



भारत सरकार/ Government of India
विद्युत मंत्रालय/ Ministry of Power
केन्द्रीय विद्युत प्राधिकरण/ Central Electricity Authority
आर. ए. प्रभाग/ Regulatory Affairs Division

सेवा में /To

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2. Secretary, Ministry of New & Renewable Energy, Atal Akshay Urja Bhawan, CGO Complex, Lodhi Road, New Delhi- 110003.
3. Secretary, CERC, 7th Floor, Tower B, World Trade Centre, Nauroji Nagar, New Delhi- 110029.

विषय: अगस्त, 2024 माह की मार्केट मॉनिटरिंग रिपोर्ट।

Subject: Monthly Market Monitoring Report for the month of August, 2024.

महोदय/ Sir,

अगस्त, 2024 माह के लिए केंद्रीय विद्युत प्राधिकरण द्वारा तैयार की गई मासिक मार्केट मॉनिटरिंग रिपोर्ट (MMMR) की एक प्रति सूचना और अवलोकन के लिए संलग्न है। A copy of the monthly market monitoring report (MMMR) prepared by Central Electricity Authority for the month of August, 2024 is enclosed herewith for kind information and perusal.

अगस्त, 2024 माह के दौरान मार्केट के संचालन की मुख्य विशेषताएं इस प्रकार रही। Key highlights of the market operation during August, 2024 are as under:

- (i) अगस्त, 2024 माह में देश में कुल 143,834 MU विद्युत का कारोबार किया गया, जिसमें से 71,902 MU का कारोबार अंतर्राज्यीय पारेषण प्रणाली (Inter State Transmission System) के माध्यम से किया गया था और शेष राज्य नियंत्रित उत्पादन स्टेशनों से अंतराराज्यीय पारेषण प्रणाली (Intra State Transmissions System) के माध्यम से किया गया।
In the month of August, 2024 a total of 143,834 MU of electricity was transacted in the country out of which 71,902 MU was transacted through ISTS, and the remaining through state controlled generating stations through Intra State Transmissions System.
- (ii) अल्पावधि मार्केट के अंतर्गत कुल 23,698 MU का कारोबार किया गया था, जिसमें से 11,239 MU पावर एक्सचेंजों के माध्यम से कारोबार किया गया और शेष द्विपक्षीय कारोबार और विचलन (deviations) के रूप में हुआ। इस प्रकार अल्पावधि कारोबार, अगस्त, 2024 माह में ट्रेड की गई विद्युत की कुल मात्रा का 16.48 % था और 7.81% पावर एक्सचेंजों के माध्यम से रहा।

A total of 23,698 MU was transacted under Short Term Market, out of which 11,239 MU was transacted through Power Exchanges and remaining happened as bilateral transactions & deviations. Thus, the total short term trade in August, 2024 was 16.48 % of total volume of electricity traded in August, 2024 and 7.81 % was through Power Exchanges.

- (iii) यदि हम अंतर्राज्यीय पारेषण प्रणाली (ISTS) के माध्यम से आपूर्ति की गई विद्युत के संबंध में इन कारोबारों की तुलना करते हैं, तो अल्पावधि कारोबार अंतर्राज्यीय पारेषण प्रणाली (ISTS) कारोबार का लगभग 32.96 % रहा, जिसमें से पावर एक्सचेंजों के माध्यम से कारोबार 15.63 % रहा।

If we compare these transactions with respect to the electricity supplied through ISTS, the short term transactions constitutes about 32.96 % of ISTS transactions, out of which transaction through the power exchanges constitutes 15.63%.

भवदीय/ Yours faithfully,

(विक्रम सिंह / Vikram Singh)

मुख्य अभियंता (आर.ए.)/ Chief Engineer (RA)

प्रतिलिपि/ Copy for information, through email, to:

1. O/o Chairperson, CEA
2. O/o Member (E&C), CEA
3. Secretary (All SERCs and JERCs)
4. CMD, Grid Controller of India Limited (GRID-INDIA), B-9 (1st Floor), Qutab Institutional Area, Katwaria Sarai, New Delhi -110016.
5. CMD, Indian Energy Exchange (IEX), 9th Floor, Max Towers, Sector 16B, Noida-201301.
6. MD & CEO, Power Exchange India Limited (PXIL), Sumer Plaza, 9th floor, Unit no - 901, Marol Maroshi Road, Andheri (East), Mumbai-400 059.
7. COO, Hindustan Power Exchange Limited (HPX), World Trade Tower, 8th Floor, Sector 16, Noida, Uttar Pradesh – 201301.

CEA website (<https://cea.nic.in/market-monitoring-report/?lang=en>)



सत्यमेव जयते

मासिक मार्केट मॉनिटरिंग रिपोर्ट - अगस्त, 2024

Monthly Market Monitoring Report

August, 2024



भारत सरकार/ Government of India
विद्युत मंत्रालय/ Ministry of Power
केन्द्रीय विद्युत प्राधिकरण/ Central Electricity Authority
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**अगस्त, 2024 की मासिक मार्केट
मॉनिटरिंग रिपोर्ट का सारांश**

**Summary of Market Monitoring Report
For the month of August, 2024**

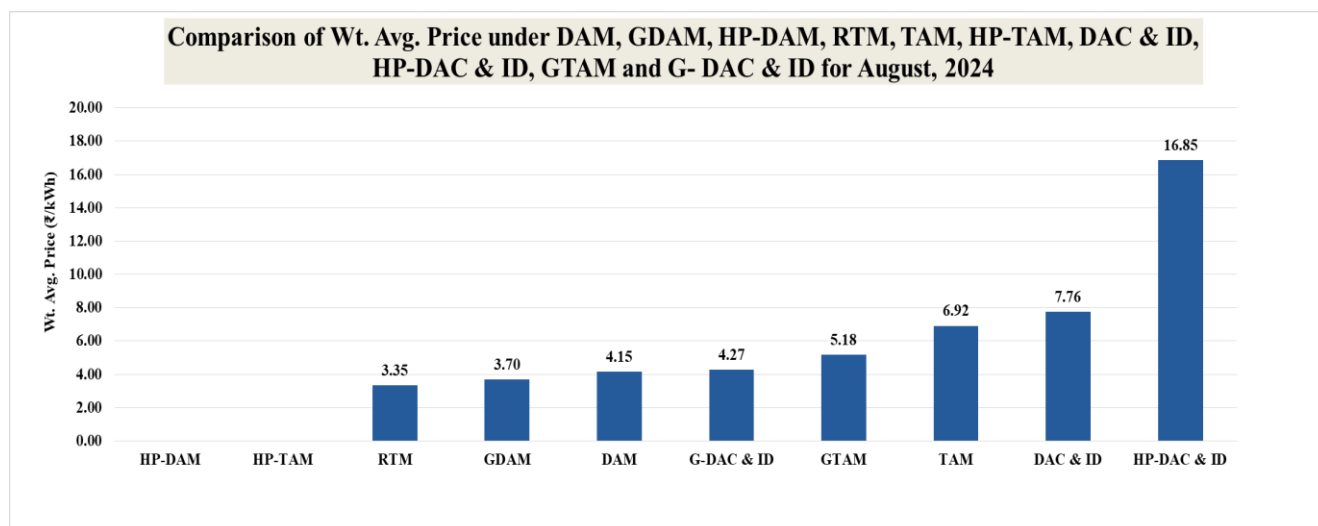
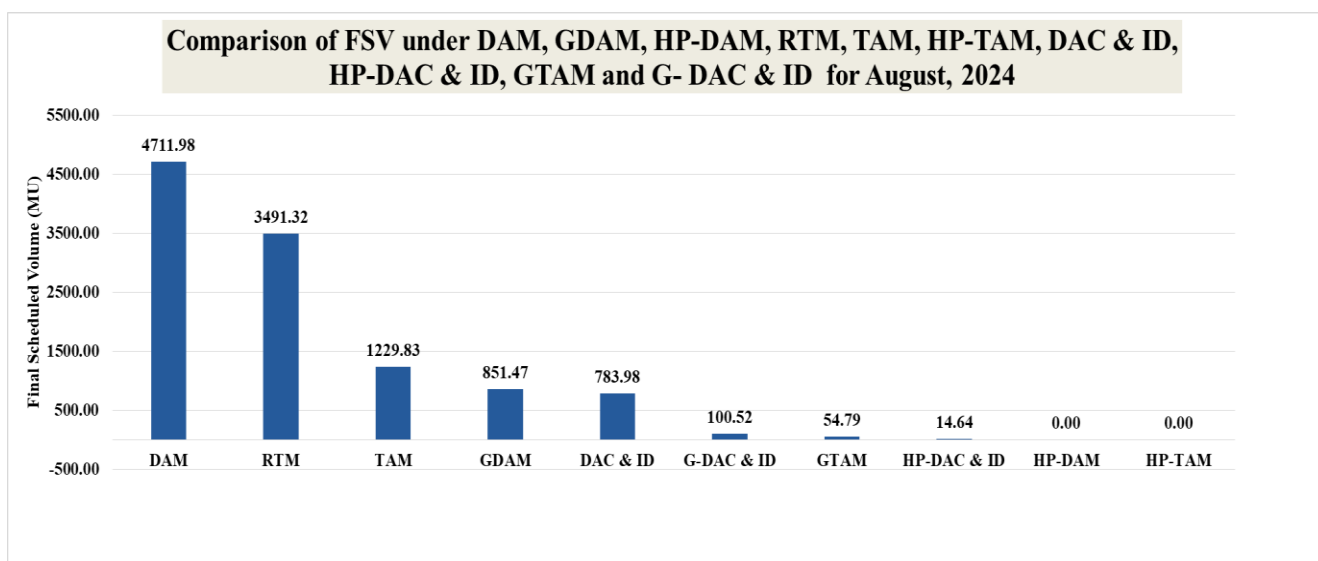
अगस्त, 2024 माह के लिए सारांश Summary for Month: August, 2024

भारत में विद्युत एक्सचेंजों पर विद्युत के व्यापार का सारांश

Summary of Electricity Transactions on Power Exchanges in India

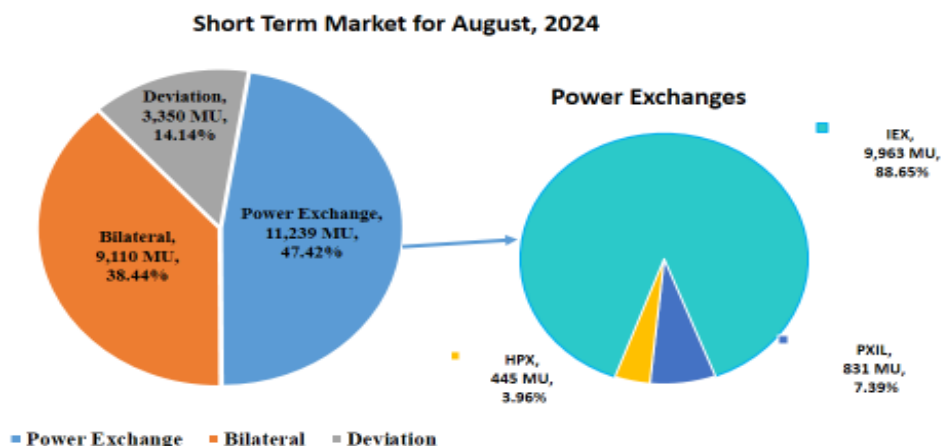
- अगस्त, 2024 के दौरान विद्युत एक्सचेंजों (यानी आईईएक्स, पीएक्सआईएल और एचपीएक्स) के माध्यम से कुल **11,239 MU** विद्युत का कारोबार किया गया। विद्युत की यह मात्रा डिलीवरी की तारीख के आधार पर है और इसमें DAM, GDAM, HP-DAM, RTM, TAM, HP-TAM, DAC & ID, HP-DAC & ID, GTAM और G-DAC & ID मार्केट खंडों के माध्यम से कारोबार शामिल हैं।

A total volume of **11,239 MU** electricity was transacted through power exchanges i.e. IEX, PXIL & HPX, during the month of August, 2024. This volume of electricity is on delivery date basis and includes transactions through DAM, GDAM, HP-DAM, RTM, TAM, HP-TAM, DAC & ID, HP-DAC & ID, GTAM and G-DAC & ID market segments.



- द्विपक्षीय व्यापार के तहत कुल **9,110 MU** विद्युत का कारोबार किया गया और **3,350 MU** को विचलन के रूप में लेनदेन किया गया। इस प्रकार कुल **23,698 MU** विद्युत का कारोबार अल्पावधि व्यापार के रूप में किया गया था। अगस्त, 2024 के महीने में देश में कुल **143,834 MU** विद्युत की आपूर्ति की गई थी, इस प्रकार अगस्त, 2024 माह में कारोबार की गई विद्युत की कुल मात्रा में अल्पावधि बाजार का हिस्सा **16.48 %** था।

Under the Bilateral trade, a total of **9,110 MU** of electricity was transacted and **3,350 MU** was transacted as deviation from schedule. Thus, a total of **23,698 MU** of electricity was transacted as short term trade (Power Exchange + Bilateral trade + deviation from schedule). In August, 2024, a total of **143,834 MU** of electricity was supplied in the country, thus, the share of short term market in the total volume of electricity supplied in August, 2024 was **16.48 %**.



