

## वृषाःमिष्राव्यद्रः प्रदायक्षेत्रः क्षेत्रः क्षेत्रे प्रद्यम्यक्षेत्र द्रमागाप्त्रवः प्रमुष्यां माल्यदः ।

## Ministry of Energy and Natural Resources Royal Government of Bhutan Bhutan Power System Operator Thimphu: Bhutan



Report Details	October 30, 2025	9:00 AM		National Coincidental Peak Load (MW)	17-Oct-25	Time Load  18:37:35 1,330.52	
Sl. No.	Hydropower Plant	Unit Unit- I	MW 140.76	Transmission Lines and Elements 400kV THP - Siliguri Line - I	Load (MW) 104.26	Remarks	
		Unit- II	141.28	400kV THP - Siliguri Line - II	0.00	Unit-IV and Unit-V on Standby.	
		Unit- III Unit- IV		400kV THP - Siliguri Line- IV 400kV THP - Malbase Line - III	96.93 378.92	Not able to generate at full capacity due to le. Inflow and ongoing emergency situation at Da	
1	6 x 170MW THP	Unit- V		400kV Malbase - Siliguri Line	37.82	following recent flash flood.	
		Unit- VI	150.31	-	-	400kV THP -Siliguri Line - II on Standby.	
		Total	585.53	Auxiliary Consumption & Transformation	0.93%		
			145.98	Losses at Generator end 400kV MHP - Jigmeling Line - I	0.00		
		Unit-I Unit-II		400kV MHP - Jigmeling Line - II	0.00 99.80		
		Unit-III	0.00	400kV MHP - Jigmeling Line - III	103.93		
2	4 x 180MW MHP	Unit-IV	80.18	400kV MHP - Jigmeling Line - IV	103.33		
		-		220kV Jigmeling - BitDeer Line - I 220kV Jigmeling - BitDeer Line - II	165.00 148.20	Unit -III on standby due to less inflow.  Generating less than its capacity due to less	
		-		500MVA, 400/220kV ICT at Jigmeling (HV)	374.91	Inflow.	
		-	-	400kV Jigmeling - Alipurduar Line - I	97.46	400kV MHP-JIG Line - I kept on Standby	
_		-	-	400kV Jigmeling - Alipurduar Line - II 80MVA, 220/132kV ICT - I (HV)	96.73	other three lines can cater the load.	
				80MVA, 220/132kV ICT - II (HV)	-30.30 -29.96		
		-	-	132kV MHP - Yurmo Line - II	66.48		
				132kV MHP - Tintibi Line	76.40		
		-		132kV Gelephu - Salakati Line	-17.78		
		Total	387.10	Auxiliary Consumption & Transformation Losses at Generator end	0.41%		
		Unit- I		400kV PHP II - Jigmeling -I	138.40		
	6 x 170MW PHP-II	Unit- II	141.90	400kV PHP II - Jigmeling -II	139.00	Unit-V taken Shutdown for runner inspection	
		Unit- III		400kV PHP II - Alipurduar -I	0.00	Unit-IV & VI on Standby	
3		Unit- IV Unit- V	0.00	400kV PHP II - Alipurduar -II	164.30	400kV PHP II - Alipurduar- I not in Service Generating less than its capacity due to	
		Unit- VI	0.00			decreasing Inflow.	
		Total	435.91	Auxiliary Consumption & Transformation	-1.33%		
				Losses at Generator end			
		Unit- I Unit- II	61.60		-31.18 -30.78		
		Unit- III		220kV CHP - Gedu	22.77		
		Unit- IV	62.66	220kV CHP - Jamjee - I	96.11		
4	4 x 84MW CHP	-	-	220kV CHP - Jamjee - II	94.00	Generating less than its capacity due to les	
		-	-	220kV CHP - Jamjee - III 220kV Malbase - Birpara Line	91.56 -28.00	Inflow. All Units & Feeders in Service.	
		-		66kV CHP - Gedu Line	5.85		
		m	249.71	Auxiliary Consumption & Transformation	0.55%		
		Total		Losses at Generator end			
