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

Report Details	Date	Time	National Coincidental Peak Load (MW)	Date	Time	Load
	02-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	99.73	400kV THP - Siliguri Line - I	39.83	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	261.13	
		Unit-V	99.33	400kV Malbase - Siliguri Line	-10.73	
		Unit-VI	101.29	-	-	
		Total	300.35	Auxiliary Consumption & Transformation Losses at Generator end	-0.20%	
2	4 x 180MW MHP	Unit-I	59.75	400kV MHP - Jigmeling Line - I	0.00	Unit-III under Shutdown. Unit-II under Standby. 400kV MHP-JLG Line I & IV on Standby. 132kV MHP_Yurmoo Line- I not in Service.
		Unit-II	0.00	400kV MHP - Jigmeling Line - II	70.80	
		Unit-III	0.00	400kV MHP - Jigmeling Line - III	71.22	
		Unit-IV	131.48	400kV MHP - Jigmeling Line - IV	0.00	
		-	-	132kV MHP - Yurmo Line - I	0.00	
		-	-	132kV MHP - Yurmo Line - II	63.97	
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	176.00	
		-	-	400kV Jigmeling - Aliparduar Line - I	71.27	
		-	-	400kV Jigmeling - Aliparduar Line - II	73.46	
		-	-	80MVA, 220/132kV ICT - I (HV)	13.05	
		-	-	80MVA, 220/132kV ICT - II (HV)	12.88	
		-	-	220kV Tsirang - Jigmeling Line	-96.04	
		-	-	132kV Gelephu - Salakati Line	-11.76	
		Total	191.23	Auxiliary Consumption & Transformation Losses at Generator end	0.04%	
3	6 x 170MW PHP-II	Unit-I	0.00	400kV PHP II - Jigmeling -I	0.00	Unit-I on standby. 400kV PHP-II_ALL line I on Standby.
		Unit-II	180.55	400kV PHP II - Jigmeling -II	180.00	
		Unit-III	0.00	400kV PHP II - Aliparduar -I	0.00	
		Unit-IV	0.00	400kV PHP II - Aliparduar -II	0.00	
		Unit-V	0.00	-	-	
		Unit-VI	0.00	-	-	
		Total	180.55	Auxiliary Consumption & Transformation Losses at Generator end	0.30%	
4	4 x 84MW CHP	Unit-I	59.81	220kV CHP - Birpara Line - I	-50.55	Unit-II on Standby. Unit-III under Shutdown.
		Unit-II	0.00	220kV CHP - Birpara Line - II	-50.29	
		Unit-III	0.00	220kV CHP - Gedu	-41.96	
		Unit-IV	50.14	220kV CHP - Jamjee (old) - I	83.24	
		-	-	220kV CHP - Jamjee - II (new)	83.72	
		-	-	220kV CHP - Jamjee - III (new)	80.85	
		-	-	220kV Malbase - Birpara Line	-35.25	
		-	-	66kV CHP - Gedu Line	5.01	
		-	-	3x3MVA, 66/11kV TFR	0.42	
		Total	109.95	Auxiliary Consumption & Transformation Losses at Generator end	-0.45%	
5	2 x 12MW BHP (U/S)	Unit-I	4.99	220kV BHP - Semtokha Line	99.28	U/S Unit-II under Shutdown. L/S Unit-I on Standby.
		Unit-II	0.00	66kV BHP - Lobeyssa Line	25.40	
		Total	4.99	220kV BHP - Tsirang Line	-109.67	
6	2 x 20MW BHP (L/S)	Unit-I	0.00	5MVA, 66/11kV TFR	0.45	
		Unit-II	9.93	30MVA ICT, 220/66kV (HV)	21.19	
		Total	9.93	Auxiliary Consumption & Transformation Losses at Generator end	-3.62%	
7	2 x 63MW DHP	Unit-I	17.47	220kV DHP - Tsirang Line	17.27	Unit II under AMP. 220kV DHP-Dagapela line on Standby.
		Unit-II	0.00	220kV DHP - Dagapela Line	0.00	
		-	-	220kV Jigmeling - Dagapela Line	52.91	
		-	-	5MVA, 220/33kV TFR	0.10	
		Total	17.47	Auxiliary Consumption & Transformation Losses at Generator end	0.57%	
8	4 x 15MW KHP	Unit-I	0.00	132kV KHP - Nangkor Line	9.86	Unit-I under AMP. Unit-IV on Standby.
		Unit-II	11.20	132kV KHP - Kiliikhar Line	11.92	
		Unit-III	11.20	5MVA, 132/11kV TFR	0.29	
		Unit-IV	0.00	132kV Motanga - Rangia Line	13.14	
		Total	22.40	Auxiliary Consumption & Transformation Losses at Generator end	1.47%	
9	2 x 59MW NHP	Unit-I	15.04	132kV NHP-MHP-I	14.83	Unit-II under AMP. 132kV NHP-MHP line-II on Standby.
		Unit-II	0.00	132kV NHP-MHP-II	0.00	
		Total	15.04	Auxiliary Consumption & Transformation Losses at Generator end	1.40%	

Note: Generation-Load Summary (MW) for 02-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)	851.91	812.79	39.12

Note: Generation-Load Summary (MW) for 01-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)	265.84	752.03	1.52

