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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 14-Jun-2025(-ve:import, +ve:export)						
Report Details		Date	Time	National Coincidental Peak Load (MW)		Load
		June 13, 2025	9:00 AM			1026.44
Sl. No.	Hydropower Plant	Unit	MW	Transmission Lines and Elements	Load (MW)	Remarks
1	6 x 170MW THP	Unit-I	80.94	400kV THP - Siliguri Line - I	31.43	400kV THP-Siliguri Line -IV on Standby. Unit-V on Standby. Unit-IV under Shutdown.
		Unit- II	99.93	400kV THP - Siliguri Line - II	29.79	
		Unit- III	114.17	400kV THP - Siliguri Line- IV	0.00	
		Unit- IV	0.00	400kV THP - Malbase Line - III	320.16	
		Unit- V	84.49	400kV Malbase - Siliguri Line	-33.71	
		Unit- VI	0.00	-	-	
		Total	379.53	Auxiliary Consumption & Transformation Losses at Generator end	-0.49%	
2	4 x 180MW MHP	Unit-I	166.20	400kV MHP - Jigmeling Line - I	0.00	Unit III under shutdown. 400kV MHP-JLG line- I on Standby. 132kV MHP_Yurmoo Line- I not in Service. 220kV Tsirang-Jigmeling Line kept open for Shutdown of 220kV Jigmeling-Dagapela Line.
		Unit-II	85.78	400kV MHP - Jigmeling Line - II	137.50	
		Unit-III	0.00	400kV MHP - Jigmeling Line - III	144.70	
		Unit-IV	170.67	400kV MHP - Jigmeling Line - IV	144.00	
		-	-	132kV MHP - Yurmo Line - I	0.00	
		-	-	132kV MHP - Yurmo Line - II	59.85	
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	120.73	
		-	-	400kV Jigmeling - Alipurduar Line - I	396.36	
		-	-	400kV Jigmeling - Alipurduar Line - II	394.91	
		-	-	80MVA, 220/132kV ICT - I (HV)	-59.53	
		-	-	80MVA, 220/132kV ICT - II (HV)	-59.12	
		-	-	220kV Tsirang - Jigmeling Line	0.00	
		-	-	132kV Gelephu - Salakati Line	35.25	
		Total	422.65	Auxiliary Consumption & Transformation Losses at Generator end	1.53%	
3	6 x 170MW PHP-II	Unit- I	169.83	400kV PHP II - Jigmeling -I	242.91	Unit-IV under Shutdown.
		Unit- II	160.82	400kV PHP II - Jigmeling -II	242.18	
		Unit- III	160.71	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	491.36	Auxiliary Consumption & Transformation Losses at Generator end	1.28%	
4	4 x 84MW CHP	Unit- I	63.61	220kV CHP - Birpara Line - I	-51.91	Unit-II under shutdown.
		Unit- II	0.00	220kV CHP - Birpara Line - II	-51.32	
		Unit- III	63.84	220kV CHP - Gedu	-24.88	
		Unit- IV	63.99	220kV CHP - Jamjee (old) - I	107.04	
		-	-	220kV CHP - Jamjee - II (new)	106.12	
		-	-	220kV CHP - Jamjee - III (new)	102.55	
		-	-	220kV Malbase - Birpara Line	-27.37	
		-	-	66kV CHP - Gedu Line	3.73	
		-	-	3x3MVA, 66/11kV TFR	1.34	
		Total	191.44	Auxiliary Consumption & Transformation Losses at Generator end	-0.64%	
5	2 x 12MW BHP (U/S)	Unit- I	0.00	220kV BHP - Semtokha Line	-27.07	U/S Unit-II & L/S Unit-I on Standby.
		Unit- II	5.80	66kV BHP - Lobeyza Line	17.81	
		Total	5.80	220kV BHP - Tsirang Line	22.64	
6	2 x 20MW BHP (L/S)	Unit- I	0.00	5MVA, 66/11kV TFR	0.44	
		Unit- II	8.30	30MVA ICT, 220/66kV (HV)	12.51	
		Total	8.30	Auxiliary Consumption & Transformation Losses at Generator end	1.99%	
7	2 x 63MW DHP	Unit-I	0.00	220kV DHP - Tsirang Line	-21.20	DHP Unit-I on Standby. 220kV Jigmeling_ Dagapela under Shutdown.
		Unit-II	26.29	220kV DHP - Dagapela Line	46.90	
		-	-	220kV Jigmeling - Dagapela Line	0.00	
		-	-	5MVA, 220/33kV TFR	0.22	
		Total	26.29	Auxiliary Consumption & Transformation Losses at Generator end	1.41%	
8	4 x 15MW KHP	Unit- I	15.84	132kV KHP - Nangkhon Line	40.80	
		Unit-II	15.99	132kV KHP - Kilikhar Line	23.22	
		Unit- III	16.56	5MVA, 132/11kV TFR	0.29	
		Unit- IV	16.54	132kV Motanga - Rangia Line	49.60	
		Total	64.93	Auxiliary Consumption & Transformation Losses at Generator end	0.95%	
9	2 x 59MW NHP	Unit-I	25.45	132kV NHP-MHP-I	44.61	
		Unit-II	45.06	132kV NHP-MHP-II	25.24	
		Total	70.51	Auxiliary Consumption & Transformation Losses at Generator end	0.94%	
10	2 x 9MW SHP	Unit- I	5.00	66kV SHP-Damdhum (Samtse)	9.00	Interim measure: evacuation is through 33kV system.
		Unit- II	4.00	-	-	
		Total	9.00	Auxiliary Consumption & Transformation Losses at Generator end	0.00%	

