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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 27-Mar-2025(-ve:import, +ve:export)

Report Details	Date	Time	National Coincidental Peak Load (MW)		Date	Time	Load
	March 26, 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	10.07	400kV THP - Siliguri Line - I	0.00	Unit-II & Unit-IV under AMP. Unit-III & VI on Standby. 400kV THP-SIL Line I on Standby. 400kV THP-SIL Line IV under Shutdown .	
		Unit-II	0.00	400kV THP - Siliguri Line - II	-110.36		
		Unit-III	0.00	400kV THP - Siliguri Line- IV	0.00		
		Unit-IV	0.00	400kV THP - Malbase Line - III	141.00		
		Unit-V	20.75	400kV Malbase - Siliguri Line	-151.74		
		Unit-VI	0.00	-	-		
		Total	30.82	Auxiliary Consumption & Transformation Losses at Generator end	0.58%		
2	4 x 180MW MHP	Unit-I	55.19	400kV MHP - Jigmeling Line - I	33.57	Unit-II under AMP. Unit IV under Shutdown 400kV MHP-JLG Line II & III on Standby. 132kV MHP_Yurmo Line- I not in Service.	
		Unit-II	0.00	400kV MHP - Jigmeling Line - II	0.00		
		Unit-III	56.56	400kV MHP - Jigmeling Line - III	0.00		
		Unit-IV	0.00	400kV MHP - Jigmeling Line - IV	33.79		
		-	-	132kV MHP - Yurmo Line - I	0.00		
		-	-	132kV MHP - Yurmo Line - II	62.29		
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	192.73		
		-	-	400kV Jigmeling - Alipurduar Line - I	16.00		
		-	-	400kV Jigmeling - Alipurduar Line - II	18.91		
		-	-	80MVA, 220/132kV ICT - I (HV)	13.27		
		-	-	80MVA, 220/132kV ICT - II (HV)	13.09		
		-	-	220kV Tsirang - Jigmeling Line	-112.47		
		-	-	132kV Gelephu - Salakati Line	-19.18		
		Total	111.75	Auxiliary Consumption & Transformation Losses at Generator end	-0.08%		
		3	6 x 170MW PHP-II	Unit-I	141.35		
Unit-II	20.62			400kV PHP II - Jigmeling -II	161.80		
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	161.97			Auxiliary Consumption & Transformation Losses at Generator end	0.10%		
4	4 x 84MW CHP	Unit-I	26.09	220kV CHP - Birpara Line - I	-74.16	Unit-II & Unit-III under AMP.	
		Unit-II	0.00	220kV CHP - Birpara Line - II	-73.25		
		Unit-III	0.00	220kV CHP - Gedu	-31.03		
		Unit-IV	25.51	220kV CHP - Jamjee (old) - I	75.09		
		-	-	220kV CHP - Jamjee - II (new)	75.47		
		-	-	220kV CHP - Jamjee - III (new)	72.64		
		-	-	220kV Malbase - Birpara Line	-69.05		
		-	-	66kV CHP - Gedu Line	6.49		
		-	-	3x3MVA, 66/11kV TFR	1.12		
		Total	51.60	Auxiliary Consumption & Transformation Losses at Generator end	-1.49%		
5	2 x 12MW BHP (U/S)	Unit-I	0.00	220kV BHP - Semtokha Line	112.00	U/S Unit-I & L/S Unit-II on Standby.	
		Unit-II	4.40	66kV BHP - Lobeysha Line	23.50		
		Total	4.40	220kV BHP - Tsirang Line	-123.50		
6	2 x 20MW BHP (L/S)	Unit-I	8.09	5MVA, 66/11kV TFR	0.36		
		Unit-II	0.00	30MVA ICT, 220/66kV (HV)	19.68		
		Total	8.09	Auxiliary Consumption & Transformation Losses at Generator end	1.04%		
7	2 x 63MW DHP	Unit-I	16.50	220kV DHP - Tsirang Line	16.24	Unit-II on Standby. 220kV DHP-Dagapela line on Standby.	
		Unit-II	0.00	220kV DHP - Dagapela Line	0.00		
		-	-	220kV Jigmeling - Dagapela Line	51.81		
		-	-	5MVA, 220/33kV TFR	0.20		
		Total	16.50	Auxiliary Consumption & Transformation Losses at Generator end	0.36%		
8	4 x 15MW KHP	Unit-I	13.39	132kV KHP - Nangkhor Line	24.40	Unit- II under AMP.	
		Unit-II	0.00	132kV KHP - Kilikhar Line	15.36		
		Unit-III	13.52	5MVA, 132/11kV TFR	0.19		
		Unit-IV	13.51	132kV Motanga - Rangia Line	0.32		
Total	40.42	Auxiliary Consumption & Transformation Losses at Generator end	1.16%				
9	2 x 59MW NHP	Unit-I	17.99	132kV NHP-MHP-I	17.81	Unit-II under AMP. 132kV NHP-MHP line-II under AMP.	
		Unit-II	0.00	132kV NHP-MHP-II	0.00		
		Total	17.99	Auxiliary Consumption & Transformation Losses at Generator end	1.00%		
10	2 x 9MW SHP	Unit-I		66kV SHP-Damdhum (Samtse)		Interim measure: evacuation is through 33kV system	
		Unit-II		-			
		Total	0.00	Auxiliary Consumption & Transformation Losses at Generator end	0.00%		

