

## 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 29, 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) 90.36	Remarks		
		Unit- II	110.95	400kV THP - Siliguri Line - II	0.00	Unit-IV and Unit-V on Standby.		
	6 x 170MW THP	Unit- III		400kV THP - Siliguri Line- IV	83.79			
1		Unit- IV		400kV THP - Malbase Line - III 400kV Malbase - Siliguri Line	365.92 25.50			
		Unit- V Unit- VI	140.31		25.50	following recent flash flood. 400kV THP -Siliguri Line - II on Standby.		
				Auxiliary Consumption & Transformation				
		Total	545.31	Losses at Generator end	0.96%			
		Unit-I	0.00		0.00			
		Unit-II		400kV MHP - Jigmeling Line - II	91.52	Unit -I under shutdown for runner inspect		
		Unit-III Unit-IV	140.20	400kV MHP - Jigmeling Line - III 400kV MHP - Jigmeling Line - IV	95.17 94.62			
	4 x 180MW MHP	-	143.20	220kV Jigmeling - BitDeer Line - I	39.09			
		-	-	220kV Jigmeling - BitDeer Line - II	58.40	Generating less than its capacity due to less		
		-	-	500MVA, 400/220kV ICT at Jigmeling (HV)	388.73	Inflow.		
2		-	-	400kV Jigmeling - Alipurduar Line - I 400kV Jigmeling - Alipurduar Line - II	109.09	400kV MHP-JIG Line - I kept on Standby a other three lines can cater the load.		
		-		80MVA, 220/132kV ICT - I (HV)	107.64 -31.65	other three lines can cater the load.		
		-		80MVA, 220/132kV ICT - II (HV)	-31.03			
		-	-	132kV MHP - Yurmo Line - II	65.02			
				132kV MHP - Tintibi Line	75.78			
		-	-	132kV Gelephu - Salakati Line	20.94			
		Total	370.23	Auxiliary Consumption & Transformation	0.72%			
		Unit- I		Losses at Generator end 400kV PHP II - Jigmeling -I	164.20			
	6 x 170MW PHP-II	Unit- II		400kV PHP II - Jigmeling -I	164.30	Unit-V taken Shutdown for runner inspec		
		Unit- III	172.00	400kV PHP II - Alipurduar -I	0.00	Unit-IV & VI on Standby		
3		Unit- IV	0.00	400kV PHP II - Alipurduar -II	190.00	400kV PHP II - Alipurduar- I not in Service		
		Unit- V	0.00		-	Generating less than its capacity due to		
		Unit- VI	0.00		-	decreasing Inflow.		
		Total	519.00	Auxiliary Consumption & Transformation Losses at Generator end	0.10%			
		Unit- I	62.62		-31.91			
		Unit- II	57.56		-31.67			
		Unit- III		220kV CHP - Gedu	23.92			
		Unit- IV	59.67		91.99			
4	4 x 84MW CHP	-	-	220kV CHP - Jamjee - II 220kV CHP - Jamjee - III	92.00 88.04	Generating less than its capacity due to less Inflow.		
		-		220kV Malbase - Birpara Line	-28.40	All Units & Feeders in Service.		
		_	-	66kV CHP - Gedu Line	6.75			
		Total	239.53	Auxiliary Consumption & Transformation	0.17%			
				Losses at Generator end				
5	2 x 12MW BHP (U/S)	Unit- I	10.00		46.80			
		Unit- II Total	19.00	66kV BHP - Lobeysa Line 220kV BHP - Tsirang Line	23.12 -21.29	Generating less than its capacity due to less Inflow.		
6	2 x 20MW BHP (L/S)	Unit- I		5MVA, 66/11kV TFR	0.32			
		Unit- II		30MVA ICT, 220/66kV (HV)	6.05			
		Total	30.40	Auxiliary Consumption & Transformation	0.91%			
				Losses at Generator end		Total Plant Shutdown from 10:27 hrs		
		Unit-I		220kV DHP - Tsirang Line 220kV DHP - Dagapela Line	0.00	(09.10.2025) due to seepage in HRC.		
		Unit-II	0.00	220kV BitDeer - Dagapela Line	0.00 50.35	220kV_DHP-TSI line on Standby due to		
7	2 x 63MW DHP	-	-	5MVA, 220/33kV TFR	0.00	unavaliability of DHP Units.		
		m . 1	0.00	Auxiliary Consumption & Transformation	0.00%	220kV DHP-DAG line is feeding DHP auxili consumption.		
		Total		Losses at Generator end		-		
	4 x 15MW KHP	Unit- I		132kV KHP - Nangkhor Line	33.50			
		Unit-II Unit- III		132kV KHP - Kilikhar Line 5MVA, 132/11kV TFR	16.04 0.28	Generating less than its capacity due to les Inflow.  All Units and Feeders in Service.		
