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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 19-May-2025(-ve:import, +ve:export)						
Report Details		Date	Time	National Coincidental Peak Load (MW)		
		May 18, 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-IV on standby 400kV THP-Siliguri Line -I under Shutdown.
		Unit- II	118.69	400kV THP - Siliguri Line - II	88.88	
		Unit- III	114.10	400kV THP - Siliguri Line- IV	82.46	
		Unit- IV	0.00	400kV THP - Malbase Line - III	290.89	
		Unit- V	114.06	400kV Malbase - Siliguri Line	39.10	
		Unit- VI	112.77	-	-	
		Total	459.62	Auxiliary Consumption & Transformation Losses at Generator end	-0.57%	
2	4 x 180MW MHP	Unit-I	161.23	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	161.30	400kV MHP - Jigmeling Line - III	193.07	
		Unit-IV	80.12	400kV MHP - Jigmeling Line - IV	192.19	
		-	-	132kV MHP - Yurno Line - I	0.00	
		-	-	132kV MHP - Yurno Line - II	61.46	
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	209.82	
		-	-	400kV Jigmeling - Alipurduar Line - I : direct lines	348.36	
		-	-	400kV Jigmeling - Alipurduar Line - II :	346.91	
		-	-	80MVA, 220/132kV ICT - I (HV)	-26.52	
		-	-	80MVA, 220/132kV ICT - II (HV)	-25.35	
		-	-	220kV Tsirang - Jigmeling Line	-137.94	
		-	-	132kV Gelephu - Salakati Line	5.76	
		Total	402.65	Auxiliary Consumption & Transformation Losses at Generator end	0.14%	
3	6 x 170MW PHP-II	Unit- I	166.74	400kV PHP II - Jigmeling -I	266.18	erstwhile interim lines
		Unit- II	186.87	400kV PHP II - Jigmeling -II	266.18	
		Unit- III	185.64	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	539.25	Auxiliary Consumption & Transformation Losses at Generator end	1.28%	
4	4 x 84MW CHP	Unit- I	69.70	220kV CHP - Birpara Line - I	-30.05	Unit-IV under Shutdown.
		Unit- II	69.55	220kV CHP - Birpara Line - II	-29.52	
		Unit- III	65.82	220kV CHP - Gedu	61.82	
		Unit- IV	0.00	220kV CHP - Jamjee (old) - I	65.13	
		-	-	220kV CHP - Jamjee - II (new)	64.93	
		-	-	220kV CHP - Jamjee - III (new)	62.61	
		-	-	220kV Malbase - Birpara Line	-54.58	
		-	-	66kV CHP - Gedu Line	8.28	
		-	-	3x3MVA, 66/11kV TFR	1.34	
		Total	205.07	Auxiliary Consumption & Transformation Losses at Generator end	0.26%	
5	2 x 12MW BHP (U/S)	Unit- I	5.30	220kV BHP - Semtokha Line	122.00	L/S & U/S Unit II on Standby.
		Unit- II	0.00	66kV BHP - Lobeysha Line	24.11	
		Total	5.30	220kV BHP - Tsirang Line	-131.37	
6	2 x 20MW BHP (L/S)	Unit- I	9.90	5MVA, 66/11kV TFR	0.40	
		Unit- II	0.00	30MVA ICT, 220/66kV (HV)	19.54	
		Total	9.90	Auxiliary Consumption & Transformation Losses at Generator end	0.39%	
7	2 x 63MW DHP	Unit-I	0.00	220kV DHP - Tsirang Line	0.00	Unit-I on standby. 220kV DHP- Tsirang line kept on idle charge.
		Unit-II	25.05	220kV DHP - Dagapela Line	25.05	
		-	-	220kV Jigmeling - Dagapela Line	22.94	
		-	-	5MVA, 220/33kV TFR	0.24	
		Total	25.05	Auxiliary Consumption & Transformation Losses at Generator end	-0.96%	
8	4 x 15MW KHP	Unit- I	16.46	132kV KHP - Nangkhor Line	43.26	
		Unit-II	16.60	132kV KHP - Kilikhar Line	22.17	
		Unit- III	16.50	5MVA, 132/11kV TFR	0.25	
		Unit- IV	16.52	132kV Motanga - Rangia Line	25.25	
		Total	66.08	Auxiliary Consumption & Transformation Losses at Generator end	0.61%	
9	2 x 59MW NHP	Unit-I	0.00	132kV NHP-MHP-I	44.65	Unit-I under Shutdown. 132kV NHP-MHP line-II on Standby.
		Unit-II	45.01	132kV NHP-MHP-II	0.00	
		Total	45.01	Auxiliary Consumption & Transformation Losses at Generator end	0.80%	
10	2 x 9MW SHP	Unit- I	5.00	66kV SHP-Damdhum (Samtse)	0.00	Interim measure: evacuation is through 33kV system.
		Unit- II	5.00	-	-	
		Total	10.00	Auxiliary Consumption & Transformation Losses at Generator end	100.00%	

Note: Generation-Load Summary (MW) for 18-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)	1,767.93	945.36	822.57

Note: Generation-Load Summary (MW) for 18-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)	631.30	843.91	-214.29

