ཤེས་རིག་དང་ཇི་ལྟར་གནས་ཚུལ་ཁག་ལས་ཁུངས་བཀའ་ཤག་ཁང་།

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 18-Sep-2025(-ve:import, +ve:export)

Report Details	Date	Time	National Coincidental Peak Load (MW)	Date	Time	Load
	September 17, 2025	9:00 AM		11-Sep-25	18:38:15	1,192.50

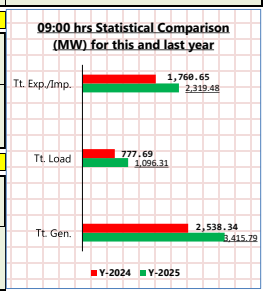
Sl. No.	Hydropower Plant	Unit	MW	Transmission Lines and Elements	Load (MW)	Remarks
1	6 x 170MW THP	Unit- I	186.20	400kV THP - Siliguri Line - I	246.12	All units and feeders are in service.
		Unit- II	187.10	400kV THP - Siliguri Line - II	244.96	
		Unit- III	185.60	400kV THP - Siliguri Line- IV	236.11	
		Unit- IV	185.40	400kV THP - Malbase Line - III	388.46	
		Unit- V	186.00	400kV Malbase - Siliguri Line	200.00	
		Unit- VI	186.50	-	-	
		Total	**1,116.80**	**Auxiliary Consumption & Transformation Losses at Generator end**	**0.10%**	
2	4 x 180MW MHP	Unit-I	197.73	400kV MHP - Jigmeling Line - I	254.08	400kV MHP-JIG Line II on Standby as three of the other 400kV lines at MHP have the capacity to evacuate the power.
		Unit-II	197.74	400kV MHP - Jigmeling Line - II	0.00	
		Unit-III	190.37	400kV MHP - Jigmeling Line - III	263.28	
		Unit-IV	196.23	400kV MHP - Jigmeling Line - IV	263.66	
		-	-	220kV Jigmeling - BitDeer Line - I	25.00	
		-	-	220kV Jigmeling - BitDeer Line - II	22.30	
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	54.90	
		-	-	400kV Jigmeling - Alipurduar Line - I	402.91	
		-	-	400kV Jigmeling - Alipurduar Line - II	401.46	
		-	-	80MVA, 220/132kV ICT - I (HV)	1.30	
		-	-	80MVA, 220/132kV ICT - II (HV)	1.10	
		-	-	132kV MHP - Yurmo Line - II	61.60	
				132kV MHP - Tintibi Line	65.29	
		-	-	132kV Gelephu - Salakati Line	1.29	
		Total	**782.07**	**Auxiliary Consumption & Transformation Losses at Generator end**	**0.41%**	
3	6 x 170MW PHP-II	Unit- I	187.00	400kV PHP II - Jigmeling -I	140.36	Unit III under Shutdown due to looseness at the runner end. Unit IV tripped @ 17:38hrs (06.09.2025) and under inspection. 400kV PHP II - Alipurduar- I not in Service.
		Unit- II	187.00	400kV PHP II - Jigmeling -II	145.30	
		Unit- III	0.00	400kV PHP II - Alipurduar -I	0.00	
		Unit- IV	0.00	400kV PHP II - Alipurduar -II	467.29	
		Unit- V	186.42	-	-	
		Unit- VI	187.00	-	-	
		Total	**747.42**	**Auxiliary Consumption & Transformation Losses at Generator end**	**-0.74%**	
4	4 x 84MW CHP	Unit- I	91.24	220kV CHP - Birpara Line - I	39.55	All units and feedrs are in service.
		Unit- II	91.11	220kV CHP - Birpara Line - II	38.88	
		Unit- III	91.14	220kV CHP - Gedu	133.42	
		Unit- IV	91.34	220kV CHP - Jamjee - I	48.80	
		-	-	220kV CHP - Jamjee - II	48.28	
		-	-	220kV CHP - Jamjee - III	46.63	
		-	-	220kV Malbase - Birpara Line	4.92	
		-	-	66kV CHP - Gedu Line	7.85	
		Total	**364.83**	**Auxiliary Consumption & Transformation Losses at Generator end**	**0.39%**	
5	2 x 12MW BHP (U/S)	Unit- I	12.10	220kV BHP - Semtokha Line	124.10	All the units and feeders are in service.
		Unit- II	12.00	66kV BHP - Lobeysa Line	20.89	
		Total	**24.10**	220kV BHP - Tsirang Line	-78.75	
6	2 x 20MW BHP (L/S)	Unit- I	21.00	5MVA, 66/11kV TFR	0.36	
		Unit- II	21.09	30MVA ICT, 220/66kV (HV)	-2.37	
		Total	**42.09**	**Auxiliary Consumption & Transformation Losses at Generator end**	**-0.62%**	
7	2 x 63MW DHP	Unit-I	63.67	220kV DHP - Tsirang Line	126.40	220kV DHP - Dagapela line on Standby due to protection setting.
		Unit-II	63.26	220kV DHP - Dagapela Line	0.00	
		-	-	220kV BitDeer - Dagapela Line	54.80	
		-	-	5MVA, 220/33kV TFR	0.21	
		Total	**126.93**	**Auxiliary Consumption & Transformation Losses at Generator end**	**0.25%**	
8	4 x 15MW KHP	Unit- I	16.50	132kV KHP - Nangkhor Line	40.63	All units and feeders are in service.
		Unit-II	16.50	132kV KHP - Kilikhar Line	22.60	
		Unit- III	15.34	5MVA, 132/11kV TFR	0.24	
		Unit- IV	15.63	132kV Motanga - Rangia Line	35.99	
		Total	**63.97**	**Auxiliary Consumption & Transformation Losses at Generator end**	**0.78%**	
9	2 x 59MW NHP	Unit-I	64.89	132kV NHP-MHP-I	64.46	All units and feeders are in service.
		Unit-II	64.84	132kV NHP-MHP-II	64.60	
		Total	**129.73**	**Auxiliary Consumption & Transformation Losses at Generator end**	**0.52%**	
10	2 x 9MW SHP	Unit- I	5.00	66kV SHP-Damdhum (Samtse)	0.00	(Not able to Generate full capacity of 18MW due to transmission evacuation constraint.) Interim measure: Evacuation is through 33kV System
		Unit- II	5.00	-	-	
		Total	**10.00**	**Auxiliary Consumption & Transformation Losses at Generator end**	**100.00%**	
11	17.38 MWp Sephu (Solar)	Inverter-1	0.96	33kV SSP-Wangdue	3.91	All inverters and feeders in service
		Inverter-2	2.37	33kV SSP-Trongsa	3.92	
		Inverter-3	1.94	-	-	
		Inverter-4	2.57	-	-	
		Total	**7.85**	**Auxiliary Consumption & Transformation Losses at Generator end**	**0.24%**	