8		Unit- IV		132kV Motanga - Rangia Line	-20.94			
				Auxiliary Consumption & Transformation				
		Total	50.03	Losses at Generator end	0.43%			
		Unit-I	15.01	132kV NHP-MHP-I	14.83			
9	2 x 59MW NHP	Unit-II		132kV NHP-MHP-II	39.70	Generating less than its capacity due to less Inflow		
		Total	55.00	Auxiliary Consumption & Transformation	0.85%	All Units and Feeders in Service.		
				Losses at Generator end 66kV SHP-Damdhum (Samtse)				
10		Unit- I Unit- II	3.00		0.00	Interim measure: Evacuation is through 33k System.		
	2 x 9MW SHP			Auxiliary Consumption & Transformation		Generating less than its capacity due to less		
		Total	6.00	Losses at Generator end	100.00%	inflow.		
		Inverter-1	1.04	33kV SSP-Wangdue	2.01			
	17.38 MWp Sephu (Solar)	Inverter-2	1.04	33kV SSP-Trongsa	2.09			
11		Inverter-3 Inverter-4	1.04		-	All Inverters and Feeders in Service.		
				Auxiliary Consumption & Transformation				
		Total	4.15	Losses at Generator end	1.33%			
		Note: Generation-Lo	oad Summar	y (MW) for 29-Oct-25 at 09:00 hrs		09:00 hrs Statistical Comparison		
				Total Domestic Load	Total	(MW) for this and last year		
Sl. No.	Region  Both Eastern &	Total Genera	ation	Total Domestic Load	Export(+ve)/			
				(Total Generation - Total Export)	Import(-ve)	Tt. Exp./Imp. 549.67 514.40		
		1,838.65			514.40	514.40		
1	Western			1,324.25				
	(Whole Bhutan)							
		Note: Generation-Lo	oad Summar	y (MW) for 29-Oct-24 at 09:00 hrs		Tt. Load 863.59		
		- Committee Court Continuary			Total			
l. No.	Region	Total Generation		Total Domestic Load	Export(+ve)/			
				(Total Generation - Total Export)	Import(-ve)			
	Both Eastern &					Tt. Gen. 1,404.2		
1	Western	1,404.2	6	863.59	540.67			
1	(Whole Bhutan)					■Y-2024 ■Y-2025		

Report				D-GENERATION BALANCE REPORT & ENER		Time	Load	
Report Details	October 29, 2025	Time 19:00:00		National Coincidental Peak Load (MW)	Date 17-Oct-25	Time 18:37:35	Load 1,330.52	
Sl. No.		Unit	MW	Transmission Lines and Elements	Load (MW)	10107100	Remarks	
<i>J</i> 1. 1 (0.	Trydropower Flanc	Unit- I		400kV THP - Siliguri Line - I	95.94		TO THE TOTAL OF TH	
1		Unit- II	140.89	400kV THP - Siliguri Line - II	0.00	Unit-IV & V on Standby. Not able to generat full capacity due to ongoing emergency situat		
	6 x 170MW THP	Unit- III		400kV THP - Siliguri Line - IV	88.95			
		Unit- IV	0.00		385.19			
		Unit- V Unit- VI	0.00 140.24	400kV Malbase - Siliguri Line	31.00			
				Auxiliary Consumption & Transformation	-	400kV III _Singui-ii on Standby		
		Total	575.29	Losses at Generator end	0.91%			
		Unit-I	54.81	400kV MHP - Jigmeling Line - I	0.00			
	4 x 180MW MHP	Unit-II	140.31		89.57	Generating less than its capacity due to less infilow.  400kV MHP-JIG Line I kept on Standby as oth three lines can cater the load.		
