ནུས་ཤུགས་དང་རང་བཞིན་ཐོན་སྐྱེད་ལྷན་ཁག དཔལ་ལྡན་འབྲུག་གཞུང་།

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 07-Dec-2025(-ve:import, +ve:export)

Report Details	Date	Time	National Coincidental Peak Load (MW)	Date	Time	Load
	December 6, 2025	9:00 AM		08-Nov-25	19:03:00	1,477.00

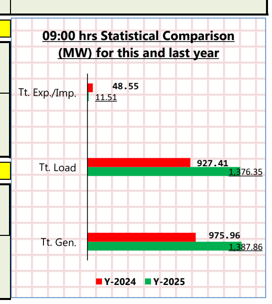
Sl. No.	Hydropower Plant	Unit	MW	Transmission Lines and Elements	Load (MW)	Remarks
1	6 x 170MW THP	Unit- I	142.00	400kV THP - Siliguri Line - I	249.78	Unit-II & VI under Shutdown (Annual Maintenance). 400kV THP-Siliguri -IV under Shutdown. 400kV THP-Malbase Line under shutdown Not able to Generate at full load due to less Inflow.
		Unit- II	0.00	400kV THP - Siliguri Line - II	249.84	
		Unit- III	130.00	400kV THP - Siliguri Line- IV	0.00	
		Unit- IV	100.00	400kV THP - Malbase Line - III	0.00	
		Unit- V	130.00	400kV Malbase - Siliguri Line	-242.00	
		Unit- VI	0.00	-	-	
		Total	502.00	Auxiliary Consumption & Transformation Losses at Generator end	0.47%	
2	4 x 180MW MHP	Unit-I	170.26	400kV MHP - Jigmeling Line - I	130.35	Unit-III under Shutdown (Annual Maintenance). Unit-I on Standby. 400kV MHP-JIG Line - II and IV kept on Standby as other two lines can cater the load.
		Unit-II	0.00	400kV MHP - Jigmeling Line - II	0.00	
		Unit-III	0.00	400kV MHP - Jigmeling Line - III	131.21	
		Unit-IV	180.37	400kV MHP - Jigmeling Line - IV	0.00	
		-	-	220kV Jigmeling - BitDeer Line - I	206.72	
		-	-	220kV Jigmeling - BitDeer Line - II	187.64	
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	423.27	
		-	-	400kV Jigmeling - Alipurduar Line - I	8.00	
		-	-	400kV Jigmeling - Alipurduar Line - II	6.55	
		-	-	80MVA, 220/132kV ICT - I (HV)	13.56	
		-	-	80MVA, 220/132kV ICT - II (HV)	13.35	
		-	-	132kV MHP - Yurmo Line - II	62.38	
				132kV MHP - Tintibi Line	64.79	
		-	-	132kV Gelephu - Salakati Line	-47.19	
		Total	350.63	Auxiliary Consumption & Transformation Losses at Generator end	0.38%	
3	6 x 170MW PHP-II	Unit- I	0.00	400kV PHP II - Jigmeling -I	91.00	Unit-I & Unit-VI under Shutdown (Annual Maintenance). Unit-III & V on Standby. 400kV PHP II - Alipurduar- I under Shutdown.
		Unit- II	115.00	400kV PHP II - Jigmeling -II	92.00	
		Unit- III	0.00	400kV PHP II - Alipurduar -I	0.00	
		Unit- IV	116.00	400kV PHP II - Alipurduar -II	47.23	
		Unit- V	0.00	-	-	
		Unit- VI	0.00	-	-	
		Total	231.00	Auxiliary Consumption & Transformation Losses at Generator end	0.33%	
4	4 x 84MW CHP	Unit- I	0.00	220kV CHP - Birpara Line - I	-71.50	Unit-I under Shutdown (Upgradation works on common Emergency Cooling Water pipelines). Unit-II under Shutdown(Annual Maintainence).
		Unit- II	0.00	220kV CHP - Birpara Line - II	-71.00	
		Unit- III	90.45	220kV CHP - Gedu	48.41	
		Unit- IV	91.50	220kV CHP - Jamjee - I	90.28	
		-	-	220kV CHP - Jamjee - II	89.43	
		-	-	220kV CHP - Jamjee - III	86.25	
		-	-	220kV Malbase - Birpara Line	-112.00	
		-	-	66kV CHP - Gedu Line	7.80	
		Total	181.95	Auxiliary Consumption & Transformation Losses at Generator end	1.25%	
5	2 x 12MW BHP (U/S)	Unit- I	0.00	220kV BHP - Semtokha Line	65.90	BHP U/S Unit-I under Shutdown (Annual Maintenance).
		Unit- II	10.20	66kV BHP - Lobeysa Line	20.13	
		Total	10.20	220kV BHP - Tsirang Line	-56.19	
6	2 x 20MW BHP (L/S)	Unit- I	10.09	5MVA, 66/11kV TFR	0.45	
		Unit- II	10.08	30MVA ICT, 220/66kV (HV)	10.38	
		Total	20.17	Auxiliary Consumption & Transformation Losses at Generator end	0.26%	
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	21.52	
		-	-	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	15.20	132kV KHP - Nangkhor Line	14.86	Unit-III on Standby. Unit-IV under Shutdown (Annual Maintainence).
		Unit-II	15.16	132kV KHP - Kilikhar Line	14.81	
		Unit- III	0.00	5MVA, 132/11kV TFR	0.51	
		Unit- IV	0.00	132kV Motanga - Rangia Line	-6.20	
		Total	30.36	Auxiliary Consumption & Transformation Losses at Generator end	0.59%	
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	40.10	132kV NHP-MHP-II	39.42	
		Total	40.10	Auxiliary Consumption & Transformation Losses at Generator end	1.70%	
10	2 x 9MW SHP	Unit- I	8.09	66kV SHP-Damdhum (Samtse)	0.00	Unit-II on standby Interim measure: Evacuation is through 33kV System.
		Unit- II	0.00	-	-	
		Total	8.09	Auxiliary Consumption & Transformation Losses at Generator end	100.00%	
11	17.38 MWp Sephu (Solar)	Inverter-1	1.55	33kV SSP-Wangdue	6.85	All Inverters and Feeders in Service.
		Inverter-2	2.74	33kV SSP-Trongsa	6.41	
		Inverter-3	2.66	-	-	
		Inverter-4	3.51	-	-	
		Inverter-5	2.90	-	-	
		Total	13.36	Auxiliary Consumption & Transformation Losses at Generator end	0.75%	