Note: Generation-Load Summary (MW) for 17-Sep-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)	3,415.79	1,096.31	2,319.48

Note: Generation-Load Summary (MW) for 17-Sep-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)	2,538.34	777.69	1,760.65



THE DAILY BHUTAN POWER SYSTEM OPERATOR LOAD-GENERATION BALANCE REPORT & ENERGY FIGURES ISSUED ON 18-Sep-2025(-ve:import, +ve:export)

Report Details	Date	Time	National Coincidental Peak Load (MW)	Date	Time	Load
	September 17, 2025	19:00:00		05-Sep-25	19:27:16	1192.5

Sl. No.	Hydropower Plant	Unit	MW	Transmission Lines and Elements	Load (MW)	Remarks
1	6 x 170MW THP	Unit- I	187.77	400kV THP - Siliguri Line - I	230.89	All units and feeders are in service.
		Unit- II	187.75	400kV THP - Siliguri Line - II	229.83	
		Unit- III	187.37	400kV THP - Siliguri Line - IV	220.91	
		Unit- IV	187.45	400kV THP - Malbase Line - III	434.36	
		Unit- V	186.92	400kV Malbase - Siliguri Line	169.54	
		Unit- VI	187.45	-	-	
		Total	**1,124.71**	**Auxiliary Consumption & Transformation Losses at Generator end**	**0.78%**	
2	4 x 180MW MHP	Unit-I	195.25	400kV MHP - Jigmeling Line - I	253.62	400kV MHP-JIG Line II on Standby as three of the other 400kV lines at MHP have the capacity to evacuate the power.
		Unit-II	195.25	400kV MHP - Jigmeling Line - II	0.00	
		Unit-III	195.25	400kV MHP - Jigmeling Line - III	263.57	
		Unit-IV	195.25	400kV MHP - Jigmeling Line - IV	263.71	
		-	-	220kV Jigmeling - BitDeer Line - I	94.00	
		-	-	220kV Jigmeling - BitDeer Line - II	86.92	
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	285.09	
		-	-	400kV Jigmeling - Alipurduar Line - I	386.18	
		-	-	400kV Jigmeling - Alipurduar Line - II	385.46	
		-	-	80MVA, 220/132kV ICT - I (HV)	52.51	
		-	-	80MVA, 220/132kV ICT - II (HV)	52.11	
		-	-	132kV MHP - Yurmo Line - II	65.64	
				132kV MHP - Tintibi Line	61.29	
		-	-	132kV Gelephu - Salakati Line	6.18	
		Total	**781.00**	**Auxiliary Consumption & Transformation Losses at Generator end**	**0.25%**	
3	6 x 170MW PHP-II	Unit- I	187.00	400kV PHP II - Jigmeling -I	146.04	Unit III under Shutdown due to looseness at the runner end. Unit IV tripped @ 17:38hrs (06.09.2025) and under inspection. 400kV PHP II - Alipurduar- I not in Service.
		Unit- II	187.09	400kV PHP II - Jigmeling -II	145.19	
		Unit- III	0.00	400kV PHP II - Alipurduar -I	0.00	
		Unit- IV	0.00	400kV PHP II - Alipurduar -II	457.08	
		Unit- V	187.29	-	-	
		Unit- VI	186.18	-	-	
		Total	**747.56**	**Auxiliary Consumption & Transformation Losses at Generator end**	**-0.10%**	
4	4 x 84MW CHP	Unit- I	91.58	220kV CHP - Birpara Line - I	36.30	All units and Feeders are in service
		Unit- II	91.31	220kV CHP - Birpara Line - II	36.00	