- अगस्त, 2024 के दौरान संचरण जाम की कुल मात्रा **37.32 MU** थी, जो की विद्युत एक्सचेंजों में कारोबार की गई विद्युत की कुल मात्रा का केवल **0.33 %** है और अगस्त, 2024 के महीने के दौरान आपूर्ति की गई कुल ऊर्जा का **0.03 %** है।

The total volume affected by the transmission congestion during the month of August, 2024 was **37.32 MU** which is only **0.33 %** of the total volume of electricity transacted in the power exchanges and **0.03 %** of total energy supplied during the month of August, 2024.

DAM में **6** दिन अर्थात् दिनांक 1 से 6 अगस्त, 2024, GDAM में **5** दिन अर्थात् दिनांक 2 से 6 अगस्त, 2024, RTM में **14** दिन अर्थात् दिनांक 1 से 10, 14, 16, 25 एवं 26 अगस्त, 2024 और DAC & ID में **1** दिन अर्थात् दिनांक 1 अगस्त, 2024 को संचरण जाम देखा गया। जबकि HP-DAM, TAM, HP-TAM, HP-DAC & ID, GTAM और G-DAC & ID में कोई संचरण जाम नहीं देखा गया। अगस्त, 2024 माह के महीने में रिपोर्ट की गई वास्तविक समय में विद्युत कटौती की कुल मात्रा केवल **45.59 MU** थी।

Transmission congestion was observed in DAM on **6** days i.e. 01st to 06th August, 2024, in GDAM on **5** days i.e. 02nd to 06th August, 2024, in RTM on **14** days i.e. 01st to 10th, 14th, 16th, 25th & 26th August, 2024 and in DAC & ID on **1** day i.e. 01st August, 2024. Whereas, there was no impact of congestion in HP-DAM, TAM, HP-TAM, HP-DAC & ID, GTAM and G-DAC & ID. The total volume of real time curtailment reported in the month of August, 2024 was only **45.59 MU**.

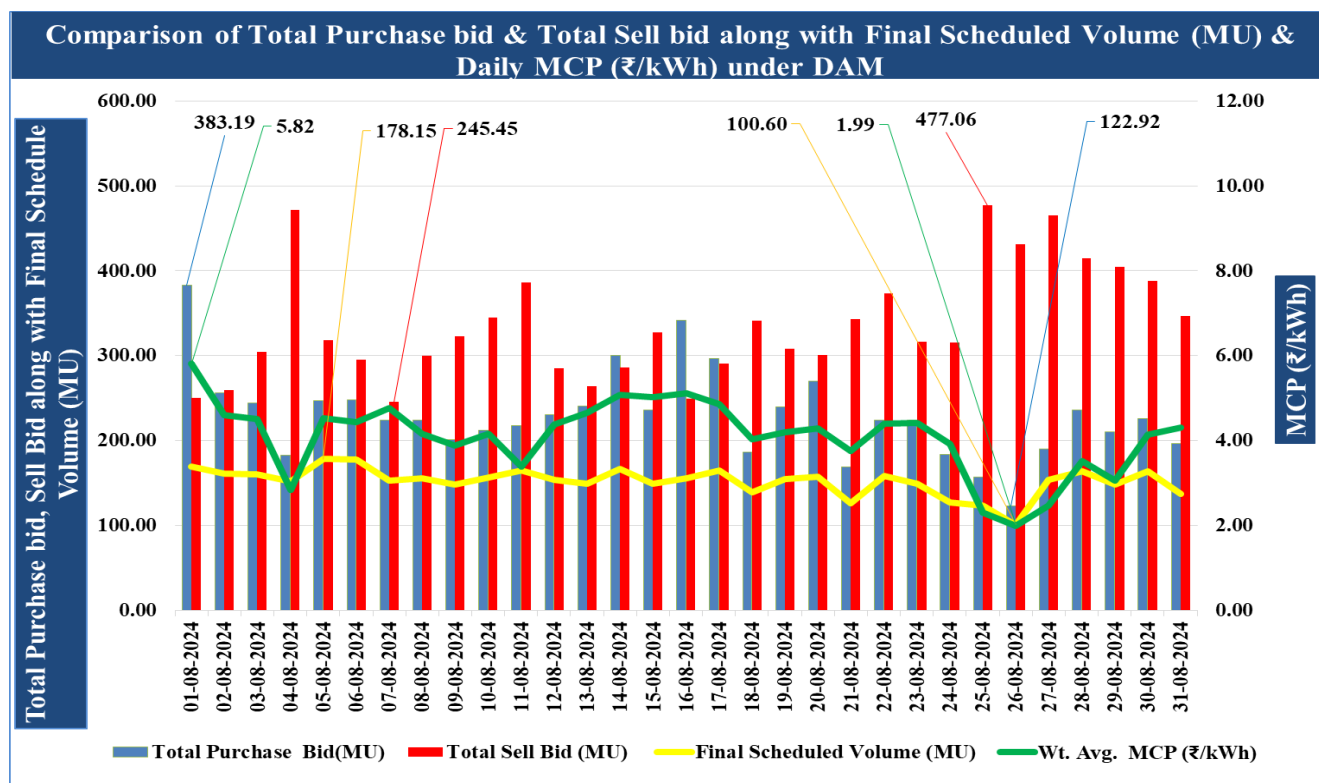
- अगस्त, 2024 माह के दौरान अंतर्राज्यीय पारेषण प्रणाली (**ISTS**) में निर्धारित अनुसूचित विद्युत की कुल मात्रा **71,902 MU** थी। अगस्त, 2024 के महीने में अल्पावधि बाजार में विद्युत का लेन-देन अंतर्राज्यीय पारेषण प्रणाली (**ISTS**) के माध्यम से अनुसूचित की गई कुल विद्युत की मात्रा का **32.96 %** रहा।

The total volume of electricity scheduled through ISTS during the month of August, 2024 was **71,902 MU**. The total volume of electricity transacted in the short term market was **32.96 %** of total volume schedule at ISTS in August, 2024.

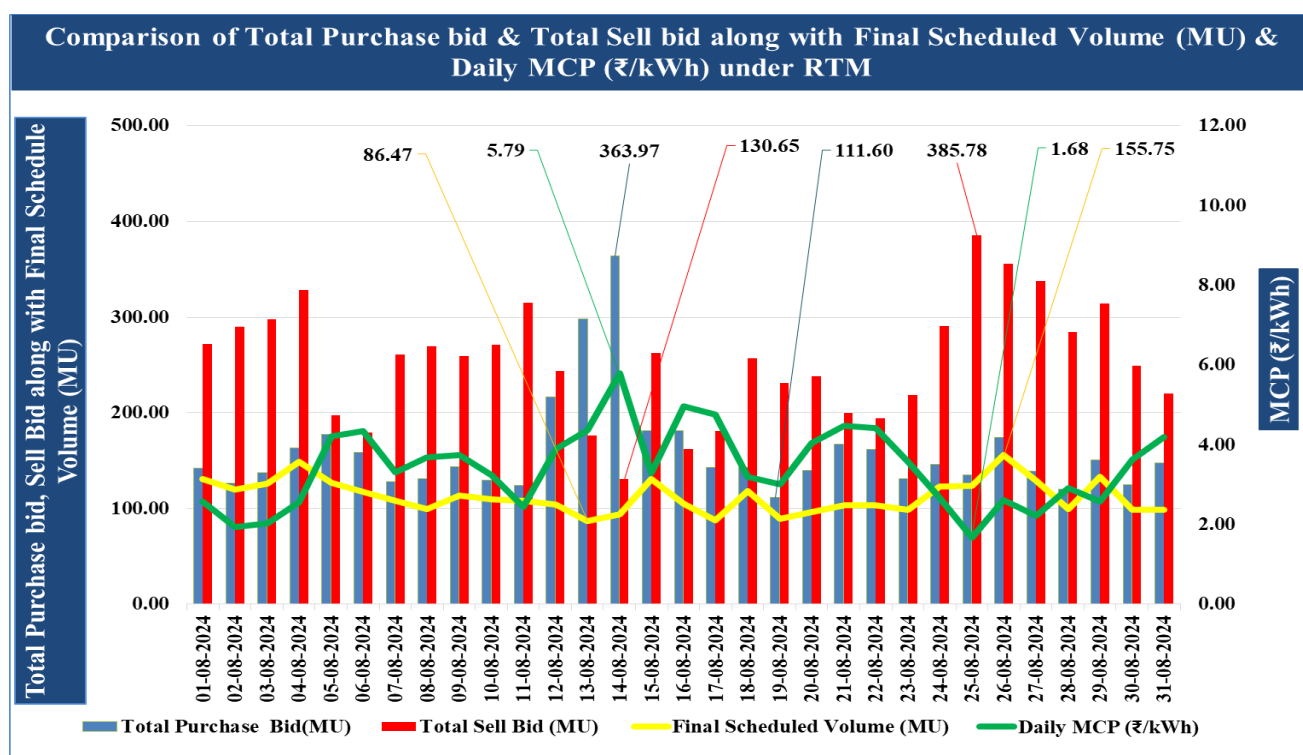
- अगस्त, 2024 माह के दौरान DAM और RTM में विद्युत की खरीद और बिक्री बोलियों, अंतिम अनुसूचित मात्रा और दैनिक औसत MCP की भिन्नता निम्नलिखित चित्रों में दर्शाई गई है:

The variation of Purchase and Sell bids, Final Scheduled Volume and Daily Wt. Avg. MCP under DAM and RTM during the month of August, 2024 are shown in following figures:

