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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 13-May-2025(-ve:import, +ve:export)							
Report Details	Date	Time	National Coincidental Peak Load (MW)		Date	Time	Load
	May 12, 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	24.84	Unit-I, II & III under shutdown for Penstock Cleaning. 400kV THP-SIL Line II & IV on Standby.	
		Unit- II	0.00	400kV THP - Siliguri Line - II	0.00		
		Unit- III	0.00	400kV THP - Siliguri Line - IV	0.00		
		Unit- IV	87.06	400kV THP - Malbase Line - III	240.72		
		Unit- V	84.41	400kV Malbase - Siliguri Line	-22.21		
		Unit- VI	94.47	-	-		
		Total	265.94	Auxiliary Consumption & Transformation Losses at Generator end	0.14%		
2	4 x 180MW MHP	Unit-I	71.79	400kV MHP - Jigmeling Line - I	0.00	Unit-II under Shutdown. 400kV MHP-JLG line-I & II on Standby. 132kV MHP_Yurnoo Line- I not in Service.	
		Unit-II	0.00	400kV MHP - Jigmeling Line - II	0.00		
		Unit-III	135.50	400kV MHP - Jigmeling Line - III	122.15		
		Unit-IV	70.04	400kV MHP - Jigmeling Line - IV	121.34		
		-	-	132kV MHP - Yurnoo Line - I	0.00		
		-	-	132kV MHP - Yurnoo Line - II	60.83		
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	203.64		
		-	-	400kV Jigmeling - Alipurduar Line - I	204.36		
		-	-	400kV Jigmeling - Alipurduar Line - II	202.91		
		-	-	80MVA, 220/132kV ICT - I (HV)	-28.11		
		-	-	80MVA, 220/132kV ICT - II (HV)	-27.92		
		-	-	220kV Tsirang - Jigmeling Line	-118.15		
		-	-	132kV Gelephu - Salakati Line	-3.85		
		Total	277.33	Auxiliary Consumption & Transformation Losses at Generator end	0.29%		
3	6 x 170MW PHP-II	Unit- I	165.00	400kV PHP II - Jigmeling -I	374.00	400kV PHP-II -Jigmeling Line-II under shutdown.	
		Unit- II	155.00	400kV PHP II - Jigmeling -II	0.00		
		Unit- III	55.00	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	375.00	Auxiliary Consumption & Transformation Losses at Generator end	0.27%		
4	4 x 84MW CHP	Unit- I	54.78	220kV CHP - Birpara Line - I	-49.76	Unit-IV under Shutdown.	
		Unit- II	34.89	220kV CHP - Birpara Line - II	-49.27		
		Unit- III	51.09	220kV CHP - Gedu	27.66		
		Unit- IV	0.00	220kV CHP - Jamjee (old) - I	68.66		
		-	-	220kV CHP - Jamjee - II (new)	68.01		
		-	-	220kV CHP - Jamjee - III (new)	65.61		
		-	-	220kV Malbase - Birpara Line	-59.89		
		-	-	66kV CHP - Gedu Line	8.42		
		-	-	3x3MVA, 66/11kV TFR	1.32		
		Total	140.76	Auxiliary Consumption & Transformation Losses at Generator end	0.08%		
5	2 x 12MW BHP (U/S)	Unit- I	2.70	220kV BHP - Sentokha Line	110.90	L/S Unit- I on Standby.	
		Unit- II	4.10	66kV BHP - Lobeyza Line	23.29		
		Total	6.80	220kV BHP - Tsirang Line	-114.61		
6	2 x 20MW BHP (L/S)	Unit- I	0.00	5MVA, 66/11kV TFR	0.40		
		Unit- II	12.60	30MVA ICT, 220/66kV (HV)	16.94		
		Total	12.60	Auxiliary Consumption & Transformation Losses at Generator end	-2.99%		
7	2 x 63MW DHP	Unit-I	18.96	220kV DHP - Tsirang Line	0.00	DHP- Tsirang line kept on idle charge. Unit-II is on standby.	
		Unit-II	0.00	220kV DHP - Dagapela Line	18.72		
		-	-	220kV Jigmeling - Dagapela Line	28.20		
		-	-	5MVA, 220/33kV TFR	0.20		
		Total	18.96	Auxiliary Consumption & Transformation Losses at Generator end	0.21%		
8	4 x 15MW KHP	Unit- I	13.48	132kV KHP - Nangkhon Line	24.56	Unit II on standby.	
		Unit-II	0.00	132kV KHP - Kilikhar Line	15.37		
		Unit- III	13.54	5MVA, 132/11kV TFR	0.27		
		Unit- IV	13.51	132kV Motanga - Rangia Line	7.41		
		Total	40.53	Auxiliary Consumption & Transformation Losses at Generator end	0.81%		
9	2 x 59MW NHP	Unit-I	0.00	132kV NHP-MHP-I	27.79	Unit-I under Shutdown. 132kV NHP-MHP line-II on Standby.	
		Unit-II	28.02	132kV NHP-MHP-II	0.00		
		Total	28.02	Auxiliary Consumption & Transformation Losses at Generator end	0.82%		
10	2 x 9MW SHP	Unit- I	5.58	66kV SHP-Damdhum (Samtse)	0.00	Unit II under Shutdown. Interim measure: evacuation is through 33kV system.	
		Unit- II	0.00	-	-		
		Total	5.58	Auxiliary Consumption & Transformation Losses at Generator end	100.00%		

Note: Generation-Load Summary (MW) for 12-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)	1,171.52	916.98	254.54

Note: Generation-Load Summary (MW) for 12-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)	532.82	865.58	-331.76