Note: Generation-Load Summary (MW) for 06-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)	1,387.86	1,376.35	11.51

Note: Generation-Load Summary (MW) for 06-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)	975.96	927.41	48.55



THE DAILY BHUTAN POWER SYSTEM OPERATOR LOAD-GENERATION BALANCE REPORT & ENERGY FIGURES ISSUED ON 07-Dec-2025(-ve:import, +ve:export)

Report Details	Date	Time	National Coincidental Peak Load (MW)	Date	Time	Load
	December 6, 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	143.68	400kV THP - Siliguri Line - I	270.13	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	270.32	
		Unit- III	134.90	400kV THP - Siliguri Line - IV	0.00	
		Unit- IV	130.47	400kV THP - Malbase Line - III	0.00	
		Unit- V	135.10	400kV Malbase - Siliguri Line	-259.00	
		Unit- VI	0.00	-	-	
		Total	**544.15**	**Auxiliary Consumption & Transformation Losses at Generator end**	0.68%	
2	4 x 180MW MHP	Unit-I	165.85	400kV MHP - Jigmeling Line - I	103.48	Unit-III under Shutdown (Annual Maintenance). Unit-II on Standby. 400kV MHP-JIG Line - II and IV kept on Standby as other two lines can cater the load.
		Unit-II	0.00	400kV MHP - Jigmeling Line - II	0.00	
		Unit-III	0.00	400kV MHP - Jigmeling Line - III	103.61	
		Unit-IV	145.22	400kV MHP - Jigmeling Line - IV	0.00	
		-	-	220kV Jigmeling - BitDeer Line - I	204.00	
		-	-	220kV Jigmeling - BitDeer Line - II	200.00	
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	433.00	
		-	-	400kV Jigmeling - Alipurduar Line - I	3.64	
		-	-	400kV Jigmeling - Alipurduar Line - II	2.91	
		-	-	80MVA, 220/132kV ICT - I (HV)	15.00	
		-	-	80MVA, 220/132kV ICT - II (HV)	15.00	
		-	-	132kV MHP - Yurmo Line - II	66.26	
				132kV MHP - Tintibi Line	62.00	
		-	-	132kV Gelephu - Salakati Line	-54.50	
		Total	**311.07**	**Auxiliary Consumption & Transformation Losses at Generator end**	1.21%	
3	6 x 170MW PHP-II	Unit- I	0.00	400kV PHP II - Jigmeling -I	115.20	Unit-I & Unit-VI under Shutdown (Annual Maintenance). Unit-III & V on Standby. 400kV PHP II - Alipurduar- I under Shutdown. Not able to Generate at full load due to less Inflow.
		Unit- II	144.50	400kV PHP II - Jigmeling -II	116.10	
		Unit- III	0.00	400kV PHP II - Alipurduar -I	0.00	
		Unit- IV	144.90	400kV PHP II - Alipurduar -II	58.15	
		Unit- V	0.00	-	-	
		Unit- VI	0.00	-	-	
		Total	**289.40**	**Auxiliary Consumption & Transformation Losses at Generator end**	-0.02%	
4	4 x 84MW CHP	Unit- I	0.00	220kV CHP - Birpara Line - I	-78.20	Unit-I under shutdown & II under Annual Maintainence. Not able to Generate at full load due to less Inflow.
