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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 05-Mar-2025(-ve:import, +ve:export)						
Report Details	Date	Time	National Coincidental Peak Load (MW)		Date	Time
	04-Mar-25	09:00 hrs			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	59.84	400kV THP - Siliguri Line - I	23.58	Unit-II & III under AMP. Unit -IV on Standby. 400kV THP-SIL Line IV on Standby. 400kV THP-SIL Line II under AMP
		Unit- II	0.00	400kV THP - Siliguri Line - II	0.00	
		Unit- III	0.00	400kV THP - Siliguri Line- IV	0.00	
		Unit- IV	0.00	400kV THP - Malbase Line - III	248.87	
		Unit- V	109.47	400kV Malbase - Siliguri Line	-25.04	
		Unit- VI	101.48	-	-	
		Total	270.79	Auxiliary Consumption & Transformation Losses at Generator end	-0.61%	
2	4 x 180MW MHP	Unit-I	150.81	400kV MHP - Jigmeling Line - I	88.13	Unit-III under Shutdown. Unit-IV under Standby. 400kV MHP-JLG Line II & III on Standby. 132kV MHP_Yurmoo Line- I not in Service.
		Unit-II	70.87	400kV MHP - Jigmeling Line - II	0.00	
		Unit-III	0.00	400kV MHP - Jigmeling Line - III	0.00	
		Unit-IV	0.00	400kV MHP - Jigmeling Line - IV	88.43	
		-	-	132kV MHP - Yurmo Line - I	0.00	
		-	-	132kV MHP - Yurmo Line - II	62.75	
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	184.36	
		-	-	400kV Jigmeling - Alipurduar Line - I	84.07	
		-	-	400kV Jigmeling - Alipurduar Line - II	83.21	
		-	-	80MVA, 220/132kV ICT - I (HV)	15.55	
		-	-	80MVA, 220/132kV ICT - II (HV)	15.35	
		-	-	220kV Tsirang - Jigmeling Line	-99.93	
		-	-	132kV Gelephu - Salakati Line	-10.49	
		Total	221.68	Auxiliary Consumption & Transformation Losses at Generator end	0.09%	
3	6 x 170MW PHP-II	Unit- I	0.00	400kV PHP II - Jigmeling -I	0.00	Unit-I on Standby. 400kV PHP-II_ALI line I on Standby.
		Unit- II	180.21	400kV PHP II - Jigmeling -II	178.00	
		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	180.21	Auxiliary Consumption & Transformation Losses at Generator end	1.23%	
4	4 x 84MW CHP	Unit- I	48.00	220kV CHP - Birpara Line - I	-50.12	Unit-II on Standby. Unit-III under Shutdown.
		Unit- II	0.00	220kV CHP - Birpara Line - II	-49.80	
		Unit- III	0.00	220kV CHP - Gedu	-40.46	
		Unit- IV	58.05	220kV CHP - Jamjee (old) - I	80.76	
		-	-	220kV CHP - Jamjee - II (new)	81.08	
		-	-	220kV CHP - Jamjee - III (new)	78.04	
		-	-	220kV Malbase - Birpara Line	-35.80	
		-	-	66kV CHP - Gedu Line	6.83	
		-	-	3x3MVA, 66/11kV TFR	1.22	
		Total	106.05	Auxiliary Consumption & Transformation Losses at Generator end	-1.41%	
5	2 x 12MW BHP (U/S)	Unit- I	4.90	220kV BHP - Semtokha Line	102.00	U/S Unit-II under Shutdown. L/S Unit-I on Standby.
		Unit- II	0.00	66kV BHP - Lobeyssa Line	25.24	
		Total	4.90	220kV BHP - Tsirang Line	-113.30	
6	2 x 20MW BHP (L/S)	Unit- I	0.00	5MVA, 66/11kV TFR	0.42	
		Unit- II	9.80	30MVA ICT, 220/66kV (HV)	21.15	
		Total	9.80	Auxiliary Consumption & Transformation Losses at Generator end	2.31%	
7	2 x 63MW DHP	Unit-I	17.18	220kV DHP - Tsirang Line	16.99	Unit II under AMP. 220kV DHP-Dagapela line on Standby.
		Unit-II	0.00	220kV DHP - Dagapela Line	0.00	
		-	-	220kV Jigmeling - Dagapela Line	52.80	
		-	-	5MVA, 220/33kV TFR	0.18	
		Total	17.18	Auxiliary Consumption & Transformation Losses at Generator end	0.06%	
8	4 x 15MW KHP	Unit- I	0.00	132kV KHP - Nangkhori Line	10.71	Unit-I under AMP. Unit-IV on Standby.
		Unit-II	11.20	132kV KHP - Kilikhar Line	11.15	
		Unit- III	11.23	5MVA, 132/11kV TFR	0.25	
		Unit- IV	0.00	132kV Motanga - Rangia Line	12.40	
		Total	22.43	Auxiliary Consumption & Transformation Losses at Generator end	1.43%	
9	2 x 59MW NHP	Unit-I	17.99	132kV NHP-MHP-I	17.82	Unit-II under AMP. 132kV NHP-MHP line-II on Standby.
		Unit-II	0.00	132kV NHP-MHP-II	0.00	
		Total	17.99	Auxiliary Consumption & Transformation Losses at Generator end	0.94%	

Note: Generation-Load Summary (MW) for 04-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)	851.03	819.02	32.01

Note: Generation-Load Summary (MW) for 03-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)	217.06	842.10	-625.04

