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

Report Details	Date	Time	National Coincidental Peak Load (MW)	Date	Time	Load
	01-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	51.06	400kV THP - Siliguri Line - I	28.20	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	261.18	
		Unit-V	118.98	400kV Malbase - Siliguri Line	-20.03	
		Unit-VI	119.44	-	-	
		Total	289.48	Auxiliary Consumption & Transformation Losses at Generator end	0.03%	
2	4 x 180MW MHP	Unit-I	130.17	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	77.08	
		Unit-III	0.00	400kV MHP - Jigmeling Line - III	77.60	
		Unit-IV	70.27	400kV MHP - Jigmeling Line - IV	0.00	
		-	-	132kV MHP - Yurmo Line - I	0.00	
		-	-	132kV MHP - Yurmo Line - II	63.59	
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	181.55	
		-	-	400kV Jigmeling - Aliparduar Line - I	79.91	
		-	-	400kV Jigmeling - Aliparduar Line - II	79.34	
		-	-	80MVA, 220/132kV ICT - I (HV)	16.56	
		-	-	80MVA, 220/132kV ICT - II (HV)	16.40	
		-	-	220kV Tsirang - Jigmeling Line	-95.55	
		-	-	132kV Gelephu - Salakati Line	-8.48	
		Total	200.44	Auxiliary Consumption & Transformation Losses at Generator end	0.06%	
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	179.97	400kV PHP II - Jigmeling -II	179.80	
		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	179.97	Auxiliary Consumption & Transformation Losses at Generator end	0.09%			
4	4 x 84MW CHP	Unit-I	61.21	220kV CHP - Birpara Line - I	-48.97	Unit-II on Standby. Unit-III under Shutdown.
		Unit-II	0.00	220kV CHP - Birpara Line - II	-48.67	
		Unit-III	0.00	220kV CHP - Gedu	-44.03	
		Unit-IV	54.70	220kV CHP - Jamjee (old) - I	84.79	
		-	-	220kV CHP - Jamjee - II (new)	85.42	
		-	-	220kV CHP - Jamjee - III (new)	81.69	
		-	-	220kV Malbase - Birpara Line	-30.00	
		-	-	66kV CHP - Gedu Line	5.00	
		-	-	3x3MVA, 66/11kV TFR	1.42	
Total	115.91	Auxiliary Consumption & Transformation Losses at Generator end	-0.64%			
5	2 x 12MW BHP (U/S)	Unit-I	5.04	220kV BHP - Semtokha Line	97.90	U/S Unit-II under Shutdown. L/S Unit-I on Standby.
		Unit-II	0.00	66kV BHP - Lobeyssa Line	25.23	
Total	5.04	Auxiliary Consumption & Transformation Losses at Generator end	-108.96			
6	2 x 20MW BHP (L/S)	Unit-I	0.00	5MVA, 66/11kV TFR	0.49	
		Unit-II	9.71	30MVA ICT, 220/66kV (HV)	20.94	
Total	9.71	Auxiliary Consumption & Transformation Losses at Generator end	0.61%			
7	2 x 63MW DHP	Unit-I	17.68	220kV DHP - Tsirang Line	17.30	Unit II under AMP. 220kV DHP-Dagapela line on Standby.
		Unit-II	0.00	220kV DHP - Dagapela Line	0.00	
		-	-	220kV Jigmeling - Dagapela Line	52.95	
		-	-	5MVA, 220/33kV TFR	0.20	
Total	17.68	Auxiliary Consumption & Transformation Losses at Generator end	1.02%			
8	4 x 15MW KHP	Unit-I	0.00	132kV KHP - Nangkor Line	10.34	Unit-I under AMP. Unit-IV on Standby.
		Unit-II	11.18	132kV KHP - Kiliikhar Line	11.46	
		Unit-III	11.23	5MVA, 132/11kV TFR	0.35	
		Unit-IV	0.00	132kV Motanga - Rangia Line	16.86	
Total	22.41	Auxiliary Consumption & Transformation Losses at Generator end	1.16%			
9	2 x 59MW NHP	Unit-I	18.00	132kV NHP-MHP-I	17.96	Unit-II under AMP. 132kV NHP-MHP line-II on Standby.
		Unit-II	0.00	132kV NHP-MHP-II	0.00	
Total	18.00	Auxiliary Consumption & Transformation Losses at Generator end	0.22%			

Note: Generation-Load Summary (MW) for 01-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)	858.64	810.48	48.16

Note: Generation-Load Summary (MW) for 29-Feb-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)	287.89	858.71	-570.82