THE DAILY BHUTAN POWER SYSTEM OPERATOR LOAD-GENERATION BALANCE REPORT & ENERGY FIGURES ISSUED ON 03-Mar-2025(-ve:import, +ve:export)							
Report Details	Date	Time	National Coincidental Peak Load (MW)		Date	Time	Load
	2-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	109.35	400kV THP - Siliguri Line - I	35.00	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	273.55		
		Unit-V	109.33	400kV Malbase - Siliguri Line	-14.64		
		Unit-VI	90.47	-	-		
		Total	309.15	Auxiliary Consumption & Transformation Losses at Generator end	0.19%		
2	4 x 180MW MHP	Unit-I	109.82	400kV MHP - Jigmeling Line - I	0.00	Unit-II on Standby. Unit-III under Shutdown 400kV MHP-JLG line I & IV on Standby. 132kV MHP_Yurmoo line-I not in service.	
		Unit-II	0.00	400kV MHP - Jigmeling Line - II	75.25		
		Unit-III	0.00	400kV MHP - Jigmeling Line - III	75.22		
		Unit-IV	91.09	400kV MHP - Jigmeling Line - IV	0.00		
		-	-	132kV MHP - Yurmo Line - I	0.00		
		-	-	132kV MHP - Yurmo Line - II	65.36		
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	185.09		
		-	-	400kV Jigmeling - Alipurduar Line - I	69.82		
		-	-	400kV Jigmeling - Alipurduar Line - II	71.27		
		-	-	80MVA, 220/132kV ICT - I (HV)	16.37		
		-	-	80MVA, 220/132kV ICT - II (HV)	16.29		
		-	-	220kV Tsirang - Jigmeling Line	-98.14		
		-	-	132kV Gelephu - Salakati Line	-10.08		
		Total	200.91	Auxiliary Consumption & Transformation Losses at Generator end	-0.05%		
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	180.00	400kV PHP II - Jigmeling -II	179.59		
		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	180.00	Auxiliary Consumption & Transformation Losses at Generator end	0.23%		
4	4 x 84MW CHP	Unit-I	62.18	220kV CHP - Birpara Line - I	-53.77	Unit-II under AMP. Unit-III under Shutdown.	
		Unit-II	0.00	220kV CHP - Birpara Line - II	-53.43		
		Unit-III	0.00	220kV CHP - Gedu	-48.00		
		Unit-IV	48.45	220kV CHP - Jamjee - I	86.62		
		-	-	220kV CHP - Jamjee - II	87.39		
		-	-	220kV CHP - Jamjee - III	84.14		
		-	-	220kV Malbase - Birpara Line	-36.66		
		-	-	66kV CHP - Gedu Line	5.86		
		-	-	3x3MVA, 66/11kV TFR	1.46		
		Total	110.63	Auxiliary Consumption & Transformation Losses at Generator end	0.33%		
5	2 x 12MW BHP (U/S)	Unit-I	4.71	220kV BHP - Semtokha Line	99.70	U/S Unit-II under Shutdown. L/S Unit-I on Standby.	
		Unit-II	0.00	66kV BHP - Lobeyasa Line	26.02		
		Total	4.71	220kV BHP - Tsirang Line	-111.34		
6	2 x 20MW BHP (L/S)	Unit-I	0.00	5MVA, 66/11kV TFR	0.65		
		Unit-II	9.90	30MVA ICT, 220/66kV (HV)	22.33		
		Total	9.90	Auxiliary Consumption & Transformation Losses at Generator end	-2.87%		
7	2 x 63MW DHP	Unit-I	17.98	220kV DHP - Tsirang Line	17.80	Unit II under AMP. 220kV DHP-Dagapela line on Standby.	
		Unit-II	0.00	220kV DHP - Dagapela Line	0.00		
		-	-	220kV Jigmeling - Dagapela Line	52.91		
		-	-	5MVA, 220/33kV TFR	0.10		
Total	17.98	Auxiliary Consumption & Transformation Losses at Generator end	0.44%				
8	4 x 15MW KHP	Unit-I	0.00	132kV KHP - Nangkhon Line	9.34	Unit-I under AMP. Unit-IV Standby.	
		Unit-II	11.21	132kV KHP - Kilikhar Line	12.41		
		Unit-III	11.20	5MVA, 132/11kV TFR	0.32		
		Unit-IV	0.00	132kV Motanga - Rangia Line	8.24		
		Total	22.41	Auxiliary Consumption & Transformation Losses at Generator end	1.52%		
9	2 x 59MW NHP	Unit-I	15.01	132kV NHP-MHP-I	14.82	Unit-II under AMP. 132kV NHP-MHP line-II on Standby.	
		Unit-II	0.00	132kV NHP-MHP-II	0.00		
		Total	15.01	Auxiliary Consumption & Transformation Losses at Generator end	1.27%		

Note: Generation-Load Summary (MW) for 02-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)	870.70	854.95	15.75

Note: Generation-Load Summary (MW) for 01-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)	157.12	857.94	2.58

Note: Daily Energy (MUs) and Power(MW) Statistics for 02-Mar-2025

Sl. No.	Total Energy Generation	Daily Energy Met	Net Energy Import (IEX and Solar)	Net Energy Export	Peak Cross-border (MW)
1	14.17	19.64	5.74	0.30	-573.95

- 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.