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Ministry of Energy and Natural Resources
Royal Government of Bhutan
Bhutan Power System Operator
Thimphu: Bhutan



THE DAILY BHUTAN POWER SYSTEM OPERATOR LOAD-GENERATION BALANCE REPORT & ENERGY FIGURES ISSUED ON 13-Dec-2025(+ve:import, +ve:export)

Report Details	Date	Time	National Coincidental Peak Load (MW)		Date	Time	Load
	December 12, 2025	9:00 AM			08-Nov-25	19:03:00	1,477.00
Sl. No.	Hydropower Plant	Unit	MW	Transmission Lines and Elements	Load (MW)	Remarks	
1	6 x 170MW THP	Unit-I	150.56	400kV THP - Siliguri Line - I	280.08	Unit-II & VI under Shutdown (Annual Maintenance). 400kV THP-Siliguri -IV on Standby. 400kV THP-Malbase Line under shutdown Not able to Generate at full load due to less Inflow.	
		Unit-II	0.00	400kV THP - Siliguri Line - II	280.31		
		Unit-III	149.92	400kV THP - Siliguri Line - IV	0.00		
		Unit-IV	103.42	400kV THP - Malbase Line - III	0.00		
		Unit-V	159.89	400kV Malbase - Siliguri Line	-265.00		
		Unit-VI	0.00	-	-		
		Total	563.79	Auxiliary Consumption & Transformation Losses at Generator end	0.60%		
2	4 x 180MW MHP	Unit-I	145.17	400kV MHP - Jigmeling Line - I	98.16	Unit-III under Shutdown (Annual Maintenance). Unit-IV on Standby. 400kV MHP-JIG Line - II and IV kept on Standby as other two lines can cater the load.	
		Unit-II	155.18	400kV MHP - Jigmeling Line - II	0.00		
		Unit-III	0.00	400kV MHP - Jigmeling Line - III	98.74		
		Unit-IV	0.00	400kV MHP - Jigmeling Line - IV	0.00		
		-	-	220kV Jigmeling - BitDeer Line - I	199.11		
		-	-	220kV Jigmeling - BitDeer Line - II	199.94		
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	436.00		
		-	-	400kV Jigmeling - Alipurduar Line - I	-4.36		
		-	-	400kV Jigmeling - Alipurduar Line - II	-7.27		
		-	-	80MVA, 220/132kV ICT - I (HV)	-19.21		
		-	-	80MVA, 220/132kV ICT - II (HV)	-18.80		
		-	-	132kV MHP - Yurmo Line - II	63.80		
		-	-	132kV MHP - Tintibi Line	66.95		
		-	-	132kV Gelephu - Salakati Line	-41.18		
Total	300.35	Auxiliary Consumption & Transformation Losses at Generator end	0.17%				
3	6 x 170MW PHP-II	Unit-I	0.00	400kV PHP II - Jigmeling - I	114.82	Unit-I, Unit-II & Unit-VI under Shutdown (Annual Maintenance). Unit-V on Standby. 400kV PHP II - Alipurduar - I under Shutdown. Not able to Generate at full load due to less Inflow.	
		Unit-II	0.00	400kV PHP II - Jigmeling - II	114.33		
		Unit-III	140.00	400kV PHP II - Alipurduar - I	0.00		
		Unit-IV	140.93	400kV PHP II - Alipurduar - II	52.31		
		Unit-V	0.00	-	-		
		Unit-VI	0.00	-	-		
		Total	280.93	Auxiliary Consumption & Transformation Losses at Generator end	-0.19%		