		Unit- II	0.00	220kV CHP - Birpara Line - II	-77.60	
		Unit- III	89.50	220kV CHP - Gedu	40.32	
		Unit- IV	90.00	220kV CHP - Jamjee - I	97.00	
		-	-	220kV CHP - Jamjee - II	96.00	
		-	-	220kV CHP - Jamjee - III	92.00	
		-	-	220kV Malbase - Birpara Line	-117.20	
		-	-	66kV CHP - Gedu Line	7.63	
		Total	**179.50**	**Auxiliary Consumption & Transformation Losses at Generator end**	1.31%	
5	2 x 12MW BHP (U/S)	Unit- I	0.00	220kV BHP - Semtokha Line	75.89	BHP U/S Unit-I under Shutdown (AMP).
		Unit- II	10.00	66kV BHP - Lobeysa Line	23.67	
		Total	**10.00**	220kV BHP - Tsirang Line	-68.95	
6	2 x 20MW BHP (L/S)	Unit- I	10.20	5MVA, 66/11kV TFR	0.57	
		Unit- II	10.19	30MVA ICT, 220/66kV (HV)	14.03	
		Total	**20.39**	**Auxiliary Consumption & Transformation Losses at Generator end**	-2.60%	
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	20.00	
		-	-	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	14.20	132kV KHP - Nangkhor Line	12.28	Unit-III on Standby. Unit- IV under Shutdown(Annual Maintainence). Not able to Generate at full load due to less Inflow.
		Unit-II	14.18	132kV KHP - Kilikhar Line	15.37	
		Unit- III	0.00	5MVA, 132/11kV TFR	0.71	
		Unit- IV	0.00	132kV Motanga - Rangia Line	-5.14	
		Total	**28.38**	**Auxiliary Consumption & Transformation Losses at Generator end**	0.07%	
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	28.09	132kV NHP-MHP-II	28.05	
		Total	**28.09**	**Auxiliary Consumption & Transformation Losses at Generator end**	0.14%	
10	2 x 9MW SHP	Unit- I	8.10	66kV SHP-Damdhum (Samtse)	0.00	Unit-II on Standby .Interim measure: Evacuation is through 33kV System.
		Unit- II	0.00	-	-	
		Total	**8.10**	**Auxiliary Consumption & Transformation Losses at Generator end**	100.00%	

Note: Generation-Load Summary (MW) for 06-Dec-2025 at 19:00 hrs

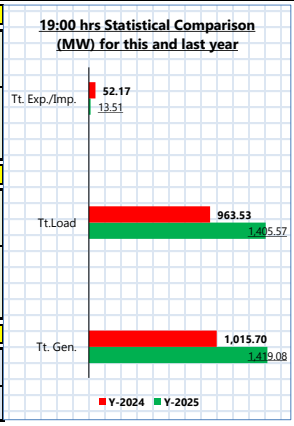
Sl. No.	Region	Total Generation	Total Domestic Load (Total Generation - Total Export)	Total Export(+ve)/ Import(-ve)
1	Both Eastern & Western (Whole Bhutan)	1,419.08	1,405.57	13.51

Note: Generation-Load Summary (MW) for 06-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)	1,015.70	963.53	52.17

Note: Daily Energy (MUs) and Power(MW) Statistics for 06-Dec-2025

Sl. No.	Total Energy Generation	Daily Energy Met	Net Energy Import (IEX and Solar)	Net Energy Export	Peak Cross-border (MW)
1	25.59	32.18	6.61	0.00	-657.98



1. The Instantaneous load balance does not tend towards zero. This could be due to the following reasons:

i) 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. 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.