DAM Volume



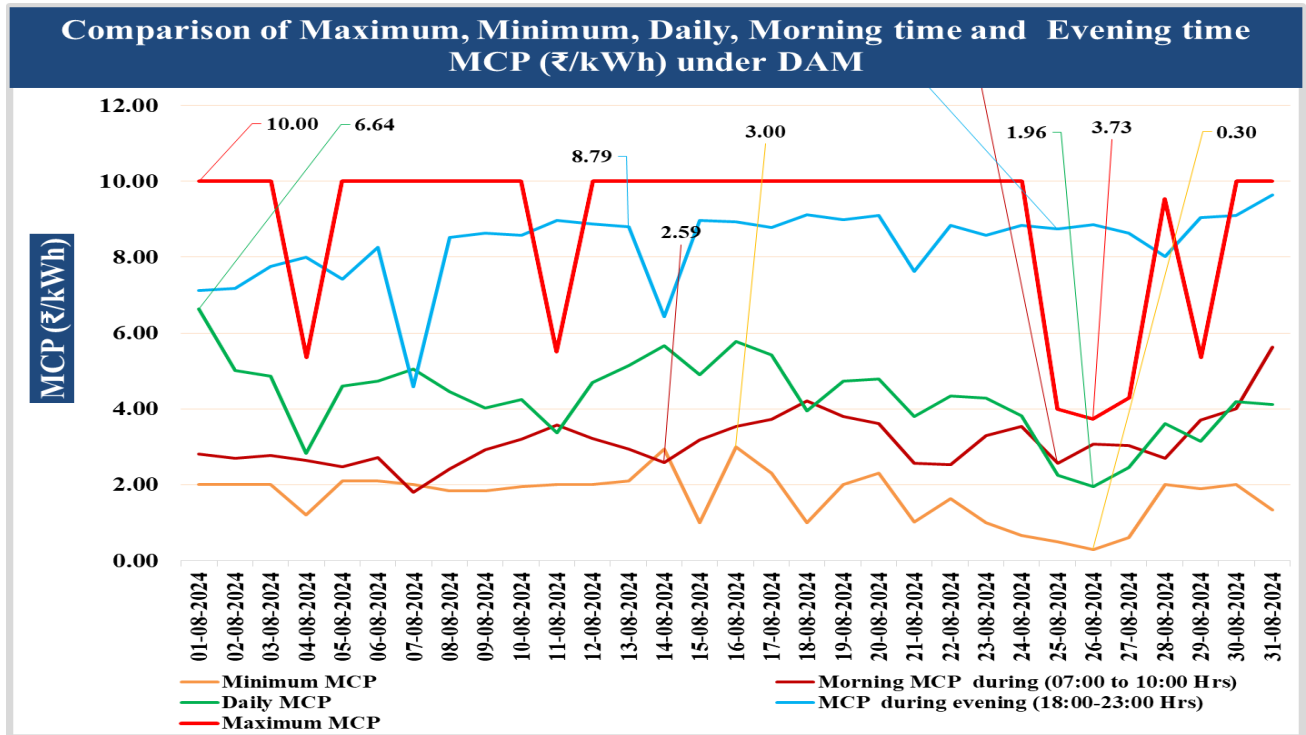
RTM Volume



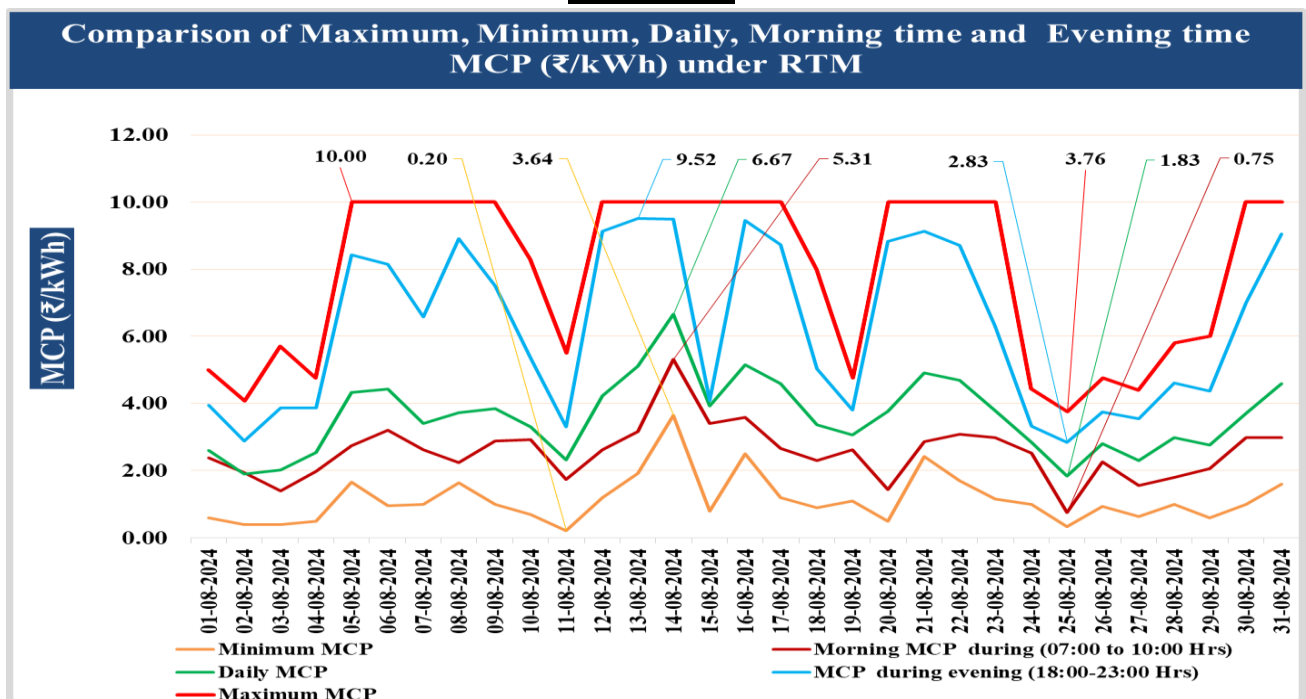
- अगस्त, 2024 माह के दौरान DAM और RTM में अधिकतम, न्यूनतम, दैनिक, सुबह और शाम के समय MCP की भिन्नता निम्नलिखित चित्रों में दिखाई गई है:

The variation of Maximum, Minimum, Daily, Morning and Evening time MCPs under DAM and RTM during the month of August, 2024 are shown in following figures:

DAM Prices



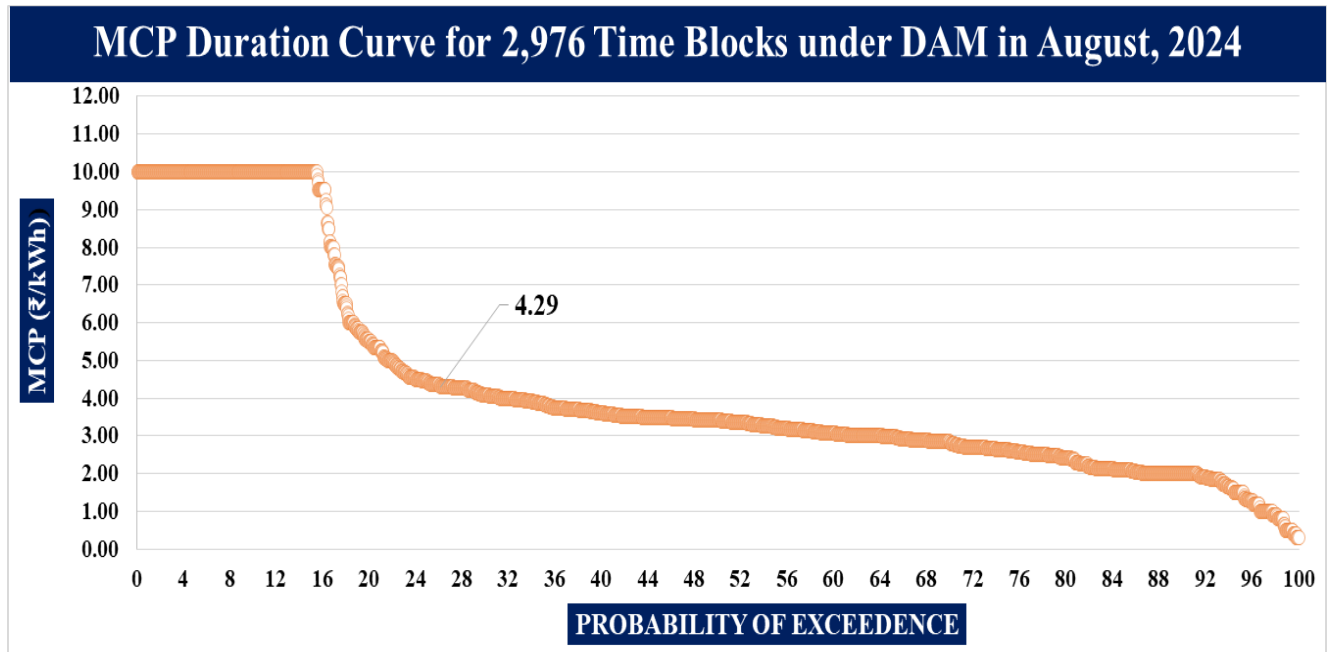
RTM Prices



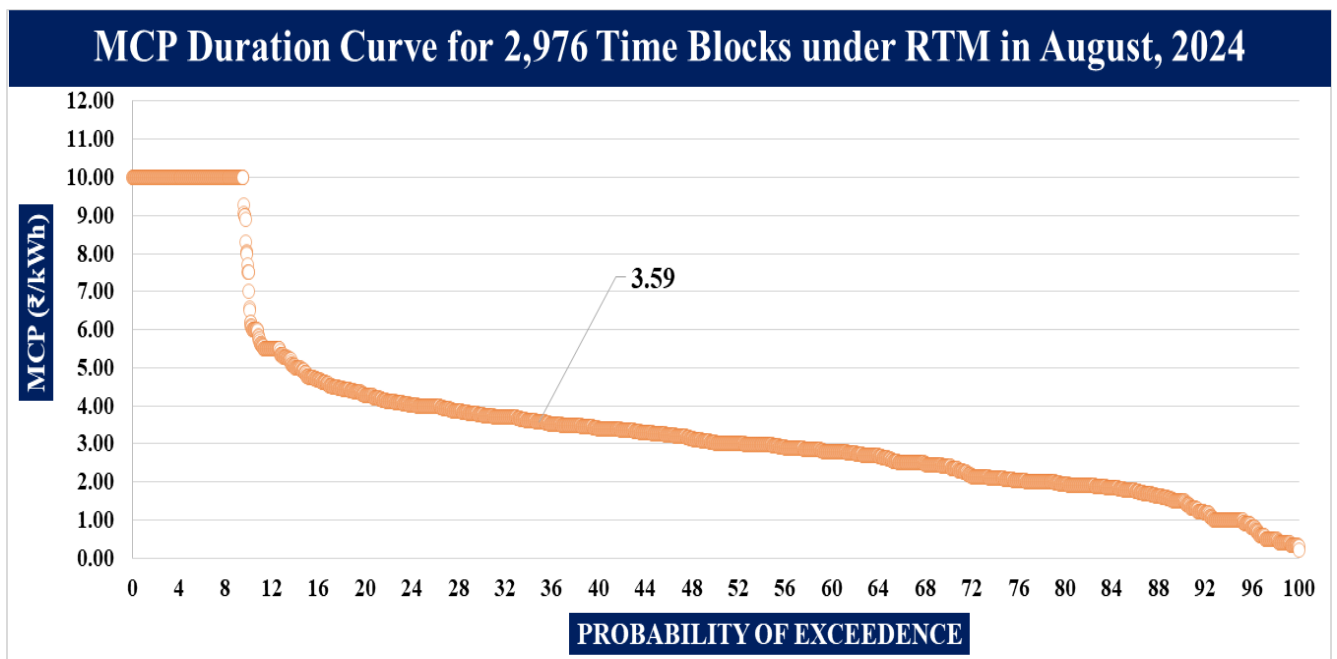
- अगस्त, 2024 के महीने के दौरान DAM और RTM के तहत समय ब्लॉकवार MCP अवधि वक्र निम्नलिखित चित्रों में में दिखाए गए हैं:

The Market Clearing Price duration curves for time block wise under DAM and RTM during the month of August, 2024 are shown in following figures:

DAM MCP duration curve



RTM MCP duration curve



MARKET MONITORING REPORT DETAILS

Electricity Transactions on Power Exchanges in India

1. Day Ahead Market (DAM)

The volume of electricity transacted under DAM was 4,711.98 MU at a Wt. Avg. Price of ₹ 4.15/kWh in August, 2024.

- 1.1.** The total volume of electricity transacted on the power exchanges, viz., IEX, HPX and PXIL in the Day Ahead Market (DAM) in August, 2024 was **4,711.98 MU**. The total energy supplied in the country during the month of August, 2024 was **143,834 MU**. Thus, the volume of electricity transacted on the power exchanges under DAM during August, 2024 was 3.28 % of the total energy supplied in the country. Comparing with the total volume of electricity transacted under DAM during last month July, 2024 i.e. **5,070.64 MU** which was 3.39 % of the total energy supplied (**149,652 MU**) in the country during July, 2024. Similarly, the total volume of electricity transacted under DAM during previous year i.e. August, 2023, was **3,898.02 MU** which was 2.58 % of the total energy supplied (**151,324 MU**) in the country during August, 2023.
- 1.2.** The DAM volume for August, 2024 in IEX is inclusive of Cross Border Transactions of Electricity with Nepal and Bhutan (details given at **Annexure XII**), which was **454.23 MU** (i.e. 399.21 MU sold by Nepal, 55.02 MU sold by Bhutan).
- 1.3.** The Average Market Clearing Price (MCP) on IEX during the month of August, 2024 was ₹ **4.15/kWh**, which shows of a decrease 10.56 % & 35.46 % when compared with Wt. Avg. MCP's for the month of July, 2024 and August, 2023, which were ₹ **4.64/kWh** and ₹ **6.43/kWh**, respectively. On PXIL & HPX, no transaction of electricity took place during August, 2024.
- 1.4.** The Comparison of Final Scheduled Volume (FSV) and Wt. Avg. Price of IEX, PXIL and HPX under DAM for August, 2024 vs July, 2024 and August, 2023 is shown below as **Figure-1**:

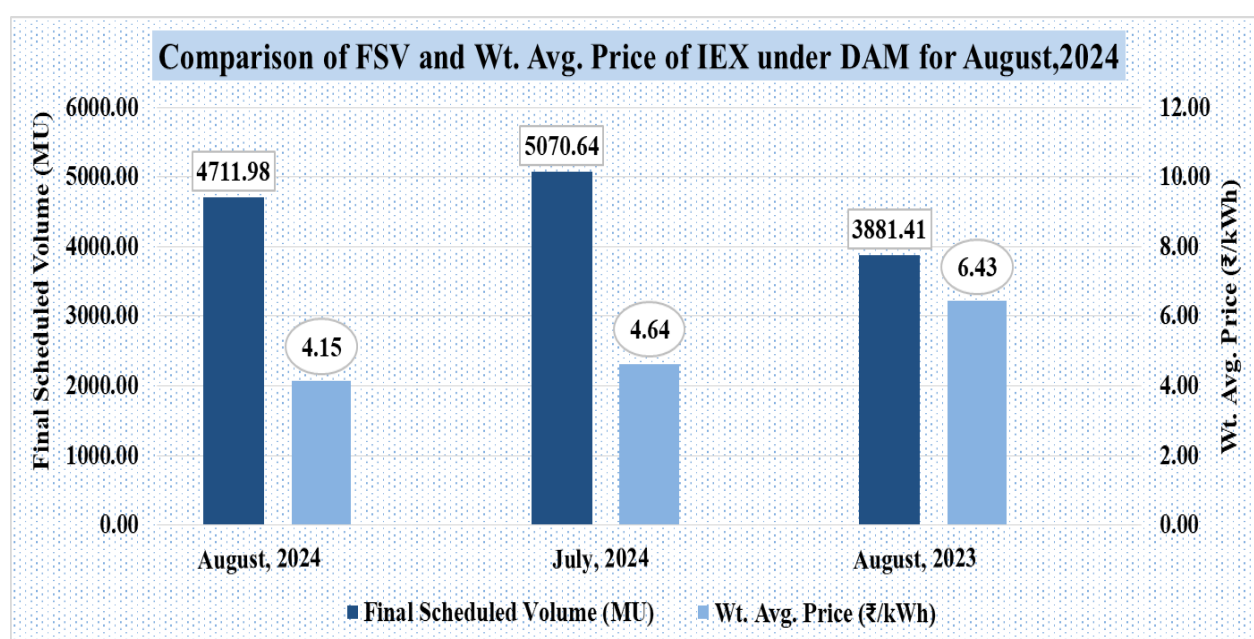


Figure-1

- 1.5.** The maximum Area Clearing Price (ACP) of ₹ 10.00/kWh in IEX was observed in all 13 regions during 461 time blocks from 1st to 3rd, 5th to 10th, 12th to 24th, 30th & 31st August, 2024. Further, in PXIL & HPX, no transaction of electricity took place during August, 2024.
- 1.6.** The minimum ACP of ₹ 0.30/kWh in IEX was observed in 13 regions during the time block 13:15 - 13:30 Hrs on 26th August, 2024. Further, in PXIL & HPX, no transaction of electricity took place during August, 2024.