4	4 x 84MW CHP	Unit-I	0.00	220kV CHP - Birpara Line - I	-75.00	Unit-I under Shutdown (Upgradation works on common Emergency Cooling Water pipelines). Unit-II under Shutdown (Annual Maintenance). Not able to Generate at full load due to less Inflow.	
		Unit-II	0.00	220kV CHP - Birpara Line - II	-74.00		
		Unit-III	89.33	220kV CHP - Gedu	37.53		
		Unit-IV	89.78	220kV CHP - Jamjee - I	95.46		
		-	-	220kV CHP - Jamjee - II	95.30		
		-	-	220kV CHP - Jamjee - III	91.77		
		-	-	220kV Malbase - Birpara Line	-110.00		
-	-	66kV CHP - Gedu Line	7.24				
Total	179.11	Auxiliary Consumption & Transformation Losses at Generator end	0.45%				
5	2 x 12MW BHP (U/S)	Unit-I	0.00	220kV BHP - Semtokha Line	59.13	BHP U/S Unit-I under Shutdown (Annual Maintenance).	
		Unit-II	10.00	66kV BHP - Lobessa Line	19.26		
		Total	10.00	220kV BHP - Tsirang Line	-50.06		
6	2 x 20MW BHP (L/S)	Unit-I	9.55	5MVA, 66/11kV TFR	0.51		
		Unit-II	9.30	30MVA ICT, 220/66kV (HV)	10.24		
		Total	18.85	Auxiliary Consumption & Transformation Losses at Generator end	0.03%		
7	2 x 63MW DHP	Unit-I	0.00	220kV DHP - Tsirang Line	0.00	Total Plant Shutdown from 10:27 hrs (09.10.2025) due to seepage in HRC.	
		Unit-II	0.00	220kV DHP - Dagapela Line	0.00		
		-	-	220kV BitDeer - Dagapela Line	21.00		
		-	-	5MVA, 220/33kV TFR	0.00		
Total	0.00	Auxiliary Consumption & Transformation Losses at Generator end	0.00%				
8	4 x 15MW KHP	Unit-I	11.17	132kV KHP - Nangkor Line	8.68	Unit-III on Standby. Unit-IV under Shutdown (Annual Maintenance).	
		Unit-II	11.14	132kV KHP - Kilikhar Line	13.01		
		Unit-III	0.00	5MVA, 132/11kV TFR	0.63		
		Unit-IV	0.00	132kV Motanga - Rangia Line	-20.48		
		Total	22.31	Auxiliary Consumption & Transformation Losses at Generator end	-0.04%		
9	2 x 59MW NHP	Unit-I	0.00	132kV NHP-MHP-I	0.00	Unit-I under Shutdown (Annual Maintenance) 132kV NHP-MHP line I under ideal charge at NHP end.	
		Unit-II	27.97	132kV NHP-MHP-II	27.82		
		Total	27.97	Auxiliary Consumption & Transformation Losses at Generator end	0.54%		
10	2 x 9MW SHP	Unit-I	7.34	66kV SHP-Damdhum (Samtse)	0.00	Unit-II on standby Interim measure: Evacuation is through 33kV System.	
		Unit-II	0.00	-	-		
		Total	7.34	Auxiliary Consumption & Transformation Losses at Generator end	100.00%		
11	17.38 MWp Sephu (Solar)	Inverter-1	1.51	33kV SSP-Wangdue	6.51	All Inverters and Feeders in Service.	
		Inverter-2	2.54	33kV SSP-Trongsa	6.22		
		Inverter-3	2.47	-	-		
		Inverter-4	3.42	-	-		
		Inverter-5	2.81	-	-		
		Total	12.73	Auxiliary Consumption & Transformation Losses at Generator end	0.00%		