5	2 x 12MW BHP (U/S) 2 x 20MW BHP (L/S)	Unit- I Unit- II	9.13	220kV BHP - Semtokha Line 66kV BHP - Lobeysa Line	47.30 23.92		
		Total	18.13	220kV BHP - Tsirang Line	-18.50	Generating less than its capacity due to les Inflow.	
6		Unit- I		5MVA, 66/11kV TFR	0.32		
		Unit- II	18.23	30MVA ICT, 220/66kV (HV)	6.77		
		Total	34.76	Auxiliary Consumption & Transformation Losses at Generator end	-0.28%		
		Unit-I	0.00	220kV DHP - Tsirang Line	0.00	Total Plant Shutdown from 10:27 hrs	
	2 x 63MW DHP	Unit-II		220kV DHP - Dagapela Line	0.00	(09.10.2025) due to seepage in HRC . 220kV_DHP-TSI line on Standby due to	
7		-	-	220kV BitDeer - Dagapela Line	50.35		
		-	-	5MVA, 220/33kV TFR Auxiliary Consumption & Transformation	0.00		
		Total	0.00	Losses at Generator end	0.00%	line is recuing D111 auxiliary consumption	
		Unit- I		132kV KHP - Nangkhor Line	26.83		
	4 x 15MW KHP	Unit-II		132kV KHP - Kilikhar Line	18.17	Unit I on standby due to less inflow.	
8		Unit- III Unit- IV		5MVA, 132/11kV TFR 132kV Motanga - Rangia Line	0.10 17.21	Generating less than its capacity due to les	
		OIIIt- I∜	15.24	Auxiliary Consumption & Transformation	17.21	Inflow. All Units and Feeders in Service.	
		Total	45.51	Losses at Generator end	0.90%	All Units and Feeders in Service.	
		Unit-I	39.97	132kV NHP-MHP-I	39.68		
9	2 x 59MW NHP	Unit-II		132kV NHP-MHP-II	24.73	Generating less than its capacity due to les Inflow.	
		Total	65.03	Auxiliary Consumption & Transformation	0.95%	All Units and Feeders in Service.	
		Unit- I		Losses at Generator end 66kV SHP-Damdhum (Samtse)	0.00	Interim measure: Evacuation is through 33l	
10	2 x 9MW SHP	Unit- II	4.80		0.00	System.	
		Total	9.60	Auxiliary Consumption & Transformation	100.00%	Generating less than its capacity due to les	
				Losses at Generator end		inflow.	
	17.38 MWp Sephu (Solar)	Inverter-1 Inverter-2	0.25	33kV SSP-Wangdue 33kV SSP-Trongsa	0.79 0.79		
		Inverter-2 Inverter-3	0.42		- 0.79		
11		Inverter-4	0.50	-	-	All Inverters and Feeders in Service.	
		Total	1.57	Auxiliary Consumption & Transformation	0.00%		
				Losses at Generator end y (MW) for 30-Oct-25 at 09:00 hrs			
		Note: Generation-Lo	ad Summar	y (M1 11/101 30-Oct-23 at 09:00 nrs	m . ·	09:00 hrs Statistical Comparison	
No	Region	Total Canan	ation	Total Domestic Load	Total Export(+ve)/	(MW) for this and last year	
l. No.	Region	Total Generation		(Total Generation - Total Export)	Import(-ve)	TA C G 535.96	
	Both Eastern &	1,832.85			1mport(-ve) 506.97	Tt. Exp./Imp. 535.96	
1	Western			1,325.88			
	(Whole Bhutan)						
		Note: Generation-L	ad Summar	y (MW) for 30-Oct-24 at 09:00 hrs		Tt. Load 879.89	
		Note: Generation-Load Summar		, (12.1.), 101 00 001 2.121 07.00 H3	T-: 1	1,325,88	
Sl. No.	Region	Total Generation		Total Domestic Load	Total Export(+ve)/		
				(Total Generation - Total Export)	Import(+ve)/	T. C 1,415.	
	Both Eastern &					Tt. Gen. 1,415.	
1	Western 1,415		5	879.89	535.96		
•	(Whole Bhutan)					■ Y-2024 ■ Y-2025	

