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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 29-May-2025(-ve:import, +ve:export)						
Report Details		Date	Time	National Coincidental Peak Load (MW)		
		May 28, 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. 400kV THP-Siliguri Line -I under Shutdown.
		Unit- II	164.33	400kV THP - Siliguri Line - II	185.42	
		Unit- III	168.43	400kV THP - Siliguri Line- IV	174.39	
		Unit- IV	142.43	400kV THP - Malbase Line - III	425.34	
		Unit- V	138.74	400kV Malbase - Siliguri Line	118.38	
		Unit- VI	169.16	-	-	
		Total	783.09	Auxiliary Consumption & Transformation Losses at Generator end	-0.26%	
2	4 x 180MW MHP	Unit-I	197.09	400kV MHP - Jigmeling Line - I	405.38	400kV MHP-JLG line- II & III on Standby. 132kV MHP_Yumoo Line- I not in Service.
		Unit-II	184.87	400kV MHP - Jigmeling Line - II	0.00	
		Unit-III	187.61	400kV MHP - Jigmeling Line - III	0.00	
		Unit-IV	190.01	400kV MHP - Jigmeling Line - IV	403.78	
		-	-	132kV MHP - Yurno Line - I	0.00	
		-	-	132kV MHP - Yurno Line - II	61.21	
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	73.46	
		-	-	400kV Jigmeling - Alipurduar Line - I : direct lines	629.82	
		-	-	400kV Jigmeling - Alipurduar Line - II :	628.36	
		-	-	80MVA, 220/132kV ICT - I (HV)	-59.59	
		-	-	80MVA, 220/132kV ICT - II (HV)	-59.10	
		-	-	220kV Tsirang - Jigmeling Line	-102.61	
		-	-	132kV Gelephu - Salakati Line	42.36	
		Total	759.58	Auxiliary Consumption & Transformation Losses at Generator end	-0.20%	
3	6 x 170MW PHP-II	Unit- I	174.55	400kV PHP II - Jigmeling-I	267.64	erstwhile interim lines
		Unit- II	181.03	400kV PHP II - Jigmeling-II	266.91	
		Unit- III	184.56	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	540.14	Auxiliary Consumption & Transformation Losses at Generator end	1.03%	
4	4 x 84MW CHP	Unit- I	91.29	220kV CHP - Birpara Line - I	-36.73	Unit-IV under Shutdown.
		Unit- II	91.31	220kV CHP - Birpara Line - II	-36.19	
		Unit- III	91.51	220kV CHP - Gedu	19.00	
		Unit- IV	0.00	220kV CHP - Jamjee (old) - I	108.88	
		-	-	220kV CHP - Jamjee - II (new)	107.74	
		-	-	220kV CHP - Jamjee - III (new)	104.51	
		-	-	220kV Malbase - Birpara Line	-33.49	
		-	-	66kV CHP - Gedu Line	7.34	
		-	-	3x3MVA, 66/11kV TFR	1.30	
		Total	274.11	Auxiliary Consumption & Transformation Losses at Generator end	-0.63%	
5	2 x 12MW BHP (U/S)	Unit- I	4.00	220kV BHP - Semtokha Line	0.00	220kV BHP-SEM line under shutdown. ICT tripped at 08:42:05hrs & upper stage unit I & II running under IMO feeding till LSA (66kV DOC-LSA tripped at 08:41hrs)
		Unit- II	4.00	66kV BHP - Lobeysa Line	7.66	
		Total	8.00	220kV BHP - Tsirang Line	25.09	
6	2 x 20MW BHP (L/S)	Unit- I	12.82	5MVA, 66/11kV TFR	0.40	
		Unit- II	12.34	30MVA ICT, 220/66kV (HV)	0.00	
		Total	25.16	Auxiliary Consumption & Transformation Losses at Generator end	0.03%	
7	2 x 63MW DHP	Unit-I	35.29	220kV DHP - Tsirang Line	0.00	220kV DHP- Tsirang line kept on Standby.
		Unit-II	34.98	220kV DHP - Dagapela Line	69.84	
		-	-	220kV Jigmeling - Dagapela Line	-20.34	
		-	-	5MVA, 220/33kV TFR	0.42	
		Total	70.27	Auxiliary Consumption & Transformation Losses at Generator end	0.01%	
8	4 x 15MW KHP	Unit- I	16.42	132kV KHP - Nangkhon Line	42.72	
		Unit-II	16.55	132kV KHP - Kilikhar Line	22.61	
		Unit- III	16.56	5MVA, 132/11kV TFR	0.30	
		Unit- IV	16.54	132kV Motanga - Rangia Line	34.64	
		Total	66.07	Auxiliary Consumption & Transformation Losses at Generator end	0.67%	
9	2 x 59MW NHP	Unit-I	55.00	132kV NHP-MHP-I	54.60	
		Unit-II	54.96	132kV NHP-MHP-II	54.67	
		Total	109.96	Auxiliary Consumption & Transformation Losses at Generator end	0.63%	
10	2 x 9MW SHP	Unit- I	4.50	66kV SHP-Damdhum (Samtse)	0.00	Interim measure: evacuation is through 33kV system.
		Unit- II	4.42	-	-	
		Total	8.92	Auxiliary Consumption & Transformation Losses at Generator end	100.00%	

Note: Generation-Load Summary (MW) for 28-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)	2,645.30	938.34	1,706.96

Note: Generation-Load Summary (MW) for 28-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)	1,275.76	844.31	431.45