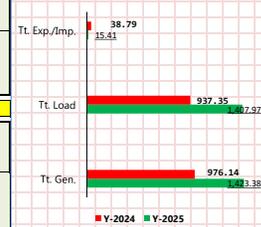
Note: Generation-Load Summary (MW) for 12-Dec-25 at 09:00 hrs

Sl. No.	Region	Total Generation	Total Domestic Load (Total Generation - Total Export)	Total Export(+ve)/ Import(-ve)
1	Both Eastern & Western (Whole Bhutan)	1,423.38	1,407.97	15.41

Note: Generation-Load Summary (MW) for 12-Dec-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)	976.14	937.35	38.79

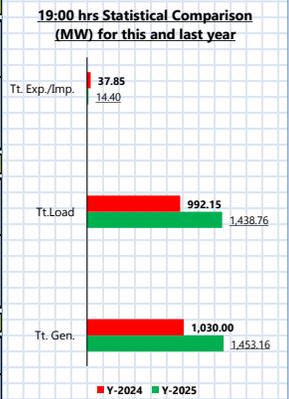
09:00 hrs Statistical Comparison (MW) for this and last year



THE DAILY BHUTAN POWER SYSTEM OPERATOR LOAD-GENERATION BALANCE REPORT & ENERGY FIGURES ISSUED ON 13-Dec-2025(-ve:import, +ve:export)							
Report	Date	Time	National Coincidental Peak Load (MW)		Date	Time	Load
Details	December 12, 2025	19:00:00			08-Nov-25	19:03:00	1,477.00
Sl. No.	Hydropower Plant	Unit	MW	Transmission Lines and Elements	Load (MW)	Remarks	
1	6 x 170MW THP	Unit-I	140.71	400kV THP - Siliguri Line - I	282.42	Unit-II & VI under Shutdown (Annual Maintenance). 400kV THP-Siliguri -IV on Standby. 400kV THP-Malbase Line under Shutdown. Not able to Generate at full Load due to less Inflow.	
		Unit-II	0.00	400kV THP - Siliguri Line - II	282.73		
		Unit-III	149.95	400kV THP - Siliguri Line - IV	0.00		
		Unit-IV	128.35	400kV THP - Malbase Line - III	0.00		
		Unit-V	149.99	400kV Malbase - Siliguri Line	-274.00		
		Unit-VI	0.00	-	-		
		Total	569.00	Auxiliary Consumption & Transformation Losses at Generator end	0.68%		
2	4 x 180MW MHP	Unit-I	161.18	400kV MHP - Jigmeling Line - I	99.09	Unit-III under Shutdown (Annual Maintenance). Unit-IV on Standby. 400kV MHP-JIG Line - II and IV kept on Standby as other two Lines can cater the load.	
		Unit-II	150.21	400kV MHP - Jigmeling Line - II	0.00		
		Unit-III	0.00	400kV MHP - Jigmeling Line - III	99.73		
		Unit-IV	0.00	400kV MHP - Jigmeling Line - IV	0.00		
		-	-	220kV Jigmeling - BitDeer Line - I	204.00		
		-	-	220kV Jigmeling - BitDeer Line - II	194.00		
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	440.73		
		-	-	400kV Jigmeling - Alipurduar Line - I	4.36		
		-	-	400kV Jigmeling - Alipurduar Line - II	3.64		
		-	-	80MVA, 220/132kV ICT - I (HV)	-20.62		
		-	-	80MVA, 220/132kV ICT - II (HV)	-20.35		
		-	-	132kV MHP - Yurmo Line - II	70.77		
		-	-	132kV MHP - Tintibi Line	68.17		
		-	-	132kV Gelephu - Salakati Line	-47.17		
Total	311.39	Auxiliary Consumption & Transformation Losses at Generator end	0.46%				
3	6 x 170MW PHP-II	Unit-I	0.00	400kV PHP II - Jigmeling -I	126.84	Unit-I,Unit-II & Unit-VI under Shutdown (Annual Maintenance). Unit-V on Standby. 400kV PHP II - Alipurduar - I under Shutdown. Not able to Generate at full Load due to less Inflow.	
		Unit-II	0.00	400kV PHP II - Jigmeling -II	126.68		
		Unit-III	158.85	400kV PHP II - Alipurduar - I	0.00		
		Unit-IV	157.65	400kV PHP II - Alipurduar - II	65.94		
		Unit-V	0.00	-	-		
		Unit-VI	0.00	-	-		
Total	316.50	Auxiliary Consumption & Transformation Losses at Generator end	-0.94%				