THE DAILY BHUTAN POWER SYSTEM OPERATOR LOAD-GENERATION BALANCE REPORT & ENERGY FIGURES ISSUED ON 19-May-2025(-ve:import, +ve:export)						
Report	Date	Time	National Coincidental Peak Load (MW)		Date	Time
Details	May 18, 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 & II under shutdown. Unit-IV on Standby.
		Unit-II	0.00	400kV THP - Siliguri Line - II	63.13	
		Unit-III	138.92	400kV THP - Siliguri Line - IV	57.82	
		Unit-IV	0.00	400kV THP - Malbase Line - III	280.78	
		Unit-V	138.11	400kV Malbase - Siliguri Line	12.41	
		Unit-VI	122.66	-	-	
		Total	399.69	Auxiliary Consumption & Transformation Losses at Generator end	-0.51%	
2	4 x 180MW MHP	Unit-I	139.62	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	140.22	400kV MHP - Jigmeling Line - III	167.51	
		Unit-IV	70.55	400kV MHP - Jigmeling Line - IV	166.61	
		-	-	132kV MHP - Yurmo Line - I	0.00	
		-	-	132kV MHP - Yurmo Line - II	63.43	
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	212.73	
		-	-	400kV Jigmeling - Alipurduar Line - I ; direct lines	244.36	
		-	-	400kV Jigmeling - Alipurduar Line - II ;	242.91	
		-	-	80MVA, 220/132kV ICT - I (HV)	-25.44	
		-	-	80MVA, 220/132kV ICT - II (HV)	-25.21	
		-	-	220kV Tsirang - Jigmeling Line	-118.15	
		-	-	132kV Gelephu - Salakati Line	-3.99	
		Total	350.39	Auxiliary Consumption & Transformation Losses at Generator end	-0.72%	
3	6 x 170MW PHP-II	Unit-I	0.00	400kV PHP II - Jigmeling -I	186.40	Unit-I Under Shutdown.
		Unit-II	187.00	400kV PHP II - Jigmeling -II	186.90	
		Unit-III	187.00	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	374.00	Auxiliary Consumption & Transformation Losses at Generator end	0.19%	
4	4 x 84MW CHP	Unit-I	59.86	220kV CHP - Birpara Line - I	-39.33	Unit-IV under Shutdown.
		Unit-II	60.17	220kV CHP - Birpara Line - II	-38.82	
		Unit-III	59.90	220kV CHP - Gedu	36.17	
		Unit-IV	0.00	220kV CHP - Jamjee - I	71.89	
		-	-	220kV CHP - Jamjee - II	71.42	
		-	-	220kV CHP - Jamjee - III	69.07	
		-	-	220kV Malbase - Birpara Line	-49.03	
		-	-	66kV CHP - Gedu Line	8.07	
		-	-	3x3MVA, 66/11kV TFR	1.58	
		Total	179.93	Auxiliary Consumption & Transformation Losses at Generator end	-0.07%	
5	2 x 12MW BHP (U/S)	Unit-I	6.01	220kV BHP - Semtokha Line	121.77	L/S & U/S Unit II on Standby.
		Unit-II	0.00	66kV BHP - Lobeysha Line	26.55	
		Total	6.01	220kV BHP - Tsirang Line	-128.52	
	2 x 20MW BHP (L/S)	Unit-I	14.74	5MVA, 66/11kV TFR	0.64	
		Unit-II	0.00	30MVA ICT, 220/66kV (HV)	21.52	
		Total	14.74	Auxiliary Consumption & Transformation Losses at Generator end	1.49%	
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	22.24	220kV DHP - Dagapela Line	22.01	
		-	-	220kV Jigmeling - Dagapela Line	51.56	
		-	-	5MVA, 220/33kV TFR	0.20	
		Total	22.24	Auxiliary Consumption & Transformation Losses at Generator end	0.13%	
8	4 x 15MW KHP	Unit-I	16.57	132kV KHP - Nangkhor Line	41.15	
		Unit-II	16.52	132kV KHP - Kilikhar Line	24.12	
		Unit-III	16.43	5MVA, 132/11kV TFR	0.35	
		Unit-IV	16.65	132kV Motanga - Rangia Line	24.09	
		Total	66.17	Auxiliary Consumption & Transformation Losses at Generator end	0.83%	
9	2 x 59MW NHP	Unit-I	0.00	132kV NHP-MHP-I	44.65	Unit-I under Shutdown. 132kV NHP-MHP line-II on Standby.
		Unit-II	44.98	132kV NHP-MHP-II	0.00	
		Total	44.98	Auxiliary Consumption & Transformation Losses at Generator end	0.73%	
10	2 x 9MW SHP	Unit-I	0.00	66kV SHP-Damdhum (Samtse)	0.00	Unit I & II tripped at 14:50hrs. 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 18-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)	1,458.15	944.60	513.55

Note: Generation-Load Summary (MW) for 18-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)	908.97	866.93	40.61

Note: Daily Energy (MUs) and Power(MW) Statistics for 18-May-2025

Sl. No.	Total Energy Generation	Daily Energy Met	Net Energy Import (IEX and Solar)	Net Energy Export	Peak Cross-border (MW)
1	37.06	21.77	0.00	15.20	828.91

- 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.