2. Real Time Market (RTM)

The volume of electricity transacted under RTM was 3,491.32 MU at a Wt. Avg. Price of ₹ 3.35/kWh in August, 2024.

- 2.1. The total volume of electricity transacted on the power exchanges under Real Time Market in August, 2024 was **3,491.32 MU**, out of which **3,484.86 MU** (99.81 %) was transacted in IEX, **4.70 MU** (0.13 %) was transacted in PXIL and **1.76 MU** (0.05 %) was transacted in HPX.
- 2.2. The Comparison of Final Scheduled Volume (FSV) and Wt. Avg. Price of IEX, PXIL and HPX under RTM for August, 2024 vs July, 2024 and August, 2023 is shown below as **Figure-2, Figure-3 & Figure-4**:

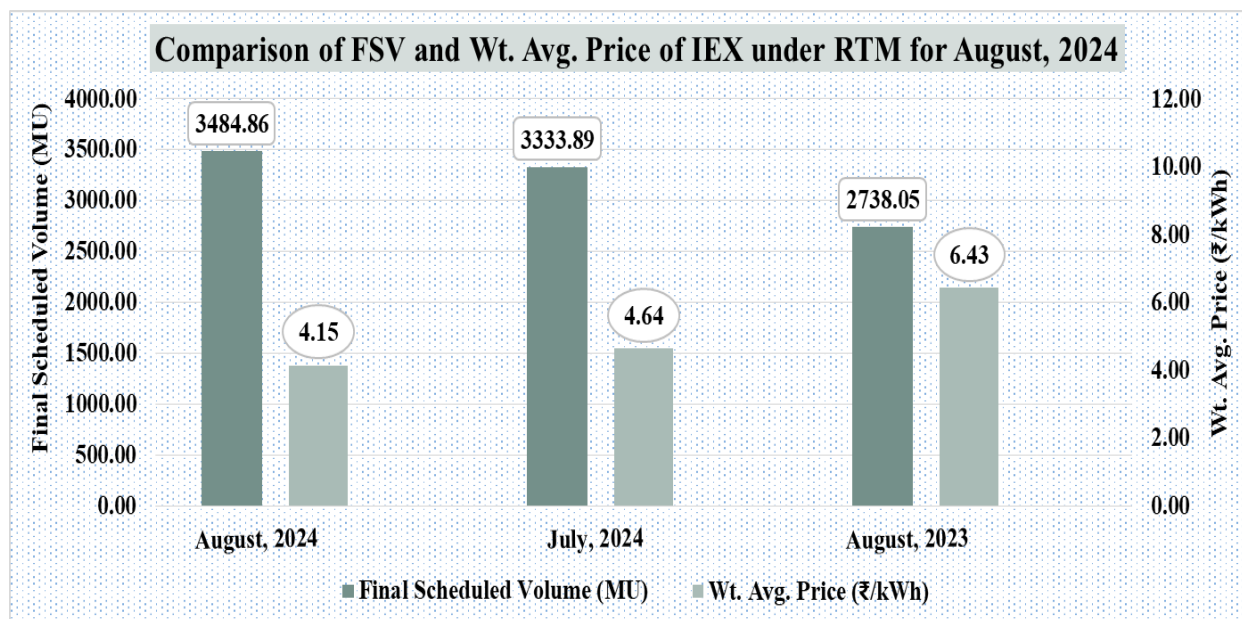


Figure-2

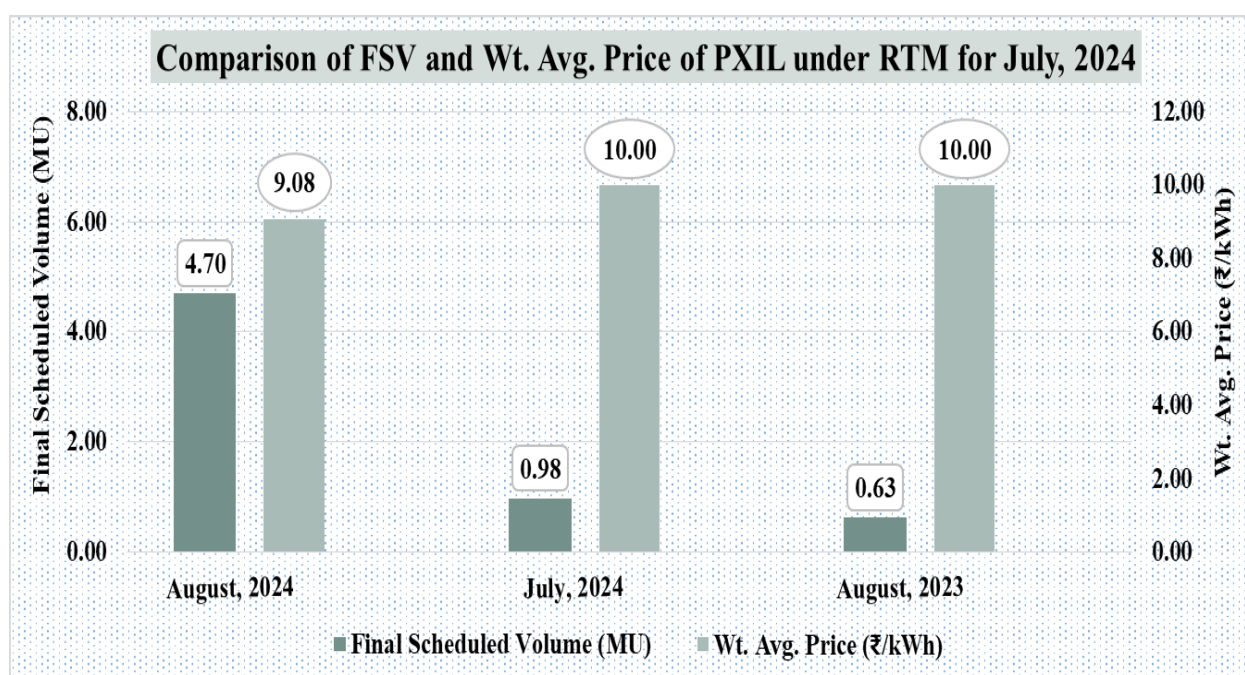


Figure-3

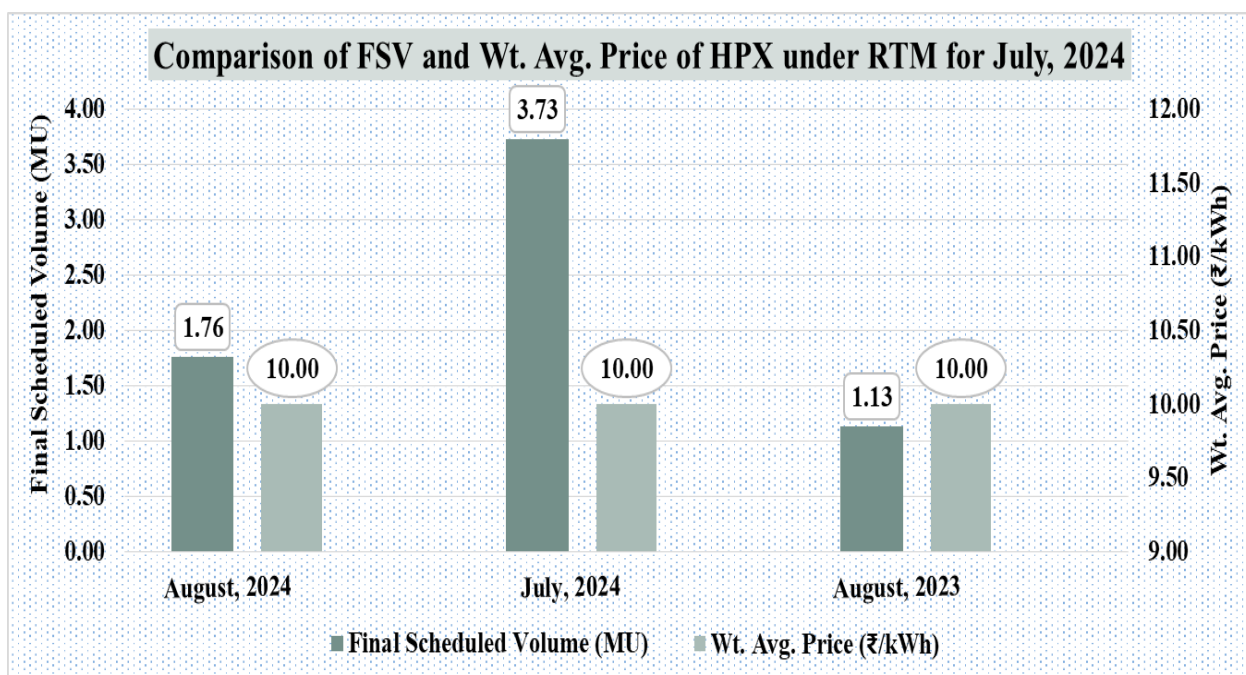


Figure-4

2.3. The RTM volume for August, 2024 in IEX is inclusive of Cross Border Transactions of Electricity with Nepal and Bhutan (details given at **Annexure XIII**), which was **8.95 MU** (i.e. 7.76 MU sold by Nepal, 1.18 MU sold by Bhutan).

3. Green Day Ahead Market (GDAM)

The volume of electricity transacted under GDAM was 851.47 MU at a Wt. Avg. Price of ₹ 3.70/kWh in August, 2024.

3.1. The volume of electricity transacted under GDAM in August, 2024 was **851.47 MU** (331.81 MU in Solar, 459.99 MU in Non-Solar and 59.67 MU in Hydro) in IEX at a Wt. Avg. MCP of ₹ **3.70/kWh** and no transaction took place in PXIL & HPX under GDAM.

3.2. The Comparison of Final Scheduled Volume (FSV) and Wt. Avg. Price of IEX under GDAM for August, 2024 vs July, 2024 and August, 2023 is shown below as **Figure-5**:

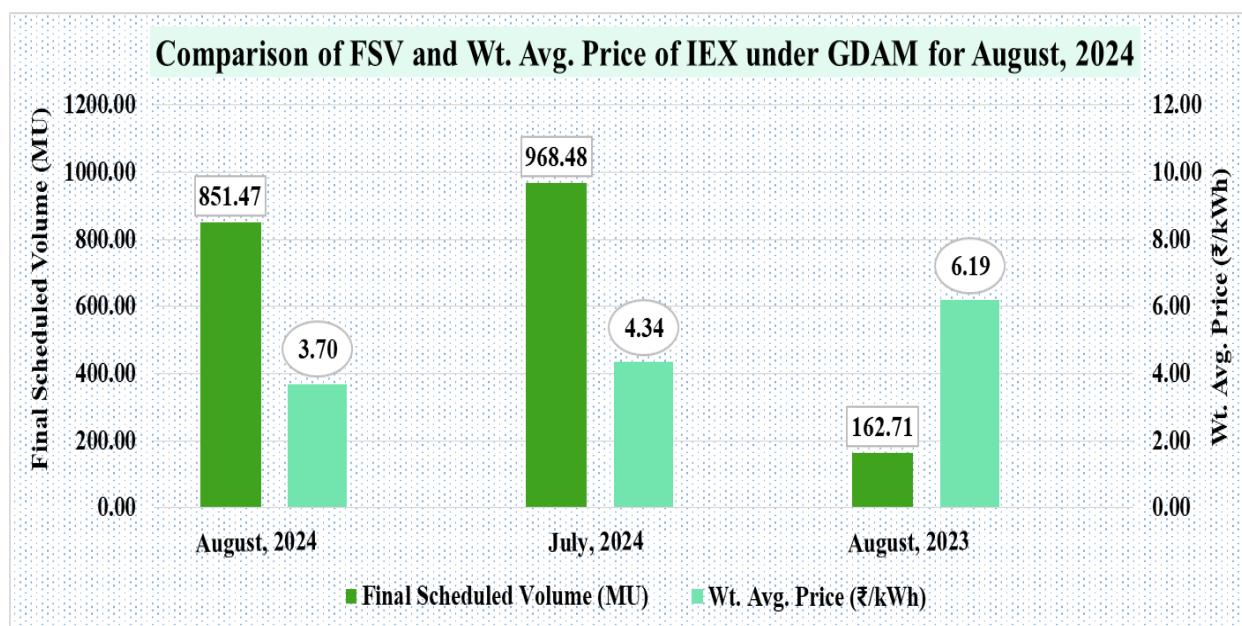


Figure-5

3.3. There was no real time curtailment in the power exchanges under Green Day Ahead Market during the month of August, 2024, July, 2024 and August, 2023.