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Report	Date Date	Time		D-GENERATION BALANCE REPORT & ENER		Time	Load	
Details		19:00:00		National Coincidental Peak Load (MW)	Date 17-Oct-25	18:37:35	1,330.52	
	Hydropower Plant		MW	Transmission Lines and Elements	Load (MW)		Remarks	
1. INO.	Hydropower Flant	Unit- I		400kV THP - Siliguri Line - I	162.71		Remarks	
		Unit- II		400kV THP - Siliguri Line - II	0.00	Unit-IV on Standby. Not able to generate at capacity due to ongoing emergency situation  Dam following recent flash flood.		
		Unit- III		400kV THP - Siliguri Line - IV	152.97			
1	6 x 170MW THP	Unit- IV		400kV THP - Malbase Line - III	424.87			
•	o x 170MW 1111	Unit- V	135.10	400kV Malbase - Siliguri Line	94.00			
		Unit- VI	130.35	Auxiliary Consumption & Transformation	-	400kV THP_Siliguri-II on Standby		
		Total	747.16	Losses at Generator end	0.88%			
		Unit-I	145.12	400kV MHP - Jigmeling Line - I	0.00			
	4 x 180MW MHP	Unit-II	145.20		115.90	Generating less than its capacity due to less infllow. 400kV MHP-JIG Line I kept on Standby as off three lines can cater the load.		
		Unit-III	80.17	400kV MHP - Jigmeling Line - III	120.53			
		Unit-IV	58.86	400kV MHP - Jigmeling Line - IV 220kV Jigmeling - BitDeer Line - I	119.74			
		-	-	220kV Jigmeling - BitDeer Line - I 220kV Jigmeling - BitDeer Line - II	171.78 155.08			
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	382.91			
2		-	-	400kV Jigmeling - Alipurduar Line - I	120.73			
2		-	-	400kV Jigmeling - Alipurduar Line - II	120.00			
		-	-	80MVA, 220/132kV ICT - I (HV)	-28.54			
		-	-	80MVA, 220/132kV ICT - II (HV) 132kV MHP - Yurmo Line - II	-28.16 69.92			
		•	-	132kV MHP - Tintibi Line	83.69			
		-	-	132kV Gelephu - Salakati Line	-23.44			
		T-4-1	420.25	Auxiliary Consumption & Transformation				
		Total	429.35	Losses at Generator end	-0.23%			
		Unit- I	141.50	400kV PHP II - Jigmeling -I	140.30			
		Unit- II			139.40	Unit-V taken shutdown for runner inspectio Unit-IV & VI on Standby. 400kV PHP II - Alipurduar- I not in Service		
		Unit- III Unit- IV	158.60	400kV PHP II - Alipurduar -I 400kV PHP II - Alipurduar -II	0.00 190.10			
3	6 x 170MW PHP-II	Unit- IV Unit- V	0.00	-	190.10			
		Unit- VI	0.00	<u> </u>			less than the capacity due to	
		Total	470.18	Auxiliary Consumption & Transformation	0.08%	decreasing inflow		
				Losses at Generator end				
		Unit- I	87.28	220kV CHP - Birpara Line - I	-6.86			
		Unit- II Unit- III		220kV CHP - Birpara Line - II 220kV CHP - Gedu	-6.95 58.57			
		Unit- IV		220kV CHP - Gedu 220kV CHP - Jamjee - I	99.91	Generating less than the capacity due to les		
		-	-	220kV CHP - Jamjee - II	99.17	Generating ic	inflow.	
4	4 x 84MW CHP	-	-	220kV CHP - Jamjee - III	95.76	All Units and Feeders in service		
		-	-	220kV Malbase - Birpara Line	-15.00			
		-	-	66kV CHP - Gedu Line	7.88			
		Total	349.58	Auxiliary Consumption & Transformation	0.60%			
		Unit- I	12.07	Losses at Generator end 220kV BHP - Semtokha Line	56.20			
5	2 x 12MW BHP	Unit- II	12.00		28.62	Generating less than its capacity due to less inflow.		