Note: Generation-Load Summary (MW) for 26-Mar-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)	443.54	906.05	-462.51

Note: Generation-Load Summary (MW) for 26-Mar-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)	1,120.79	900.64	220.15

THE DAILY BHUTAN POWER SYSTEM OPERATOR LOAD-GENERATION BALANCE REPORT & ENERGY FIGURES ISSUED ON 27-Mar-2025(-ve:import, +ve:export)							
Report Details	Date	Time	National Coincidental Peak Load (MW)		Date	Time	Load
	March 26, 2025	18:00:00			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	129.39	400kV THP - Siliguri Line - I	0.00	Unit-II & Unit-IV under AMP. Unit- III & VI on Standby. 400kV THP-SIL Line I on Standby. 400kV THP-SIL Line IV under Shutdown .	
		Unit-II	0.00	400kV THP - Siliguri Line - II	13.08		
		Unit-III	0.00	400kV THP - Siliguri Line - IV	0.00		
		Unit-IV	0.00	400kV THP - Malbase Line - III	247.01		
		Unit-V	131.23	400kV Malbase - Siliguri Line	-39.27		
		Unit-VI	0.00	-	-		
		Total	260.62	Auxiliary Consumption & Transformation Losses at Generator end	0.20%		
2	4 x 180MW MHP	Unit-I	85.15	400kV MHP - Jigmeling Line - I	105.97	Unit-II under AMP. Unit IV under Shutdown 400kV MHP-JLG Line III & IV on Standby. 132kV MHP_Yurmo Line- I not in Service.	
		Unit-II	0.00	400kV MHP - Jigmeling Line - II	105.99		
		Unit-III	176.46	400kV MHP - Jigmeling Line - III	0.00		
		Unit-IV	0.00	400kV MHP - Jigmeling Line - IV	0.00		
		-	-	132kV MHP - Yurmo Line - I	0.00		
		-	-	132kV MHP - Yurmo Line - II	61.61		
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	205.46		
		-	-	400kV Jigmeling - Alipurduar Line - I	96.00		
		-	-	400kV Jigmeling - Alipurduar Line - II	95.27		
		-	-	80MVA, 220/132kV ICT - I (HV)	22.49		
		-	-	80MVA, 220/132kV ICT - II (HV)	22.32		
		-	-	220kV Tsirang - Jigmeling Line	-108.02		
		-	-	132kV Gelephu - Salakati Line	-15.40		
		Total	261.61	Auxiliary Consumption & Transformation Losses at Generator end	1.14%		
3	6 x 170MW PHP-II	Unit-I	151.13	400kV PHP II - Jigmeling -I	0.00	400kV PHP II-Jigmeling line I on Standby.	
		Unit-II	49.02	400kV PHP II - Jigmeling -II	200.05		
		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	200.15	Auxiliary Consumption & Transformation Losses at Generator end	0.05%		
4	4 x 84MW CHP	Unit-I	58.62	220kV CHP - Birpara Line - I	-46.05	Unit-II & Unit-III under AMP.	
		Unit-II	0.00	220kV CHP - Birpara Line - II	-45.89		
		Unit-III	0.00	220kV CHP - Gedu	-38.52		
		Unit-IV	51.98	220kV CHP - Jamjee - I	78.03		
		-	-	220kV CHP - Jamjee - II	78.79		
		-	-	220kV CHP - Jamjee - III	75.71		