THE DAILY BHUTAN POWER SYSTEM OPERATOR LOAD-GENERATION BALANCE REPORT & ENERGY FIGURES ISSUED ON 05-Mar-2025(-ve:import, +ve:export)						
Report Details	Date	Time	National Coincidental Peak Load (MW)		Date	Time
	4-Mar-2025	18:00 hrs			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	74.72	400kV THP - Siliguri Line - I	33.01	Unit-II & III under AMP. Unit -IV on Standby. 400kV THP-SIL Line IV on Standby. 400kV THP-SIL Line II under AMP
		Unit- II	0.00	400kV THP - Siliguri Line - II	0.00	
		Unit- III	0.00	400kV THP - Siliguri Line - IV	0.00	
		Unit- IV	0.00	400kV THP - Malbase Line - III	269.10	
		Unit- V	126.20	400kV Malbase - Siliguri Line	-21.57	
		Unit- VI	99.58	-	-	
		Total	300.50	Auxiliary Consumption & Transformation Losses at Generator end	-0.54%	
2	4 x 180MW MHP	Unit-I	135.36	400kV MHP - Jigmeling Line - I	82.06	Unit-II on Standby. Unit-III under Shutdown 400kV MHP-JLG line II & III on Standby. 132kV MHP_Yurmoo line- I not in service.
		Unit-II	0.00	400kV MHP - Jigmeling Line - II	0.00	
		Unit-III	0.00	400kV MHP - Jigmeling Line - III	0.00	
		Unit-IV	75.98	400kV MHP - Jigmeling Line - IV	82.59	
		-	-	132kV MHP - Yurmo Line - I	0.00	
		-	-	132kV MHP - Yurmo Line - II	63.65	
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	194.55	
		-	-	400kV Jigmeling - Alipurduar Line - I <i>direct lines</i>	73.36	
		-	-	400kV Jigmeling - Alipurduar Line - II	71.90	
		-	-	80MVA, 220/132kV ICT - I (HV)	18.43	
		-	-	80MVA, 220/132kV ICT - II (HV)	18.27	
		-	-	220kV Tsirang - Jigmeling Line	-103.25	
		-	-	132kV Gelephu - Salakati Line	-10.16	
		Total	211.34	Auxiliary Consumption & Transformation Losses at Generator end	0.42%	
3	6 x 170MW PHP-II	Unit- I	0.00	400kV PHP II - Jigmeling -I	0.00	Unit I on Standby 400kV PHP II-ALI line I on Standby.
		Unit- II	179.28	400kV PHP II - Jigmeling -II	179.17	
		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	179.28	Auxiliary Consumption & Transformation Losses at Generator end	0.06%	
4	4 x 84MW CHP	Unit- I	57.71	220kV CHP - Birpara Line - I	-53.74	Unit-II under AMP. Unit-III under Shutdown.
		Unit- II	0.00	220kV CHP - Birpara Line - II	-53.41	
		Unit- III	0.00	220kV CHP - Gedu	-53.26	
		Unit- IV	52.94	220kV CHP - Jamjee - I	88.14	
		-	-	220kV CHP - Jamjee - II	88.69	
		-	-	220kV CHP - Jamjee - III	85.82	
		-	-	220kV Malbase - Birpara Line	-31.46	
		-	-	66kV CHP - Gedu Line	6.42	
		-	-	3x3MVA, 66/11kV TFR	1.85	
		Total	110.65	Auxiliary Consumption & Transformation Losses at Generator end	0.13%	
5	2 x 12MW BHP (U/S)	Unit- I	4.71	220kV BHP - Semtokha Line	102.20	U/S Unit-II under Shutdown. L/S Unit-I on Standby.
		Unit- II	0.00	66kV BHP - Lobeysha Line	27.20	
		Total	4.71	220kV BHP - Tsirang Line	-115.54	
6	2 x 20MW BHP (L/S)	Unit- I	0.00	5MVA, 66/11kV TFR	0.58	
		Unit- II	9.49	30MVA ICT, 220/66kV (HV)	23.42	
		Total	9.49	Auxiliary Consumption & Transformation Losses at Generator end	-1.69%	
7	2 x 63MW DHP	Unit-I	17.48	220kV DHP - Tsirang Line	17.28	Unit II under AMP. 220kV DHP-Dagapela line on Standby.
		Unit-II	0.00	220kV DHP - Dagapela Line	0.00	
		-	-	220kV Jigmeling - Dagapela Line	53.56	
		-	-	5MVA, 220/33kV TFR	0.15	
		Total	17.48	Auxiliary Consumption & Transformation Losses at Generator end	0.29%	
8	4 x 15MW KHP	Unit- I	0.00	132kV KHP - Nangkhor Line	12.26	Unit-I under AMP. Unit-IV on Standby.
		Unit-II	14.19	132kV KHP - Kilikhar Line	15.46	
		Unit- III	14.16	5MVA, 132/11kV TFR	0.32	
		Unit- IV	0.00	132kV Motanga - Rangia Line	10.72	
		Total	28.35	Auxiliary Consumption & Transformation Losses at Generator end	1.09%	
9	2 x 59MW NHP	Unit-I	17.99	132kV NHP-MHP-I	17.85	Unit-II under AMP. 132kV NHP-MHP line-II on Standby.
		Unit-II	0.00	132kV NHP-MHP-II	0.00	
		Total	17.99	Auxiliary Consumption & Transformation Losses at Generator end	0.78%	

Note: Generation-Load Summary (MW) for 04-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)	879.79	861.14	18.65

Note: Generation-Load Summary (MW) for 03-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)	330.70	819.28	-488.58

Note: Daily Energy (MUS) and Power(MW) Statistics for 04-Mar-2025

Sl. No.	Total Energy Generation	Daily Energy Met	Net Energy Import (IEX and Solar)	Net Energy Export	Peak Cross-border (MW)
1	15.53	20.13	4.88	0.38	-475.30

1. 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. 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.