	(U/S) 2 x 20MW BHP (L/S)	Total	24.07	220kV BHP - Tsirang Line	-20.02			
6		Unit- I	20.89	5MVA, 66/11kV TFR	0.68			
		Unit- II	21.10		5.77			
		Total	41.99	Auxiliary Consumption & Transformation	0.88%			
		Unit-I	0.00	Losses at Generator end 220kV DHP - Tsirang Line	0.00	T 1 DI	. 01 . 1 . 6 . 10 27 1	
	2 x 63MW DHP	Unit-II		220kV DHF - Isliang Line 220kV DHP - Dagapela Line	0.00	(09.10.2025) due to seepage in HRC . 220kV_DHP-TSI line on Standby due to		
_		-	-	220kV BitDeer - Dagapela Line	50.87			
7		-	-	5MVA, 220/33kV TFR	0.00			
		Total	0.00	Auxiliary Consumption & Transformation	0.00%			
				Losses at Generator end				
	4 x 15MW KHP	Unit- I		132kV KHP - Nangkhor Line	27.95	Unit I on standby. Generating less than its		
		Unit-II Unit- III		132kV KHP - Kilikhar Line 5MVA, 132/11kV TFR	20.69			
8		Unit- III Unit- IV		132kV Motanga - Rangia Line	22.00			
				Auxiliary Consumption & Transformation		All Units and Feeders in Service.		
		Total	49.54	Losses at Generator end	1.15%			
		Unit-I	51.95	132kV NHP-MHP-I	51.66			
9	2 x 59MW NHP	Unit-II	28.05	132kV NHP-MHP-II	27.78			
		Total	80.00	Auxiliary Consumption & Transformation	0.70%			
				Losses at Generator end				
10	2 x 9MW SHP	Unit- I	4.80	66kV SHP-Damdhum (Samtse)	0.00	Interim measure: Evacuation is through		
		Unit- II	4.80	Auxiliary Consumption & Transformation	-	Generating le	System. ess than its capacity due to les	
		Total	9.60	Losses at Generator end	100.00%	- sucrating i	inflow.	
ote: G	eneration-Load Sumn	nary (MW) for 30-O	ct-2025 at 19					
	a_	J, 202 00-0			Total		Statistical Comparison	
Sl. No.	Region	Total Generation		Total Domestic Load	Total Export(+ve)/ Import(-ve)	(MW)	for this and last year	
				(Total Generation - Total Export)		<del>                                     </del>		
	Both Eastern &					Tt. Exp./Imp.	429.71 810.26	
1	Western	2,201.47		1,391.21	810.26		010.20	
	(Whole Bhutan)							
oto: C	eneration-Load Sumn	pary (MW) for 20 C	et-2024 et 10	•00 hrs				
ote: G	eneration-Load Sumn	iai y (19199) 10F 50-U	ct-2024, at 19	.00 III 5				
9 N	Day 1	Total C		Total Domestic Load	Total	917.62	917.62	
Sl. No.	Region	Total Generation		(Total Generation - Total Export)	Export(+ve)/	Tt.Load	917.62 1,391.21	
1	Both Eastern &	1 247 22			Import(-ve)			
				017 63				
1	Western (Whole Bhutan)	1,347.	22	917.62	429.71			
	,							
_	aily Energy (MUs) and	d Power(MW) Statis	stics for 30-Oc	rt-2025			1,347.33	
ote: D	uny Energy (Mes) un							
	Total Energy	Daily Energy Mot		ergy Import Net Energy Export	Peak Cross-	Tt. Gen.	<b>2</b> 20	
ote: D		Daily Energy Met		ergy Import and Solar) Net Energy Export	Peak Cross- border (MW)	It. Gen.	2,20	

<sup>1.</sup> The Instantaneous load balance does not tend towards zero. This could be due to the following reasons:

i) 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.

2. 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.

3. When SCADA data are unavailable for certain stations due to technical issues, required data are collected from the site.

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