THE DAILY BHUTAN POWER SYSTEM OPERATOR LOAD-GENERATION BALANCE REPORT & ENERGY FIGURES ISSUED ON 29-May-2025(-ve:import, +ve:export)						
Report	Date	Time	National Coincidental Peak Load (MW)		Date	Time
Details	May 28, 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. 400kV THP-Siliguri Line -I under Shutdown.
		Unit- II	159.59	400kV THP - Siliguri Line - II	190.70	
		Unit- III	151.95	400kV THP - Siliguri Line - IV	180.07	
		Unit- IV	159.42	400kV THP - Malbase Line - III	386.78	
		Unit- V	143.99	400kV Malbase - Siliguri Line	135.39	
		Unit- VI	139.02	-	-	
		Total	753.97	Auxiliary Consumption & Transformation Losses at Generator end	-0.47%	
2	4 x 180MW MHP	Unit-I	159.99	400kV MHP - Jigmeling Line - I	258.64	400kV MHP-JLG line-II & III on Standby. 132kV MHP_Yurmoo Line- I not in Service.
		Unit-II	145.25	400kV MHP - Jigmeling Line - II	0.00	
		Unit-III	145.90	400kV MHP - Jigmeling Line - III	0.00	
		Unit-IV	52.07	400kV MHP - Jigmeling Line - IV	259.52	
		-	-	132kV MHP - Yurmo Line - I	0.00	
		-	-	132kV MHP - Yurmo Line - II	61.46	
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	17.66	
		-	-	400kV Jigmeling - Alipurduar Line - I	414.91	
		-	-	400kV Jigmeling - Alipurduar Line - II	413.91	
		-	-	80MVA, 220/132kV ICT - I (HV)	-44.37	
		-	-	80MVA, 220/132kV ICT - II (HV)	-43.97	
		-	-	220kV Tsirang - Jigmeling Line	-123.24	
		-	-	132kV Gelephu - Salakati Line	13.89	
		Total	503.21	Auxiliary Consumption & Transformation Losses at Generator end	0.61%	
3	6 x 170MW PHP-II	Unit- I	180.00	400kV PHP II - Jigmeling -I	278.00	erstwhile interim lines
		Unit- II	165.30	400kV PHP II - Jigmeling -II	277.00	
		Unit- III	180.40	400kV PHP II - Alipurduar -I	0.00	
		Unit- IV	30.00	400kV PHP II - Alipurduar -II	0.00	
		Unit- V	0.00	-	-	
		Unit- VI	0.00	-	-	
		Total	555.70	Auxiliary Consumption & Transformation Losses at Generator end	0.13%	
4	4 x 84MW CHP	Unit- I	90.58	220kV CHP - Birpara Line - I	22.35	
		Unit- II	89.91	220kV CHP - Birpara Line - II	22.07	
		Unit- III	91.44	220kV CHP - Gedu	108.63	
		Unit- IV	91.66	220kV CHP - Jamjee - I	67.32	
		-	-	220kV CHP - Jamjee - II	66.59	
		-	-	220kV CHP - Jamjee - III	64.29	
		-	-	220kV Malbase - Birpara Line	-4.94	
		-	-	66kV CHP - Gedu Line	10.20	
		-	-	3x3MVA, 66/11kV TFR	1.47	
		Total	363.59	Auxiliary Consumption & Transformation Losses at Generator end	0.18%	
5	2 x 12MW BHP (U/S)	Unit- I	5.38	220kV BHP - Semtokha Line	117.26	
		Unit- II	5.32	66kV BHP - Lobeysa Line	26.16	
		Total	10.70	220kV BHP - Tsirang Line	-116.00	
6	2 x 20MW BHP (L/S)	Unit- I	8.60	5MVA, 66/11kV TFR	0.63	
		Unit- II	8.28	30MVA ICT, 220/66kV (HV)	16.86	
		Total	16.88	Auxiliary Consumption & Transformation Losses at Generator end	-1.70%	
7	2 x 63MW DHP	Unit-I	43.66	220kV DHP - Tsirang Line	0.00	220kV DHP-TSI line on Standby. Unit-II on standby.
		Unit-II	0.00	220kV DHP - Dagapela Line	43.41	
		-	-	220kV Jigmeling - Dagapela Line	6.09	
		-	-	5MVA, 220/33kV TFR	0.24	
		Total	43.66	Auxiliary Consumption & Transformation Losses at Generator end	0.02%	
8	4 x 15MW KHP	Unit- I	16.51	132kV KHP - Nangkhori Line	41.30	
		Unit-II	16.50	132kV KHP - Kilikhar Line	23.86	
		Unit- III	16.56	5MVA, 132/11kV TFR	0.41	
		Unit- IV	16.62	132kV Motanga - Rangia Line	27.62	
		Total	66.19	Auxiliary Consumption & Transformation Losses at Generator end	0.94%	
9	2 x 59MW NHP	Unit-I	40.03	132kV NHP-MHP-I	39.73	
		Unit-II	40.01	132kV NHP-MHP-II	39.77	
		Total	80.04	Auxiliary Consumption & Transformation Losses at Generator end	0.67%	
10	2 x 9MW SHP	Unit- I	5.00	66kV SHP-Damdhum (Samtse)	0.00	Interim measure: evacuation is through 33kV system.
		Unit- II	4.00	-	-	
		Total	9.00	Auxiliary Consumption & Transformation Losses at Generator end	100.00%	

Note: Generation-Load Summary (MW) for 28-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)	2,402.94	986.97	1,415.97

Note: Generation-Load Summary (MW) for 28-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)	1,199.00	871.89	327.79

Note: Daily Energy (MUs) and Power(MW) Statistics for 28-May-2025

Sl. No.	Total Energy Generation	Daily Energy Met	Net Energy Import (IEX and Solar)	Net Energy Export	Peak Cross-border (MW)
1	56.39	22.05	0.00	33.94	1,761.75

- 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.