3.4. The **top 10 sellers** on the power exchanges under Green Day Ahead Market (**GDAM**) in August, 2024 were **Karnataka, ADANI RENEWABLE ENERGY HOLDING FOUR LIMITED, Himachal Pradesh, ADANI RENEWABLE ENERGY FORTY ONE LIMITED_infirm, Adani Green Energy Twenty Five B Limited_infirm, Meghalaya, RENEW SURYA OJAS PRIVATE LIMITED-Wind, ADANI WIND ENERGY KUTCHH FOUR Ltd. Nakhatrana, Maharashtra, Singolia and Bhagwati, which** constituted **64.55 %** of the market volume.

3.5. The **top 10 buyers** on the power exchanges under Green Day Ahead Market (**GDAM**) in August, 2024 were **Punjab, ArcelorMittal Nippon steel (ESIL), Orissa, Maharashtra, DVC, Tamilnadu, Haryana, Gujarat, Jharkhand and Karnataka** which constituted **86.51 %** of the market volume.

4. Term Ahead Market (TAM)

The volume of electricity transacted under TAM was 1,229.83 MU at a Wt. Avg. Price of ₹ 6.92/kWh in August, 2024.

4.1. The total volume of electricity transacted on the power exchanges on delivery date basis under Term Ahead Market in August, 2024, July, 2024 and August, 2023 is tabulated below:

Month	Total Volume (in MU)	IEX in MU (in % of total volume)	PXIL in MU (in % of total volume)	HPX in MU (in % of total volume)
August, 2024	1,229.83	646.40 (52.56 %)	463.63 (37.70 %)	119.80 (9.74 %)
July, 2024	768.92	337.92 (43.95 %)	253.37 (32.95 %)	177.63 (23.10 %)
August, 2023	1,411.30	768.73 (54.47 %)	287.36 (20.36 %)	355.21 (25.17 %)

4.2. In the month of August, 2024, no transaction took place in IEX, PXIL & HPX under **High Price Term Ahead Market (HP-TAM)**.

4.3. With respect to the total energy supplied during the month of August, 2024 in the country, the volume of electricity traded on the power exchanges under TAM on delivery date basis represents **0.86 %** of the total energy supplied. The same was **0.51 %** in July, 2024 and **0.93 %** in August, 2023.

4.4. In August, 2024, there was no transmission congestion under TAM in IEX, PXIL & HPX.

4.5. There was real time curtailment of **36.01 MU** under TAM, out of which 19.54 MU in IEX, 13.96 MU in PXIL and 2.52 MU in HPX.

4.6. The comparison of total volume of electricity transacted and Wt. Avg. MCP in the power exchanges under Term Ahead Market (TAM) on delivery date basis during August, 2024 with July, 2024 and August, 2023 are shown in Table – 1A & 1B:

(i) Final Scheduled Volume (MU), August, 2024 vis- a- vis July, 2024 and August, 2023

Exchange	Period	Final Scheduled Volume (MU)				
		Daily or Any Day	Weekly	Monthly	Anyday Single Side	Total
IEX	August, 2024	403.72	0.36	73.96	168.36	646.40
	July, 2024	205.37	-	57.74	74.81	337.92
	%Change (Month over Month)	96.58	NA	28.09	125.05	91.29
	August, 2023	229.99	-	72.06	466.68	768.73
	%Change (Year over Year)	75.54	NA	2.64	-63.92	-15.91
PXIL	August, 2024	260.37	8.90	74.11	120.25	463.63
	July, 2024	119.62	-	59.78	73.97	253.37
	%Change (Month over Month)	117.66	NA	23.97	62.57	82.99

Exchange	Period	Final Scheduled Volume (MU)				
		Daily or Any Day	Weekly	Monthly	Anyday Single Side	Total
	August, 2023	0.56	105.87	-	180.93	287.36
	%Change (Year over Year)	46394.64	-91.59	NA	-33.54	61.34
HPX	August, 2024	95.65	-	-	24.15	119.80
	July, 2024	17.85	-	-	159.78	177.63
	%Change (Month over Month)	435.85	NA	NA	-84.89	-32.56
	August, 2023	113.44	-	-	241.77	355.21
	%Change (Year over Year)	-15.68	NA	NA	-90.01	-66.27

- : No transaction took place

NA: Not Applicable

Table: 1A

(ii) Wt. Avg. MCP, August, 2024 vis- a- vis July, 2024 and August, 2023

Exchange	Period	Wt. Average MCP (₹/kWh)			
		Daily or Any Day	Weekly	Monthly	Anyday Single Side
IEX	August, 2024	6.48	5.70	5.90	6.93
	July, 2024	6.02	-	5.90	6.94
	%Change (Month over Month)	7.64	NA	0.00	-0.14
	August, 2023	7.07	-	5.04	7.18
	%Change Year over Year)	-8.35	NA	17.06	-3.48
PXIL	August, 2024	7.18	5.70	5.90	7.03
	July, 2024	7.71	-	5.90	5.84
	%Change (Month over Month)	-6.87	NA	0.00	20.38
	August, 2023	10.00	6.45	-	6.53
	%Change (Year over Year)	-28.20	-11.63	NA	7.66
HPX	August, 2024	9.28	-	-	8.05
	July, 2024	9.01	-	-	5.97
	%Change (Month over Month)	3.00	NA	NA	34.84
	August, 2023	6.10	-	-	7.16
	%Change Year over Year)	52.13	NA	NA	12.43

- : No transaction took place

NA: Not Applicable

Table: 1B

5. Day Ahead Contingency & Intra Day (DAC & ID)

The volume of electricity transacted under DAC & ID was 783.98 MU at a Wt. Avg. Price of ₹ 7.76/kWh in August, 2024.

- 5.1. The volume of electricity transacted on IEX, PXIL and HPX under DAC & ID on delivery date basis during August, 2024 were **239.44 MU, 312.60 MU and 231.94 MU**, respectively.
- 5.2. In the month of August, 2024, the transaction of electricity in IEX in **High Price Day Ahead Contingency & Intra Day (HP- DAC & ID)** under ID contract was **6.78 MU** at an average MCP of ₹ 13.93/kWh, while in PXIL under DAC contract was **1.70 MU** at an average MCP of ₹ 15.00/kWh and under ID contract was **6.16 MU** at an average MCP of ₹ 17.36/kWh whereas no transaction took place in IEX under HP- DAC & ID.
- 5.3. In August, 2024, there was transmission congestion **8.86 MU** under DAC & ID. Out of which **2.05 MU** was in IEX, **4.28 MU** in PXIL and **2.52 MU** in HPX.
- 5.4. In August, 2024, there was real time curtailment of **10.11 MU** under DAC & ID. Out of which **4.34 MU** was in IEX, **3.67 MU** in PXIL and **2.10 MU** in HPX.
- 5.5. The total volume of electricity transacted under DAC & ID under Day Ahead Contingency & Intra Day contracts during August, 2024 and its comparison with July, 2024 and August, 2023 on delivery date basis are shown in Tables- 2A & 2B:

(i) Final Scheduled Volume (MU), August, 2024 vis- a- vis July, 2024 and August, 2023

Exchange	Period	Final Scheduled Volume (MU)		
		Day Ahead Contingency	Intra Day	Total
IEX	August, 2024	229.74	9.70	239.44
	July, 2024	355.03	18.85	373.88
	%Change (Month over Month)	-35.29	-48.54	-35.96
	August, 2023	896.59	8.82	905.41
	%Change (Year over Year)	-74.38	9.98	-73.55
PXIL	August, 2024	286.68	25.92	312.60
	July, 2024	410.60	62.99	473.59
	%Change (Month over Month)	-30.18	-58.85	-33.99
	August, 2023	806.31	9.52	815.83
	%Change (Year over Year)	-64.45	172.27	-61.68
HPX	August, 2024	224.24	7.70	231.94
	July, 2024	204.27	19.78	224.05
	%Change (Month over Month)	9.78	-61.07	3.52
	August, 2023	1012.32	9.96	1022.28
	%Change (Year over Year)	-77.85	-22.69	-77.31

- : No transaction took place

NA: Not Applicable

Table: 2A

(ii) Wt. Avg. MCP, August, 2024 vis- a- vis July, 2024 and August, 2023

Exchange	Period	Wt. Average MCP (₹/kWh)	
		Day Ahead Contingency	Intra Day
IEX	August, 2024	7.27	9.57
	July, 2024	8.35	10.00
	%Change (Month over Month)	-12.93	-4.30
	August, 2023	7.53	9.89
	%Change Year over Year)	-3.45	-3.24
PXIL	August, 2024	7.25	9.71
	July, 2024	8.23	9.85
	%Change (Month over Month)	-11.91	-1.42
	August, 2023	8.03	9.81
	%Change (Year over Year)	-9.71	-1.02
HPX	August, 2024	8.52	9.95
	July, 2024	8.91	10.00
	%Change (Month over Month)	-4.38	-0.50
	August, 2023	7.71	9.74
	%Change Year over Year)	10.51	2.16

- : No transaction took place

NA: Not Applicable

Table: 2B

6. Green Term Ahead Market (GTAM)

The volume of electricity transacted under GTAM was 54.79 MU at a Wt. Avg. Price of ₹ 5.18/kWh in August, 2024.

The total volume of electricity transacted in the PXs under GTAM on delivery date basis was **54.79 MU** (**11.60 MU** in Solar and **43.19 MU** in Non-Solar). The Comparison of Final Scheduled Volume (FSV) and Wt. Avg. Price of IEX, PXIL and HPX under GTAM for August, 2024 is shown below as **Figure-6**, **Figure-7** and **Figure-8**:

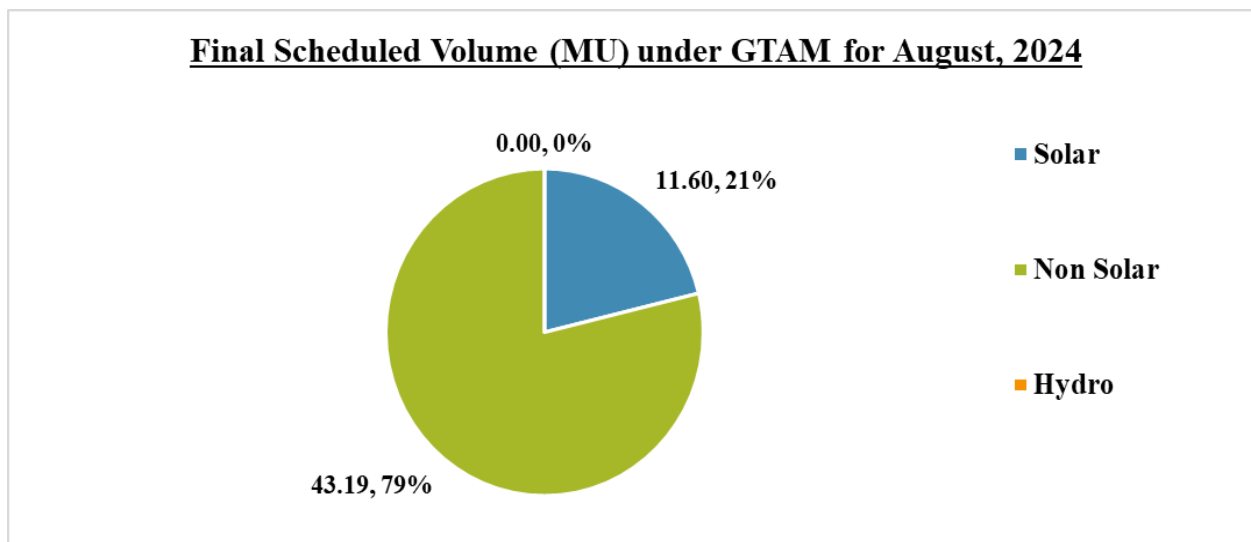


Figure-6

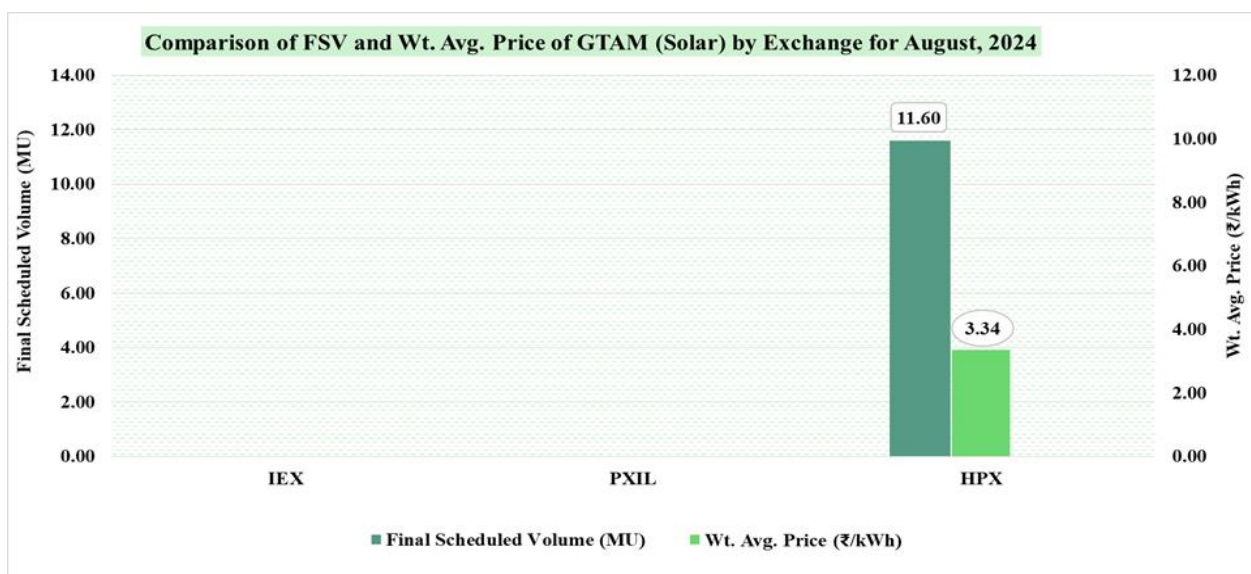


Figure-7

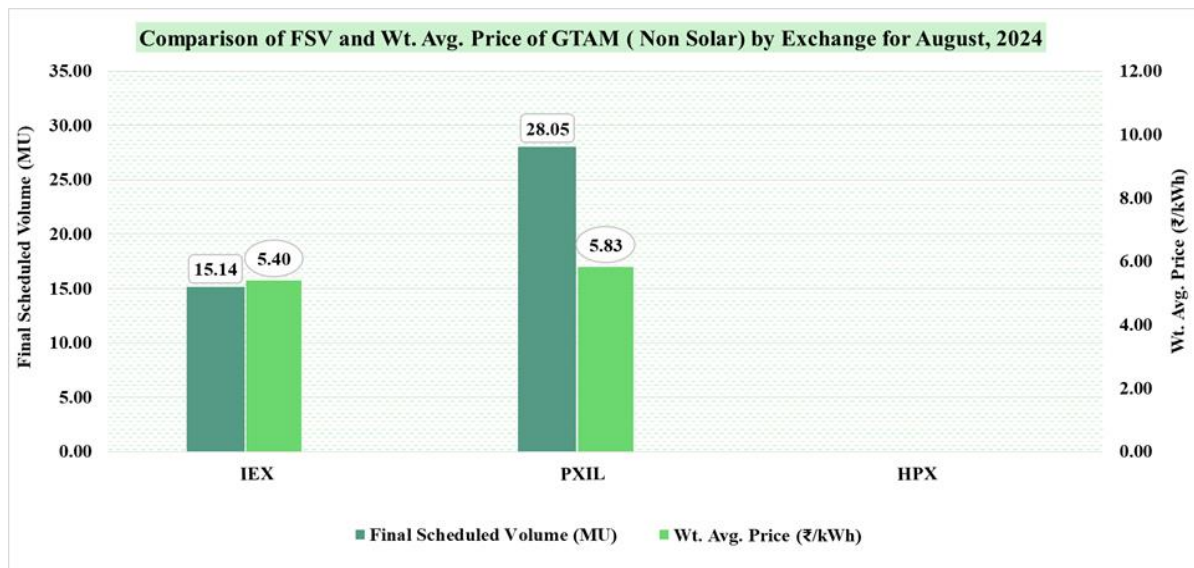


Figure-8

7. Green Day Ahead Contingency & Intra Day (G-DAC & ID)

The volume of electricity transacted under G-DAC & ID was 100.52 MU at a Wt. Avg. Price of ₹ 4.27/kWh in 2024.

The total volume of electricity transacted in the IEX, PXIL & HPX under G-DAC & ID on delivery date basis was **100.52 MU** (**30.19 MU** in Solar, **35.65 MU** in Non-Solar and **34.68 MU** in Hydro), respectively. The Comparison of Final Scheduled Volume (FSV) and Wt. Avg. Price of IEX, PXIL and HPX under G-DAC & ID for August, 2024 is shown below as **Figure-9, Figure-10, Figure-11 and Figure-12:**

Final Scheduled Volume (MU) under G-DAC & ID for August, 2024

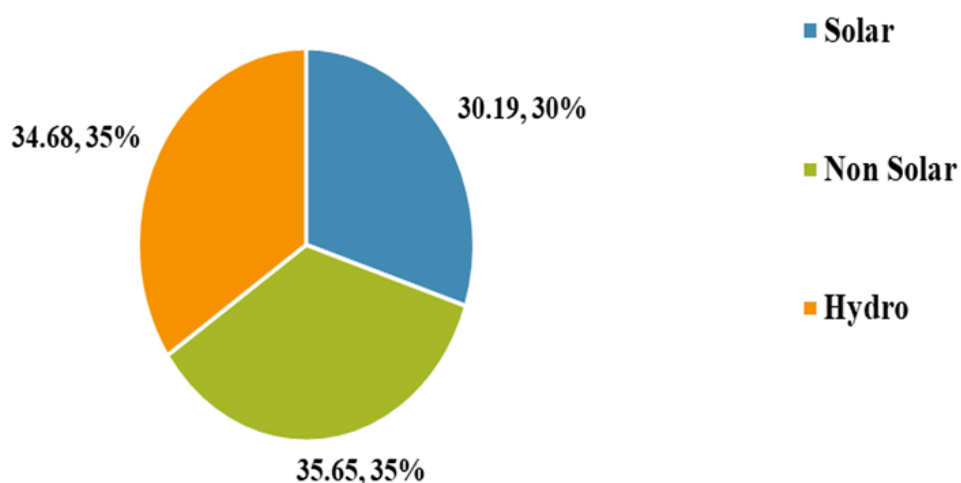


Figure-9

Comparison of FSV and Wt. Avg. Price of G-DAC & ID (Solar) by Exchange for August 2024



Figure-10

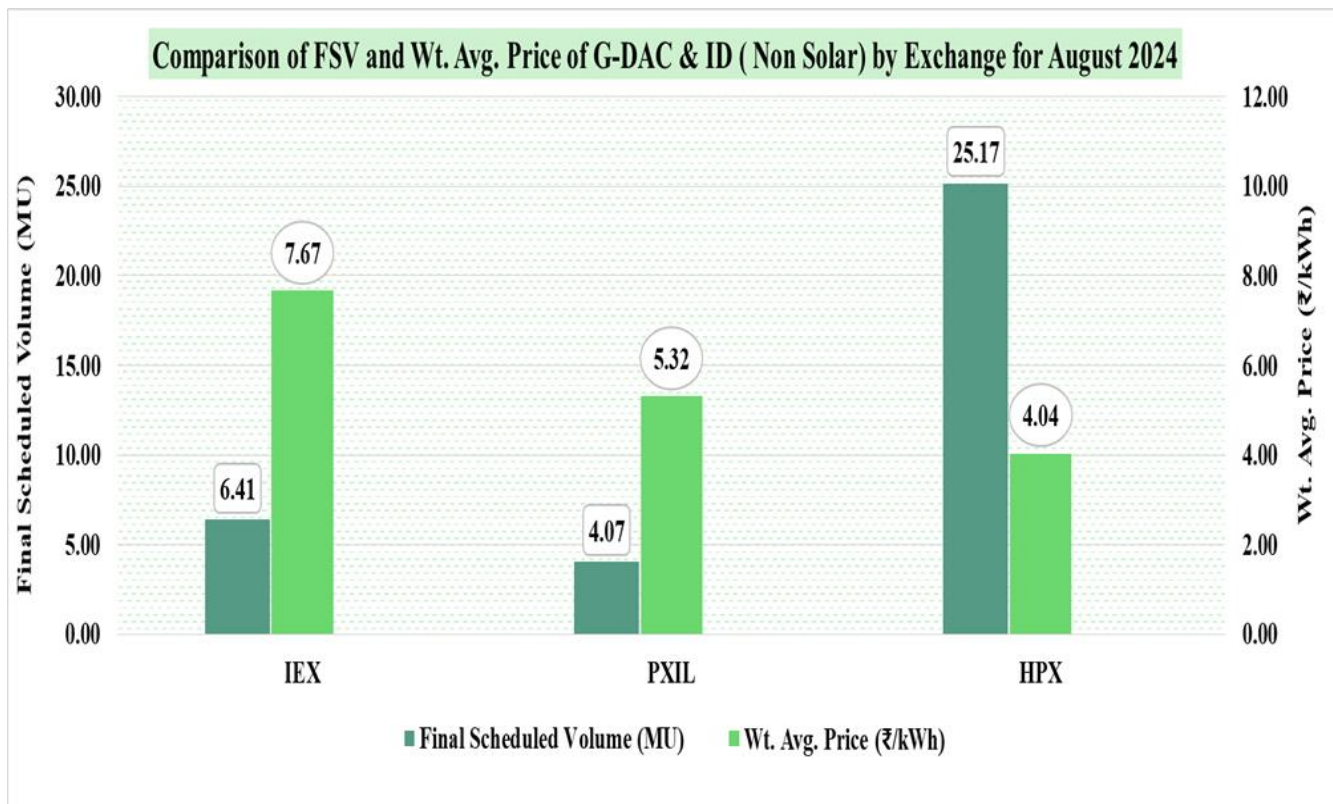


Figure-11

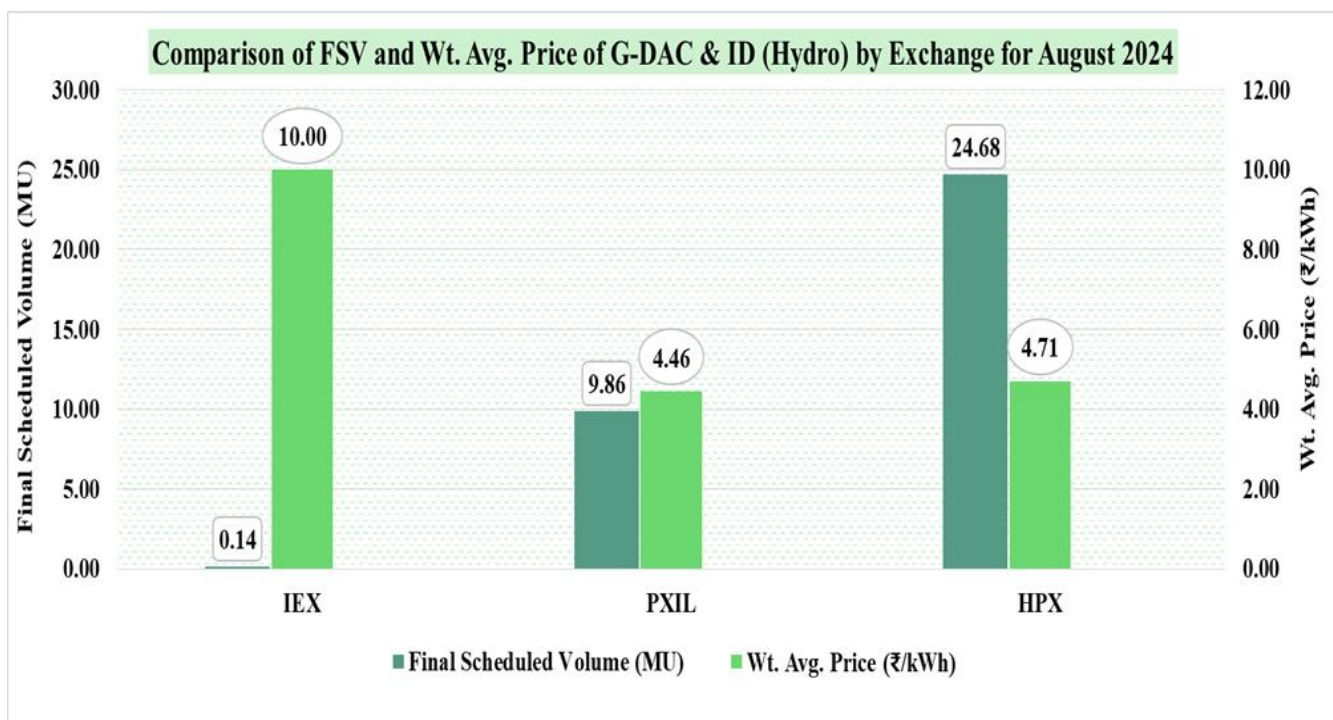


Figure-12

8. **Bilateral Transactions:**

The total volume of electricity transacted through **bilateral transactions** in August, 2024 was **9,109.80 MU**. The total buy volume of electricity transacted in bilateral market through direct and trader transactions in August, 2024 were **3,690.08 MU** and **5,419.72 MU** respectively. The details of bilateral transactions of Electricity during August, 2024 are shown in table below:

August, 2024	Direct	Traders	Total Bilateral Transaction (MU)
Total	3,690.08	5,419.72	9,109.80
Minimum	1.24	0.35	-
Maximum	1,108.74	1,151.42	-

Table -3A

The region-wise maximum/ minimum volume of electricity transacted bilaterally during August, 2024 are given in table below:

(i) **Region-wise Volume:**

Region-wise Volume (MU)	ER		WR		NR		SR		NER	
	Direct	Trader	Direct	Trader	Direct	Trader	Direct	Trader	Direct	Trader
Total	630.81	1523.3	93.60	313.36	2941.27	2998.56	23.16	484.75	1.24	99.74
Minimum	36.99	0.43	7.44	0.35	3.47	2.31	6.96	1.93	1.24	2.46
Maximum	493.94	949.63	66.64	176.59	1108.74	1151.42	9.00	482.82	1.24	97.28

Table-3B

8.1. The top 5 buyers on bilateral transaction through direct transactions in August, 2024 were **Uttar Pradesh, Punjab, Haryana, Bihar and Delhi**, which constituted **91.62 %** of the market volume. Whereas **top 5 buyers** on bilateral transaction through traders in August, 2024 were **Punjab, West Bengal, Haryana, Delhi and Bihar**, which constituted **75.76 %** of the market volume. **[Annexure III]**

8.2. The top 5 sellers on bilateral transaction through direct transactions in August, 2024 were **Madhya Pradesh, Rajasthan, Karnataka, IGSTPS JHAJJAR and NABINAGAR POWER GENERATING COMPANY LIMITED**, which constituted **57.83 %** of the market volume. Whereas **top 5 sellers** on bilateral transaction through traders in August, 2024 were **Maharashtra, Adani Power Limited-Raipur TPP, Himachal Pradesh, Kerala and MAHAN ENERGEN LIMITED U#2**, which constituted **33.65 %** of the market volume. **[Annexure III]**

8.3. Deviation Volume -The volume of Deviation observed in August, 2024 in import and export were **3,165.60 MU** and **3,534.47 MU** respectively. The total volume of Deviation observed in August, 2024 can be taken as **3,350.04 MU**.

8.4. A comparison of volume of electricity transacted through the Power Exchanges together under DAM, GDAM, HP-DAM, RTM, TAM, HP-TAM, DAC & ID, HP-DAC & ID, GTAM and G-DAC & ID (on delivery date basis) with Bilateral transactions and Deviation in August, 2024 is shown in **Figure 13:**

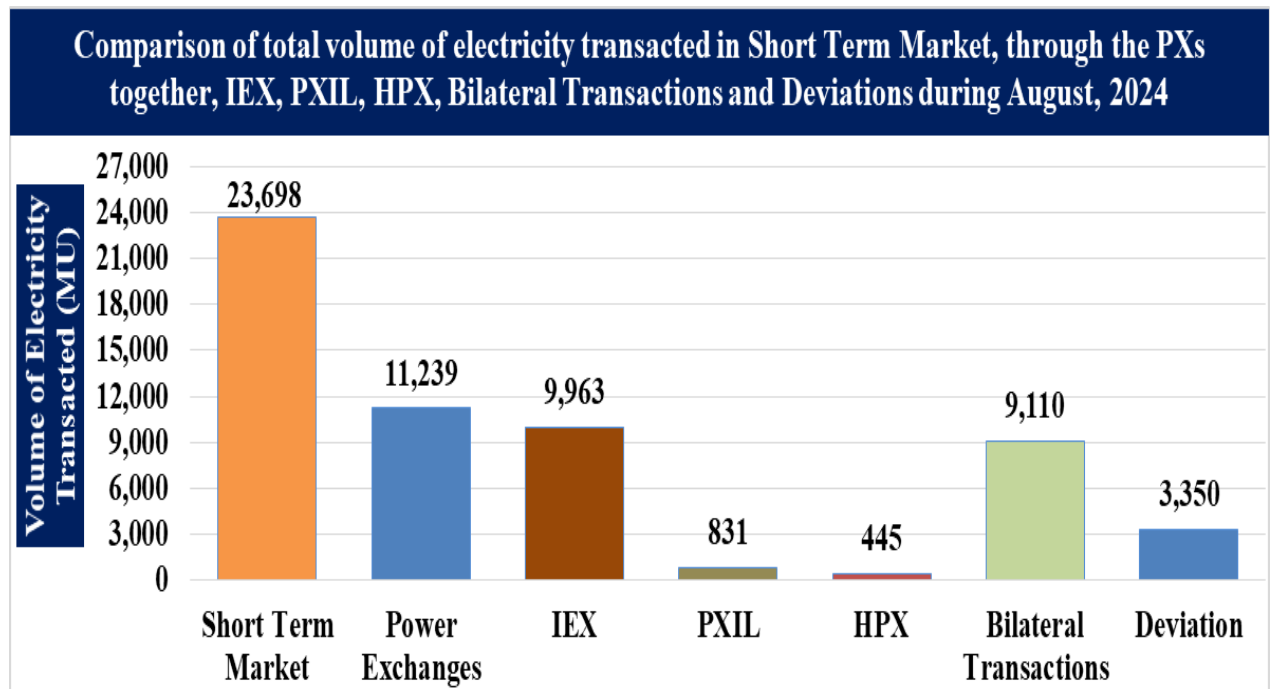
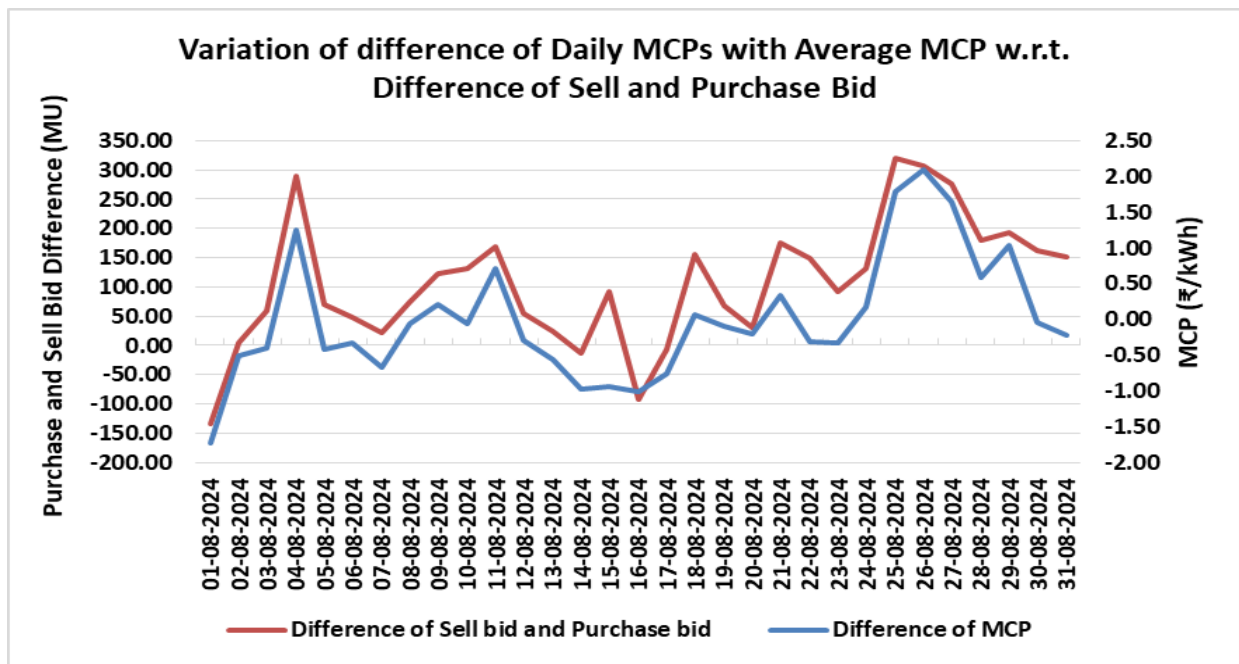


Figure -13

9. Analysis of movement of prices observed under DAM during August, 2024

A regression analysis has been carried out on the Day Ahead Market data taken from IEX website. Also, data was plotted in various graphs to observe patterns for each day of the August, 2024 month. The observations made are as under:

- 9.1. In order to find out the determinants which are responsible for the Daily Wt. Avg. MCP, a regression analysis has been carried out where the Daily Wt. Avg. MCP is the dependent variable and the independent variables are peak demand, total purchase bid, total sell bid, coal generation, hydro generation, wind generation and solar generation.
- 9.2. A double log function was used so that elasticity of Daily Wt. Avg. MCP could be read off from the coefficients of independent variables. The regression analysis revealed that the most significant variable was the Peak Demand. Further, the regression analysis revealed that the elasticity of the Daily Wt. Avg. MCP with respect Peak Demand was **5.13** in August, 2024.
- 9.3. The variation of difference of Daily Wt. Avg. MCPs with Wt. Avg. MCP w.r.t Difference of Sell and Purchase bid is Shown below:



- 9.4. The same relationship is visible from the analysis carried out from the plot in **Figure – 14**:

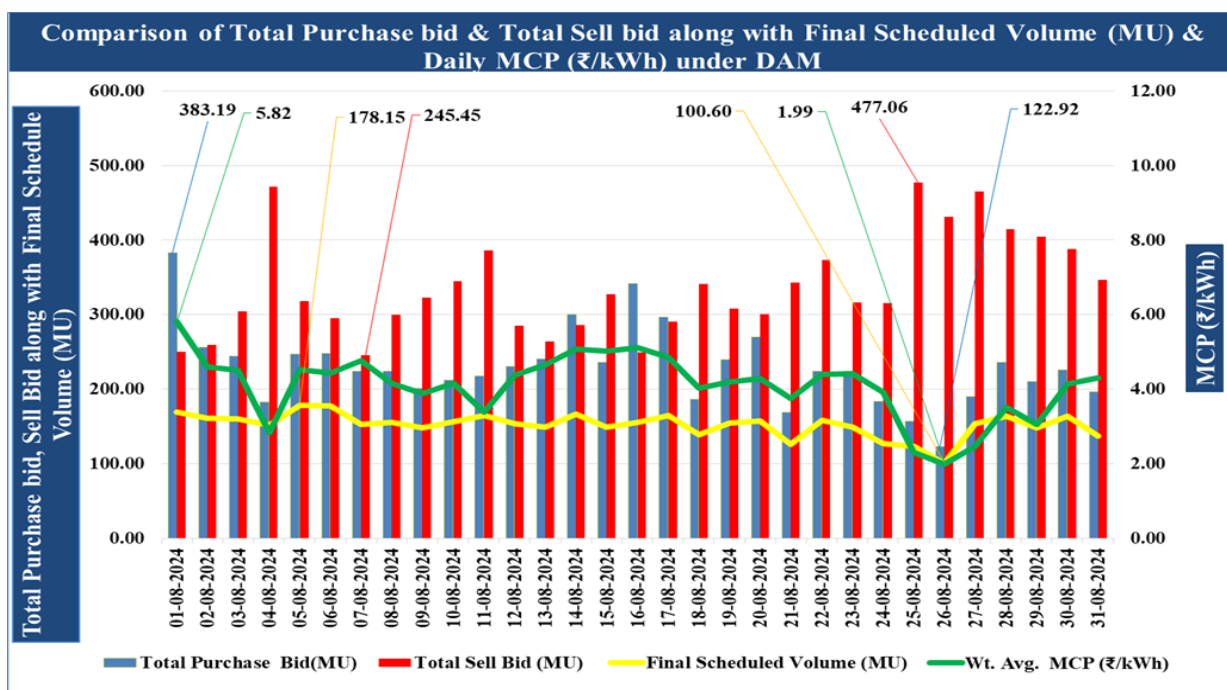


Figure – 14

9.5. Invariably, the Final Scheduled Volume (MU) and the Daily Wt. Avg. MCP (₹/kWh) showed decreasing trend on Sundays and increasing trend on Mondays as the demand of electricity in the country was less on Sundays as compared to other days of week. However, during the month of August, 2024, it is observed that on second Sunday (11th August, 2024), FSV showed increasing trend in comparison to second Saturday (10th August, 2024), on fourth Monday (26th August, 2024), FSV showed decreasing trend in comparison to fourth Sunday (25th August, 2024). The detailed analysis on this is given at **Appendix-I**.