Note: Generation-Load Summary (MW) for 13-Jun-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)	1,669.81	896.78	773.03

Note: Generation-Load Summary (MW) for 13-Jun-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)	1,116.45	696.32	414.22

THE DAILY BHUTAN POWER SYSTEM OPERATOR LOAD-GENERATION BALANCE REPORT & ENERGY FIGURES ISSUED ON 14-Jun-2025(-ve:import, +ve:export)						
Report	Date	Time	National Coincidental Peak Load (MW)		Date	Time
Details	June 13, 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	80.92	400kV THP - Siliguri Line - I	5.97	Unit-IV under Shutdown. Unit-VI on Standby. 400kV THP-Siliguri Line -IV on Standby.
		Unit- II	55.28	400kV THP - Siliguri Line - II	4.76	
		Unit- III	104.13	400kV THP - Siliguri Line - IV	0.00	
		Unit- IV	0.00	400kV THP - Malbase Line - III	318.20	
		Unit- V	89.40	400kV Malbase - Siliguri Line	-58.69	
		Unit- VI	0.00	-	-	
		Total	329.73	Auxiliary Consumption & Transformation Losses at Generator end	0.24%	
2	4 x 180MW MHP	Unit-I	141.19	400kV MHP - Jigmeling Line - I	114.80	Unit-III under Stutdown. 400kV MHP-JLG line- III on Standby. 132kV MHP_Yurmo Line- I not in Service. 220kV Tsirang-Jigmeling Line kept open for Shutdown of 220kV Jigmeling-Dagapela Line.
		Unit-II	70.13	400kV MHP - Jigmeling Line - II	114.00	
		Unit-III	0.00	400kV MHP - Jigmeling Line - III	0.00	
		Unit-IV	141.54	400kV MHP - Jigmeling Line - IV	111.34	
		-	-	132kV MHP - Yurmo Line - I	0.00	
		-	-	132kV MHP - Yurmo Line - II	62.14	
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	130.18	
		-	-	400kV Jigmeling - Alipurduar Line - I ; direct lines	370.91	
		-	-	400kV Jigmeling - Alipurduar Line - II ; direct lines	369.46	
		-	-	80MVA, 220/132kV ICT - I (HV)	-64.60	
		-	-	80MVA, 220/132kV ICT - II (HV)	-64.10	
		-	-	220kV Tsirang - Jigmeling Line	0.00	
		-	-	132kV Gelephu - Salakati Line	34.78	
		Total	352.86	Auxiliary Consumption & Transformation Losses at Generator end	0.05%	
3	6 x 170MW PHP-II	Unit- I	179.65	400kV PHP II - Jigmeling -I	266.18	Unit-IV under Shutdown.
		Unit- II	179.57	400kV PHP II - Jigmeling -II	266.91	
		Unit- III	179.55	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	538.77	Auxiliary Consumption & Transformation Losses at Generator end	1.05%	
4	4 x 84MW CHP	Unit- I	66.67	220kV CHP - Birpara Line - I	-54.73	Unit-II on standby