		Unit- III	91.42	220kV CHP - Gedu	117.43	
		Unit- IV	91.52	220kV CHP - Jamjee - I	55.70	
		-	-	220kV CHP - Jamjee - II	55.16	
		-	-	220kV CHP - Jamjee - III	53.24	
		-	-	220kV Malbase - Birpara Line	11.84	
		-	-	66kV CHP - Gedu Line	9.01	
		Total	**365.83**	**Auxiliary Consumption & Transformation Losses at Generator end**	**0.82%**	
5	2 x 12MW BHP (U/S)	Unit- I	12.02	220kV BHP - Semtokha Line	119.90	All units and feeders are in service.
		Unit- II	12.00	66kV BHP - Lobeysa Line	25.17	
		Total	**24.02**	220kV BHP - Tsirang Line	-80.15	
6	2 x 20MW BHP (L/S)	Unit- I	20.82	5MVA, 66/11kV TFR	0.62	
		Unit- II	21.10	30MVA ICT, 220/66kV (HV)	2.20	
		Total	**41.92**	**Auxiliary Consumption & Transformation Losses at Generator end**	**0.61%**	
7	2 x 63MW DHP	Unit-I	63.66	220kV DHP - Tsirang Line	126.25	220kV DHP -Dagapela Line on Standby due to protection setting.
		Unit-II	63.20	220kV DHP - Dagapela Line	0.00	
		-	-	220kV BitDeer - Dagapela Line	52.80	
		-	-	5MVA, 220/33kV TFR	0.20	
		Total	**126.86**	**Auxiliary Consumption & Transformation Losses at Generator end**	**0.32%**	
8	4 x 15MW KHP	Unit- I	16.50	132kV KHP - Nangkhor Line	38.60	All units and feeders are in service.
		Unit-II	16.50	132kV KHP - Kilikhar Line	25.20	
		Unit- III	16.04	5MVA, 132/11kV TFR	0.32	
		Unit- IV	16.07	132kV Motanga - Rangia Line	40.93	
		Total	**65.11**	**Auxiliary Consumption & Transformation Losses at Generator end**	**1.52%**	
9	2 x 59MW NHP	Unit-I	64.84	132kV NHP-MHP-I	64.38	All units and feeders are in service.
		Unit-II	64.89	132kV NHP-MHP-II	64.44	
		Total	**129.73**	**Auxiliary Consumption & Transformation Losses at Generator end**	**0.70%**	
10	2 x 9MW SHP	Unit- I	5.00	66kV SHP-Damdhum (Samtse)	0.00	(Not able to Generate full capacity of 18MW due to transmission evacuation constraint.) Interim measure: Evacuation is through 33kV System.
		Unit- II	4.99	-	-	
		Total	**9.99**	**Auxiliary Consumption & Transformation Losses at Generator end**	**100.00%**	

Note: Generation-Load Summary (MW) for 17-Sep-2025 at 19:00 hrs

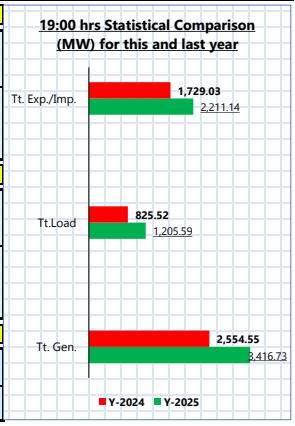
Sl. No.	Region	Total Generation	Total Domestic Load (Total Generation - Total Export)	Total Export(+ve)/ Import(-ve)
1	Both Eastern & Western (Whole Bhutan)	3,416.73	1,205.59	2,211.14

Note: Generation-Load Summary (MW) for 17-Sep-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)	2,554.55	825.52	1,729.03

Note: Daily Energy (MUs) and Power(MW) Statistics for 17-Sep-2025

Sl. No.	Total Energy Generation	Daily Energy Met	Net Energy Import (IEX and Solar)	Net Energy Export	Peak Cross-border (MW)
1	81.85	26.93	0.00	54.86	2,461.45



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.