THE DAILY BHUTAN POWER SYSTEM OPERATOR LOAD-GENERATION BALANCE REPORT & ENERGY FIGURES ISSUED ON 02-Mar-2025(-ve:import, +ve:export)							
Report Details	Date	Time	National Coincidental Peak Load (MW)		Date	Time	Load
	1-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	60.13	400kV THP - Siliguri Line - I	25.47	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	255.34		
		Unit-V	138.99	400kV Malbase - Siliguri Line	-24.96		
		Unit-VI	81.63	-	-		
		Total	280.75	Auxiliary Consumption & Transformation Losses at Generator end	-0.02%		
2	4 x 180MW MHP	Unit-I	144.83	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_Yurmo line-I not in service.	
		Unit-II	0.00	400kV MHP - Jigmeling Line - II	91.24		
		Unit-III	0.00	400kV MHP - Jigmeling Line - III	91.63		
		Unit-IV	85.05	400kV MHP - Jigmeling Line - IV	0.00		
		-	-	132kV MHP - Yurmo Line - I	0.00		
		-	-	132kV MHP - Yurmo Line - II	63.53		
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	193.46		
		-	-	400kV Jigmeling - Alipurduar Line - I <i>direct lines</i>	82.18		
		-	-	400kV Jigmeling - Alipurduar Line - II	83.64		
		-	-	80MVA, 220/132kV ICT - I (HV)	20.22		
		-	-	80MVA, 220/132kV ICT - II (HV)	20.02		
		-	-	220kV Tsirang - Jigmeling Line	-100.44		
		-	-	132kV Gelephu - Salakati Line	-8.13		
		Total	229.88	Auxiliary Consumption & Transformation Losses at Generator end	0.57%		
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	180.18	400kV PHP II - Jigmeling -II	180.97		
		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	180.18	Auxiliary Consumption & Transformation Losses at Generator end	-0.44%		
4	4 x 84MW CHP	Unit-I	55.64	220kV CHP - Birpara Line - I	-50.23	Unit-II under AMP. Unit-III under Shutdown.	
		Unit-II	0.00	220kV CHP - Birpara Line - II	-49.90		
		Unit-III	0.00	220kV CHP - Gedu	-50.65		
		Unit-IV	59.64	220kV CHP - Jamjee - I	87.54		
		-	-	220kV CHP - Jamjee - II	87.81		
		-	-	220kV CHP - Jamjee - III	84.75		
		-	-	220kV Malbase - Birpara Line	-29.04		
		-	-	66kV CHP - Gedu Line	5.00		
		-	-	3x3MVA, 66/11kV TFR	1.33		
		Total	115.28	Auxiliary Consumption & Transformation Losses at Generator end	-0.32%		
5	2 x 12MW BHP (U/S)	Unit-I	4.88	220kV BHP - Semtokha Line	100.29	U/S Unit-II under Shutdown. L/S Unit-I on Standby.	
		Unit-II	0.00	66kV BHP - Lobeysa Line	26.85		
		Total	4.88	220kV BHP - Tsirang Line	-112.73		
6	2 x 20MW BHP (L/S)	Unit-I	0.00	5MVA, 66/11kV TFR	0.68		
		Unit-II	9.61	30MVA ICT, 220/66kV (HV)	23.00		
		Total	9.61	Auxiliary Consumption & Transformation Losses at Generator end	-4.14%		
7	2 x 63MW DHP	Unit-I	17.47	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	53.46		
		-	-	5MVA, 220/33kV TFR	0.10		
Total	17.47	Auxiliary Consumption & Transformation Losses at Generator end	0.52%				
8	4 x 15MW KHP	Unit-I	0.00	132kV KHP - Nangkhon Line	3.60	Unit-I under AMP. Unit-IV & Unit-II on Standby.	
		Unit-II	0.00	132kV KHP - Kilikhar Line	11.27		
		Unit-III	15.40	5MVA, 132/11kV TFR	0.34		
		Unit-IV	0.00	132kV Motanga - Rangia Line	7.58		
		Total	15.40	Auxiliary Consumption & Transformation Losses at Generator end	1.23%		
9	2 x 59MW NHP	Unit-I	17.97	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	17.97	Auxiliary Consumption & Transformation Losses at Generator end	0.83%		

Note: Generation-Load Summary (MW) for 01-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)	871.42	834.81	36.61

Note: Generation-Load Summary (MW) for 29-Feb-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)	170.99	874.82	-703.83

Note: Daily Energy (MUs) and Power(MW) Statistics for 01-Mar-2025

Sl. No.	Total Energy Generation	Daily Energy Met	Net Energy Import (IEX and Solar)	Net Energy Export	Peak Cross-border (MW)
1	13.55	19.70	6.39	0.32	-533.04

- 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.