4	4 x 84MW CHP	Unit-I	0.00	220kV CHP - Birpara Line - I	-82.84	Unit-I under Shutdown & II under Annual Maintenance. Not able to Generate at full Load due to less Inflow.	
		Unit-II	0.00	220kV CHP - Birpara Line - II	-81.83		
		Unit-III	85.40	220kV CHP - Gedu	32.93		
		Unit-IV	84.35	220kV CHP - Jamjee - I	99.43		
		-	-	220kV CHP - Jamjee - II	98.07		
		-	-	220kV CHP - Jamjee - III	95.06		
		-	-	220kV Malbase - Birpara Line	-118.56		
Total	169.75	Auxiliary Consumption & Transformation Losses at Generator end	0.78%				
5	2 x 12MW BHP (U/S)	Unit-I	0.00	220kV BHP - Sertokha Line	77.65	BHP U/S Unit-I under Shutdown (AMP). Not able to Generate at full Load due to less Inflow.	
		Unit-II	10.00	66kV BHP - Lobeysa Line	24.93		
Total	10.00	220kV BHP - Tsirang Line	-74.71				
6	2 x 20MW BHP (L/S)	Unit-I	9.56	5MVA, 66/11kV TFR	0.85		
		Unit-II	9.30	30MVA ICT, 220/66kV (HV)	16.38		
Total	18.86	Auxiliary Consumption & Transformation Losses at Generator end	0.49%				
7	2 x 63MW DHP	Unit-I	0.00	220kV DHP - Tsirang Line	0.00	Total Plant Shutdown from 10:27 hrs (09.10.2025) due to Seepage in HRC .	
		Unit-II	0.00	220kV DHP - Dagapela Line	0.00		
		-	-	220kV BitDeer - Dagapela Line	20.15		
		-	-	5MVA, 220/33kV TFR	0.00		
Total	0.00	Auxiliary Consumption & Transformation Losses at Generator end	0.00%				
8	4 x 15MW KHP	Unit-I	11.23	132kV KHP - Nangkor Line	5.71	Unit-III on Standby. Unit-IV under Shutdown (Annual Maintenance).	
		Unit-II	11.16	132kV KHP - Kilikhar Line	15.91		
		Unit-III	0.00	5MVA, 132/11kV TFR	0.49		
		Unit-IV	0.00	132kV Motanga - Rangia Line	-20.29		
		Total	22.39	Auxiliary Consumption & Transformation Losses at Generator end	1.25%		
9	2 x 59MW NHP	Unit-I	0.00	132kV NHP-MHP-I	0.00	Unit-I under Shutdown. 132kV NHP-MHP line I under ideal charge at NHP end.	
		Unit-II	27.97	132kV NHP-MHP-II	27.80		
		Total	27.97	Auxiliary Consumption & Transformation Losses at Generator end	0.61%		
10	2 x 9MW SHP	Unit-I	7.30	66kV SHP-Damdhum (Samtse)	0.00	Unit-II on Standby Interim measure: Evacuation is through 33kV System.	
		Unit-II	0.00	-	-		
		Total	7.30	Auxiliary Consumption & Transformation Losses at Generator end	100.00%		

Note: Generation-Load Summary (MW) for 12-Dec-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)	1,453.16	1,438.76	14.40



Note: Generation-Load Summary (MW) for 12-Dec-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)	1,030.00	992.15	37.85

Note: Daily Energy (MUs) and Power(MW) Statistics for 12-Dec-2025

Sl. No.	Total Energy Generation	Daily Energy Met	Net Energy Import (IEX and Solar)	Net Energy Export	Peak Cross-border (MW)
1	23.8232625	32.92	9.09	0.00	-779.20

- The Instantaneous load balance does not tend towards zero. This could be due to the following reasons:
 - Not all the meters are digital and nor are all the meter at all locations can be read at same time (say 9:00hrs) due to many meter to be read manually.
 - 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.