		-	-	220kV Malbase - Birpara Line	-30.39		
		-	-	66kV CHP - Gedu Line	5.95		
		-	-	3x3MVA, 66/11kV TFR	1.29		
		Total	110.60	Auxiliary Consumption & Transformation Losses at Generator end	1.17%		
5	2 x 12MW BHP (U/S)	Unit-I	0.00	220kV BHP - Semtokha Line	108.37	U/S Unit-I & L/S Unit-II on Standby	
		Unit-II	4.13	66kV BHP - Lobeyasa Line	23.10		
		Total	4.13	220kV BHP - Tsirang Line	-119.64		
6	2 x 20MW BHP (L/S)	Unit-I	8.31	5MVA, 66/11kV TFR	0.47		
		Unit-II	0.00	30MVA ICT, 220/66kV (HV)	19.74		
		Total	8.31	Auxiliary Consumption & Transformation Losses at Generator end	1.13%		
7	2 x 63MW DHP	Unit-I	15.76	220kV DHP - Tsirang Line	15.38	Unit-II on Standby. 220kV DHP-Dagapela line on Standby	
		Unit-II	0.00	220kV DHP - Dagapela Line	0.00		
		-	-	220kV Jigmeling - Dagapela Line	52.41		
		-	-	5MVA, 220/33kV TFR	0.24		
		Total	15.76	Auxiliary Consumption & Transformation Losses at Generator end	0.89%		
8	4 x 15MW KHP	Unit-I	0.00	132kV KHP - Nangkhor Line	11.58	Unit- II under AMP. Unit-I on Standby.	
		Unit-II	0.00	132kV KHP - Klichkar Line	12.28		
		Unit-III	12.22	5MVA, 132/11kV TFR	0.27		
		Unit-IV	12.18	132kV Motanga - Rangia Line	-2.95		
		Total	24.40	Auxiliary Consumption & Transformation Losses at Generator end	1.11%		
9	2 x 59MW NHP	Unit-I	15.05	132kV NHP-MHP-I	14.95	Unit-II under AMP. 132kV NHP-MHP line-II under AMP.	
		Unit-II	0.00	132kV NHP-MHP-II	0.00		
		Total	15.05	Auxiliary Consumption & Transformation Losses at Generator end	0.66%		
10	2 x 9MW SHP	Unit-I		66kV SHP-Damdhum (Samtse)	0.00	Interim measure: evacuation is through 33kV system	
		Unit-II		-	-		
		Total	0.00	Auxiliary Consumption & Transformation Losses at Generator end	0.00%		

Note: Generation-Load Summary (MW) for 26-Mar-2025 at 18:00 hrs

Sl. No.	Region	Total Generation	Total Domestic Load (Total Generation - Total Export)	Total Export(+ve)/ Import(-ve)
1	Both Eastern & Western (Whole Bhutan)	900.63	876.23	24.40

Note: Generation-Load Summary (MW) for 26-Mar-2024, at 18:00 hrs

Sl. No.	Region	Total Generation	Total Domestic Load (Total Generation - Total Export)	Total Export(+ve)/ Import(-ve)
1	Both Eastern & Western (Whole Bhutan)	852.88	884.83	-31.95

Note: Daily Energy (MUs) and Power(MW) Statistics for 26-Mar-2025

Sl. No.	Total Energy Generation	Daily Energy Met	Net Energy Import (IEX and Solar)	Net Energy Export	Peak Cross-border (MW)
1	15.28	20.72	5.83	0.41	-499.54

- 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 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.