dagapela Line	27.06	
		-	-	220kV Jigmeling - Dagapela Line	52.03	
		-	-	5MVA, 220/33kV TFR	0.20	
		Total	27.27	Auxiliary Consumption & Transformation Losses at Generator end	0.04%	
8	4 x 15MW KHP	Unit- I	16.56	132kV KHP - Nangkhor Line	41.21	
		Unit-II	16.53	132kV KHP - Kilikhar Line	24.11	
		Unit- III	16.58	5MVA, 132/11kV TFR	0.34	
		Unit- IV	16.57	132kV Motanga - Rangia Line	28.61	
		Total	66.24	Auxiliary Consumption & Transformation Losses at Generator end	0.88%	
9	2 x 59MW NHP	Unit-I	15.01	132kV NHP-MHP-I	39.72	
		Unit-II	39.97	132kV NHP-MHP-II	14.79	
		Total	54.98	Auxiliary Consumption & Transformation Losses at Generator end	0.85%	
10	2 x 9MW SHP	Unit- I	4.40	66kV SHP-Damdhum (Samtse)	0.00	Interim measure: evacuation is through 33kV system.
		Unit- II	4.45	-	-	
		Total	8.85	Auxiliary Consumption & Transformation Losses at Generator end	100.00%	

Note: Generation-Load Summary (MW) for 25-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)	1,613.14	963.50	649.64

Note: Generation-Load Summary (MW) for 25-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)	960.64	891.45	69.19

Note: Daily Energy (MUs) and Power(MW) Statistics for 25-May-2025

Sl. No.	Total Energy Generation	Daily Energy Met	Net Energy Import (IEX and Solar)	Net Energy Export	Peak Cross-border (MW)
1	40.83	21.54	0.00	19.15	1,059.60

- 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.