THE DAILY BHUTAN POWER SYSTEM OPERATOR LOAD-GENERATION BALANCE REPORT & ENERGY FIGURES ISSUED ON 13-May-2025(-ve:import, +ve:export)						
Report	Date	Time	National Coincidental Peak Load (MW)		Date	Time
Details	May 12, 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	20.78	Unit-I, II & III under shutdown for Penstock Cleaning. 400kV THP-SIL Line II & IV on Standby.
		Unit- II	0.00	400kV THP - Siliguri Line - II	0.00	
		Unit- III	0.00	400kV THP - Siliguri Line - IV	0.00	
		Unit- IV	121.72	400kV THP - Malbase Line - III	269.69	
		Unit- V	39.29	400kV Malbase - Siliguri Line	-38.00	
		Unit- VI	129.32	-	-	
		Total	290.33	Auxiliary Consumption & Transformation Losses at Generator end	-0.05%	
2	4 x 180MW MHP	Unit-I	56.18	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	135.30	400kV MHP - Jigmeling Line - III	119.33	
		Unit-IV	65.35	400kV MHP - Jigmeling Line - IV	118.56	
		-	-	132kV MHP - Yurmo Line - I	0.00	
		-	-	132kV MHP - Yurmo Line - II	62.94	
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	225.46	
		-	-	400kV Jigmeling - Alipurduar Line - I ; direct lines	179.64	
		-	-	400kV Jigmeling - Alipurduar Line - II ; direct lines	179.64	
		-	-	80MVA, 220/132kV ICT - I (HV)	-38.27	
		-	-	80MVA, 220/132kV ICT - II (HV)	-37.96	
		-	-	220kV Tsirang - Jigmeling Line	-118.15	
		-	-	132kV Gelephu - Salakati Line	-3.43	
		Total	256.83	Auxiliary Consumption & Transformation Losses at Generator end	0.32%	
3	6 x 170MW PHP-II	Unit- I	175.00	400kV PHP II - Jigmeling -I	352.00	Unit-III on standby 400kV PHP-II - Jigmeling Line-II under shutdown.
		Unit- II	180.00	400kV PHP II - Jigmeling -II	0.00	
		Unit- III	0.00	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	355.00	Auxiliary Consumption & Transformation Losses at Generator end	0.85%	
4	4 x 84MW CHP	Unit- I	85.39	220kV CHP - Birpara Line - I	-43.48	Unit- II & IV under Shutdown.
		Unit- II	0.00	220kV CHP - Birpara Line - II	-42.97	
		Unit- III	84.57	220kV CHP - Gedu	20.94	
		Unit- IV	0.00	220kV CHP - Jamjee - I	76.82	
		-	-	220kV CHP - Jamjee - II	76.23	
		-	-	220kV CHP - Jamjee - III	73.24	
		-	-	220kV Malbase - Birpara Line	-45.52	
		-	-	66kV CHP - Gedu Line	8.47	
		-	-	3x3MVA, 66/11kV TFR	1.55	
		Total	169.96	Auxiliary Consumption & Transformation Losses at Generator end	-0.49%	
5	2 x 12MW BHP (U/S)	Unit- I	4.10	220kV BHP - Semtokha Line	109.00	L/S Unit-I on standby
		Unit- II	4.00	66kV BHP - Lobeysa Line	26.49	
		Total	8.10	220kV BHP - Tsirang Line	-113.07	
				5MVA, 66/11kV TFR	0.58	
6	2 x 20MW BHP (L/S)	Unit- I	0.00	30MVA ICT, 220/66kV (HV)	18.59	
		Unit- II	14.60			
		Total	14.60	Auxiliary Consumption & Transformation Losses at Generator end	-1.32%	
7	2 x 63MW DHP	Unit-I	18.39	220kV DHP - Tsirang Line	0.00	Unit-II on Standby. 220kV DHP-TSI line kept on idle charge.
		Unit-II	0.00	220kV DHP - Dagapela Line	18.31	
		-	-	220kV Jigmeling - Dagapela Line	32.58	
		-	-	5MVA, 220/33kV TFR	0.07	
8	4 x 15MW KHP	Total	18.39	Auxiliary Consumption & Transformation Losses at Generator end	0.05%	Unit- II on Standby.
		Unit-I	12.16	132kV KHP - Nangkhon Line	19.05	
		Unit-II	0.00	132kV KHP - Kilikhar Line	16.86	
		Unit- III	12.20	5MVA, 132/11kV TFR	0.33	
9	2 x 59MW NHP	Unit- IV	12.19	132kV Motanga - Rangia Line	12.96	
		Total	36.55	Auxiliary Consumption & Transformation Losses at Generator end	0.85%	
		Unit-I	0.00	132kV NHP-MHP-I	44.81	
		Unit-II	45.08	132kV NHP-MHP-II	0.00	
10	2 x 9MW SHP	Total	45.08	Auxiliary Consumption & Transformation Losses at Generator end	0.60%	Unit-I under Shutdown. 132kV NHP-MHP line-II on Standby.
		Unit- I	6.44	66kV SHP-Damdhum (Samtse)	0.00	
		Unit- II	0.00	-	-	
		Total	6.44	Auxiliary Consumption & Transformation Losses at Generator end	100.00%	

Note: Generation-Load Summary (MW) for 12-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)	1,201.28	981.66	219.62

Note: Generation-Load Summary (MW) for 12-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)	932.79	893.52	34.10

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

Sl. No.	Total Energy Generation	Daily Energy Met	Net Energy Import (IEX and Solar)	Net Energy Export	Peak Cross-border (MW)
1	28.86	21.82	0.00	6.84	412.17

- 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.