		Unit-III Unit-IV		400kV MHP - Jigmeling Line - III 400kV MHP - Jigmeling Line - IV	92.96 92.48			
		Unit-IV	80.49	220kV Jigmeling - BitDeer Line - I	37.83			
		-	-	220kV Jigmeling - BitDeer Line - II	0.00			
			-	500MVA, 400/220kV ICT at Jigmeling (HV)	400.73			
2		-	-	400kV Jigmeling - Alipurduar Line - I	81.46			
		-	-	400kV Jigmeling - Alipurduar Line - II	81.46			
		_	<del></del>	80MVA, 220/132kV ICT - I (HV) 80MVA, 220/132kV ICT - II (HV)	-29.24 -28.90			
		-	-	132kV MHP - Yurmo Line - II	68.34			
				132kV MHP - Tintibi Line	80.72			
		-	-	132kV Gelephu - Salakati Line	-25.82			
		Total	360.86	Auxiliary Consumption & Transformation	0.36%			
				Losses at Generator end				
		Unit- I Unit- II	150.00 150.00		146.87 146.44			
		Unit- III	149.60		0.00		shutdown for runner inspection	
2	( 150) (IV DVID II	Unit- IV		400kV PHP II - Alipurduar -II	154.00			
3	6 x 170MW PHP-II	Unit- V	0.00	-	-			
		Unit- VI	0.00		-			
		Total	449.60	Auxiliary Consumption & Transformation	0.51%			
		Unit- I	60.61	Losses at Generator end 220kV CHP - Birpara Line - I	-30.97			
	4 x 84MW CHP	Unit- II		220kV CHP - Birpara Line - II	-30.78			
		Unit- III		220kV CHP - Gedu	5.16			
		Unit- IV	59.75	220kV CHP - Jamjee - I	98.81	Generating less than the capacity due to les inflow. All Units and Feeders in service		
4		-	-	220kV CHP - Jamjee - II	97.80			
		-	-	220kV CHP - Jamjee - III	94.82			
		-	-	220kV Malbase - Birpara Line 66kV CHP - Gedu Line	-7.20 4.77			
		-	-	Auxiliary Consumption & Transformation				
		Total	239.83	Losses at Generator end	0.09%			
	2 x 12MW BHP	Unit- I	8.28		57.90			
5	(U/S)	Unit- II		66kV BHP - Lobeysa Line	26.83	Generating less than its capacity due to less inflow.  All Units and Feeders in Service.		
	2 x 20MW BHP (L/S)	Total	16.58	220kV BHP - Tsirang Line	-34.82			
		Unit- I	16.44 16.98		0.32 6.77			
		Unit- II		Auxiliary Consumption & Transformation				
		Total	33.42	Losses at Generator end	-0.46%			
	2 x 63MW DHP	Unit-I	0.00		0.00	(00.10.2025) due to connego in HPC		
		Unit-II	0.00		0.00	220KV_DHP-1SI line on Standby due to unavaliability of DHP Units		
7		-	-	220kV BitDeer - Dagapela Line 5MVA, 220/33kV TFR	51.05			
		-	-	Auxiliary Consumption & Transformation	0.00	220kV DHP-DAG line is feeding DHP auxilia consumption.		
		Total	0.00	Losses at Generator end	0.00%			
		Unit- I	0.00	132kV KHP - Nangkhor Line	26.98			
	4 x 15MW KHP	Unit-II		132kV KHP - Kilikhar Line	20.73	Generating less than its capacity due to less		
8		Unit- III		5MVA, 132/11kV TFR	0.38			
٥		Unit- IV	16.20	132kV Motanga - Rangia Line	25.00			
		Total	48.55	Auxiliary Consumption & Transformation	0.95%			
				Losses at Generator end				
		Unit-I	40.01	132kV NHP-MHP-I	39.71	Generating less than its capacity due to le		
9	2 x 59MW NHP	Unit-II	25.04	132kV NHP-MHP-II  Auxiliary Consumption & Transformation	24.80	inflow.  All Units and Feeders in Service.		
		Total	65.05	Losses at Generator end	0.83%			
	2 x 9MW SHP	Unit- I	4.80	66kV SHP-Damdhum (Samtse)	0.00	System.		
10		Unit- II	4.80	-	-			
	OIII	Total	9.60	Auxiliary Consumption & Transformation	100.00%	Generating le	ess than its capacity due to less	
				Losses at Generator end		inflow.		
Note: G	eneration-Load Sumn	nary (MW) for 29-O	ct-2025 at 19:	.00 hrs		19:00 hrs	Statistical Comparison	
				Total Domestic Load	Total		for this and last year	
Sl. No.	Region	Total Generation		(Total Generation - Total Export)	Export(+ve)/			
					Import(-ve)	Ti C C	495.18	
	Both Eastern &					Tt. Exp./Imp.	463.04	
1	Western (Whole Bhutan)	1,798.78		1,335.74	463.04			
	(whole brittan)							
Note: G	eneration-Load Sumn	nary (MW) for 29-O	ct-2024, at 19	:00 hrs				
		Region Total Generation		Total Domestic I	Total	7t.Load 915.47		
Sl. No.	Region			Total Domestic Load (Total Generation - Total Export)	Export(+ve)/			
1		1,410.65		(Total Generation - Total Export)	Import(-ve)		<u>1,335.74</u>	
	Both Eastern &							
	Western			915.47	495.18			
	(Whole Bhutan)							
Note: D	aily Energy (MUs) and	l Power(MW) Statis	stics for 29-Oc	:t-2025				
		() Grade		ergy Import	Peak Cross-	Tt. Gen.	1,410.65 1,798	
Sl. No.	Total Energy Generation	Daily Energy Met		and Solar) Net Energy Export	border (MW)		1,126	
	Ochciation		(22/22		DOTACI (19177)			
1	43.13	30.77		0.00 12.35	629.99		■ Y-2024 ■ Y-2025	

<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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