		Unit- II	0.00	220kV CHP - Birpara Line - II	-54.32	
		Unit- III	66.66	220kV CHP - Gedu	-29.90	
		Unit- IV	66.87	220kV CHP - Jamjee - I	113.72	
		-	-	220kV CHP - Jamjee - II	112.53	
		-	-	220kV CHP - Jamjee - III	108.44	
		-	-	220kV Malbase - Birpara Line	-24.85	
		-	-	66kV CHP - Gedu Line	4.07	
		-	-	3x3MVA, 66/11kV TFR	1.27	
		Total	200.20	Auxiliary Consumption & Transformation Losses at Generator end	-0.44%	
5	2 x 12MW BHP (U/S)	Unit- I	0.00	220kV BHP - Semtokha Line	-24.75	L/S Unit I & U/S Unit-I on Standby.
		Unit- II	6.01	66kV BHP - Lobeysa Line	18.88	
		Total	6.01	220kV BHP - Tsirang Line	22.64	
		Unit- I	0.00	5MVA, 66/11kV TFR	0.55	
6	2 x 20MW BHP (L/S)	Unit- II	11.59	30MVA ICT, 220/66kV (HV)	13.70	
		Total	11.59	Auxiliary Consumption & Transformation Losses at Generator end	1.59%	
7	2 x 63MW DHP	Unit-I	0.00	220kV DHP - Tsirang Line	-22.00	Unit I on Standby. 220kV JLG-DAG line under Shutdown.
		Unit-II	26.28	220kV DHP - Dagapela Line	47.89	
		-	-	220kV Jigmeling - Dagapela Line	0.00	
		-	-	5MVA, 220/33kV TFR	-	
		Total	26.28	Auxiliary Consumption & Transformation Losses at Generator end	1.48%	
8	4 x 15MW KHP	Unit- I	16.53	132kV KHP - Nangkhori Line	40.24	
		Unit-II	16.54	132kV KHP - Kilikhar Line	25.04	
		Unit- III	16.64	5MVA, 132/11kV TFR	0.31	
		Unit- IV	16.49	132kV Motanga - Rangia Line	56.00	
		Total	66.20	Auxiliary Consumption & Transformation Losses at Generator end	0.92%	
9	2 x 59MW NHP	Unit-I	24.95	132kV NHP-MHP-I	24.78	
		Unit-II	24.98	132kV NHP-MHP-II	24.83	
		Total	49.93	Auxiliary Consumption & Transformation Losses at Generator end	0.64%	
10	2 x 9MW SHP	Unit- I	9.00	66kV SHP-Damdhum (Samtse)	-	Interim measure: evacuation is through 33kV system.
		Unit- II	0.00	-	-	
		Total	9.00	Auxiliary Consumption & Transformation Losses at Generator end	100.00%	

Note: Generation-Load Summary (MW) for 13-Jun-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)	1,590.57	941.28	649.29

Note: Generation-Load Summary (MW) for 13-Jun-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)	2,015.42	903.38	1,103.64

Note: Daily Energy (MUs) and Power(MW) Statistics for 13-Jun-2025

Sl. No.	Total Energy Generation	Daily Energy Met	Net Energy Import (IEX and Solar)	Net Energy Export	Peak Cross-border (MW)
1	39.18	21.87	0.00	17.41	813.29

- 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.