9.6. A comparison of maximum, minimum, daily, evening time MCP is shown in **Figure-15**. The same are also tabulated in **Annexure-I**

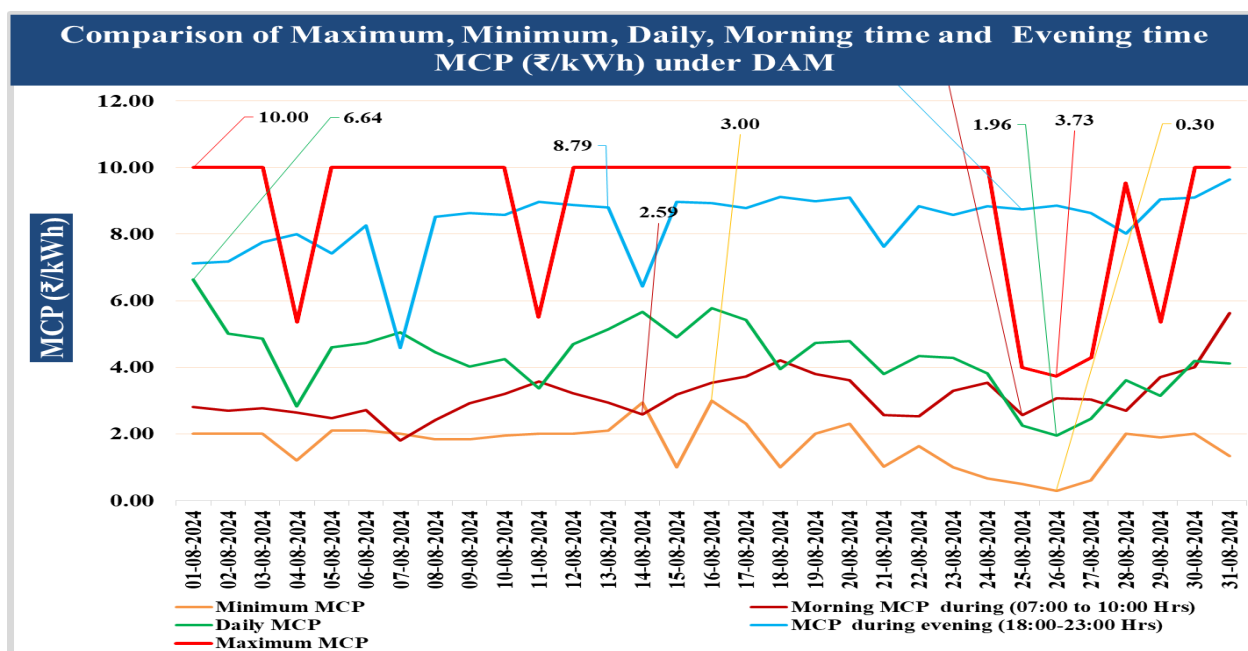


Figure-15

9.7. The Market Clearing Price duration curves for time block wise MCP for the month of August, 2024 is shown in **Figure-16**.

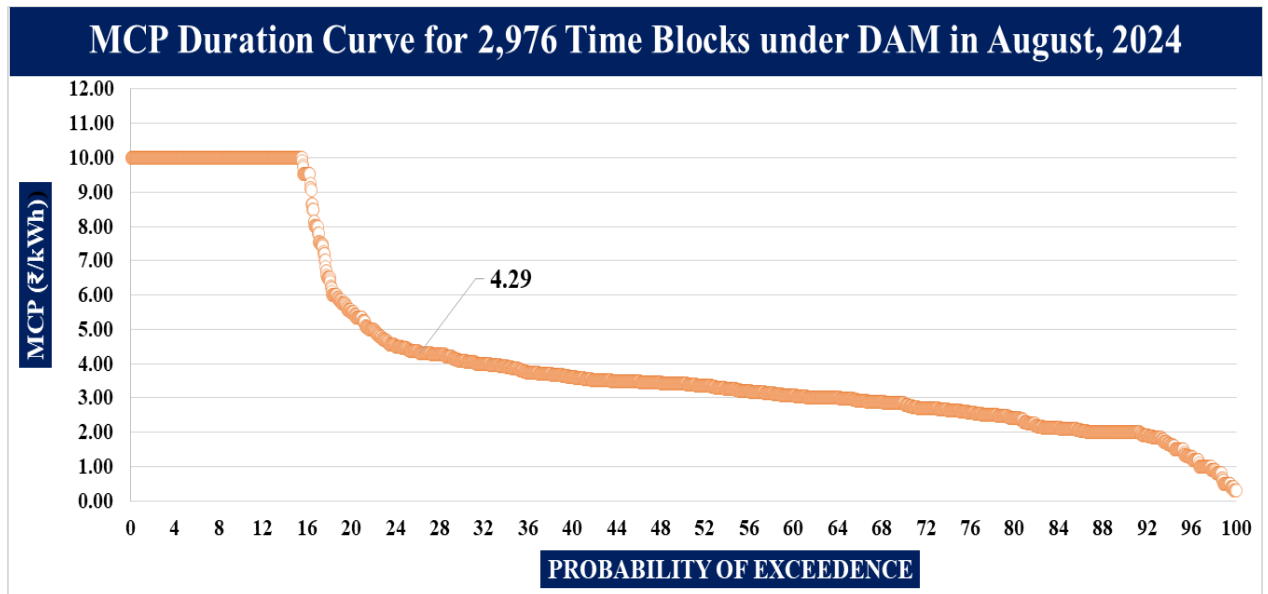


Figure – 16

- 9.8. It can be seen in figure 16 above that in the MCP duration curve of August, 2024, for 26.00 % of the time MCP was above Wt. Avg. MCP of the month (i.e. ₹ 4.29/kWh) and almost 74.00 % of the time MCP was below the Wt. Avg. MCP of the month.
- 9.9. The Purchase Bids and the MCP discovered in each of the 15-minute time block during the month almost followed the same trend [Annexure V]. This is also corroborated with the outcome of regression analysis mentioned at para 9.1 and 9.2 above.
- 9.10. In August, 2024, the maximum FSV occurred mostly during **the time period 07-08 Hrs** (on 13 no. of days). Whereas, the maximum MCP occurred mostly during **the time period 19-20 Hrs** (on 14 no. of days). Similarly, the minimum FSV occurred mostly during **the time period 19-21 Hrs** (on 13 no. of days). Whereas, the minimum MCP occurred mostly during **the time period 13-14 Hrs** (on 28 no. of days). [Annexure VI]
- 9.11. In August, 2024, there was congestion of **19.34 MU** in IEX and no transaction of electricity took place in PXIL & HPX. Further, in July, 2024, there was congestion of **64.90 MU** in IEX and no transaction of electricity took place in PXIL & HPX. Further, in August, 2023, there was no congestion in IEX & PXIL and no transaction of electricity took place in HPX.
- 9.12. In August, 2024, there was **no** real time curtailment in IEX and no transaction of electricity took place in PXIL & HPX. Further, in July, 2024, there was **no** real time curtailment in IEX and no transaction of electricity took place in PXIL & HPX. Further in August, 2023, there was **no** real time curtailment in IEX & PXIL and no transaction of electricity took place in HPX.

- 9.13.** The **top 10 sellers** on the power exchanges under Day Ahead Market (**DAM**) in August, 2024 were **Karnataka, NVVN (SNA) – NEA, JITPL, Orissa, Jindal Power Ltd. Stg-II, Uttar Pradesh, Chhattisgarh, MAHAN ENERGEN LIMITED U#1, Delhi and Adani Power Limited-Raipur TPP**, which constituted **42.87 %** of the market volume. [**Annexure VII**]
- 9.14.** The **top 10 buyers** on the power exchanges under Day Ahead Market (**DAM**) in August, 2024 were **Telangana, Gujarat, Andhra Pradesh, Maharashtra, Daman & Diu - Dadra & Nagar Haveli, Uttar Pradesh, Tamilnadu, Punjab, West Bengal and Haryana**, which constituted **89.76 %** of the market volume. [**Annexure VII**]
- 9.15.** The total volume of electricity purchased by Discoms/Licensees under DAM in August, 2024 was **4,636.62 MU**, which constituted **98.40 %** of total volume of electricity purchased on the power exchanges.
- 9.16.** Similarly, the total volume of electricity sold by Discoms/Licensees under DAM in August, 2024 was **1,852.54 MU**, which constituted **39.32 %** of total volume of electricity sold on the power exchanges.

10. Analysis of movement of prices observed under Real Time Market (RTM) transactions in August, 2024

- 10.1. Similar to the regression analysis carried out for Day Ahead Market, the regression analysis for Real Time Market was also done. The regression analysis revealed that the significant variable was the Peak Demand. Further, the regression analysis revealed that the elasticity of the Daily Wt. Avg. MCP with respect to Peak Demand was **9.44** in August, 2024.
- 10.2. The Purchase Bids and the MCP discovered in each of the 15-minute time block during the month almost followed the same trend [**Annexure IX**]. This is also corroborated with the outcome of regression analysis mentioned at **para 10.1 above**.
- 10.3. The Total Purchase Bid, Total Sell Bid, Daily Wt. Avg. MCP and FSV are shown in **Figure-17** below:

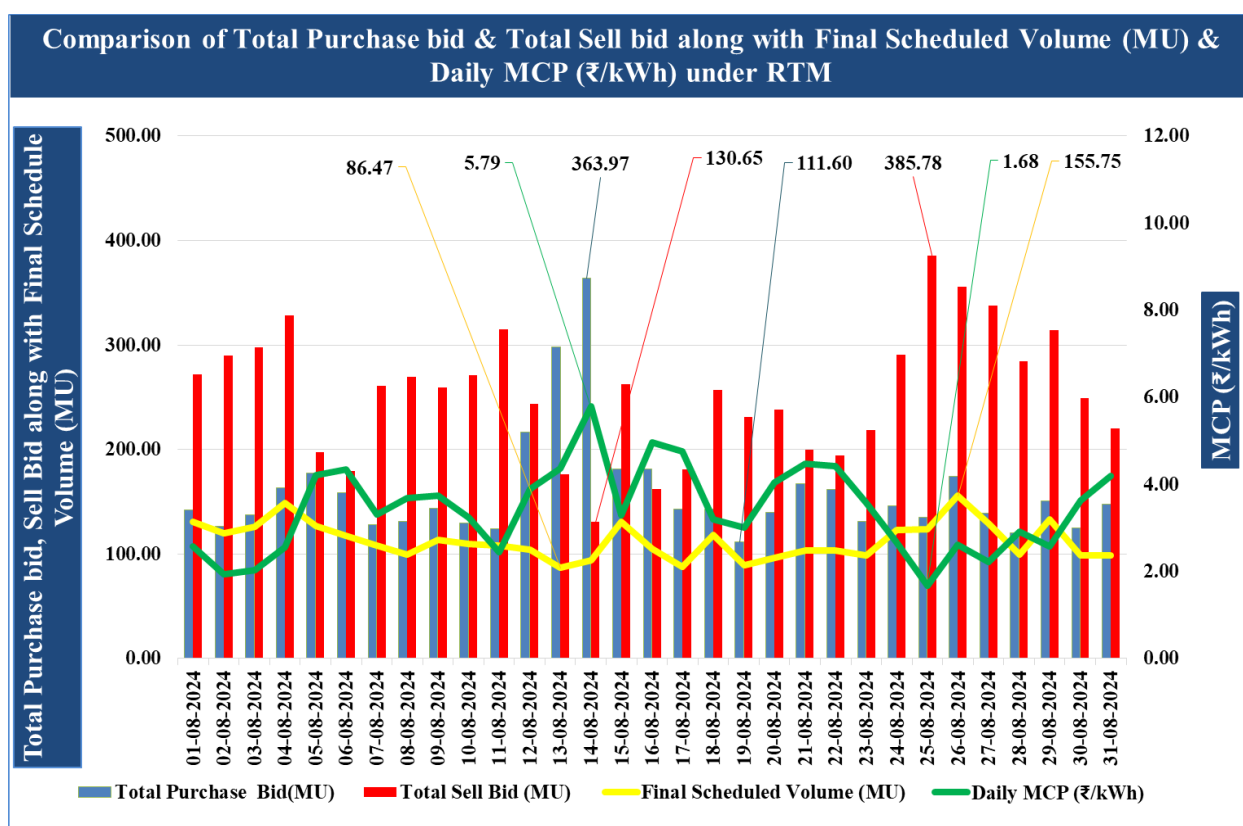


Figure-17

- 10.4. A comparison of maximum, minimum, daily, evening time MCP is shown in **Figure-18**. The same are also tabulated in **Annexure-VIII**.

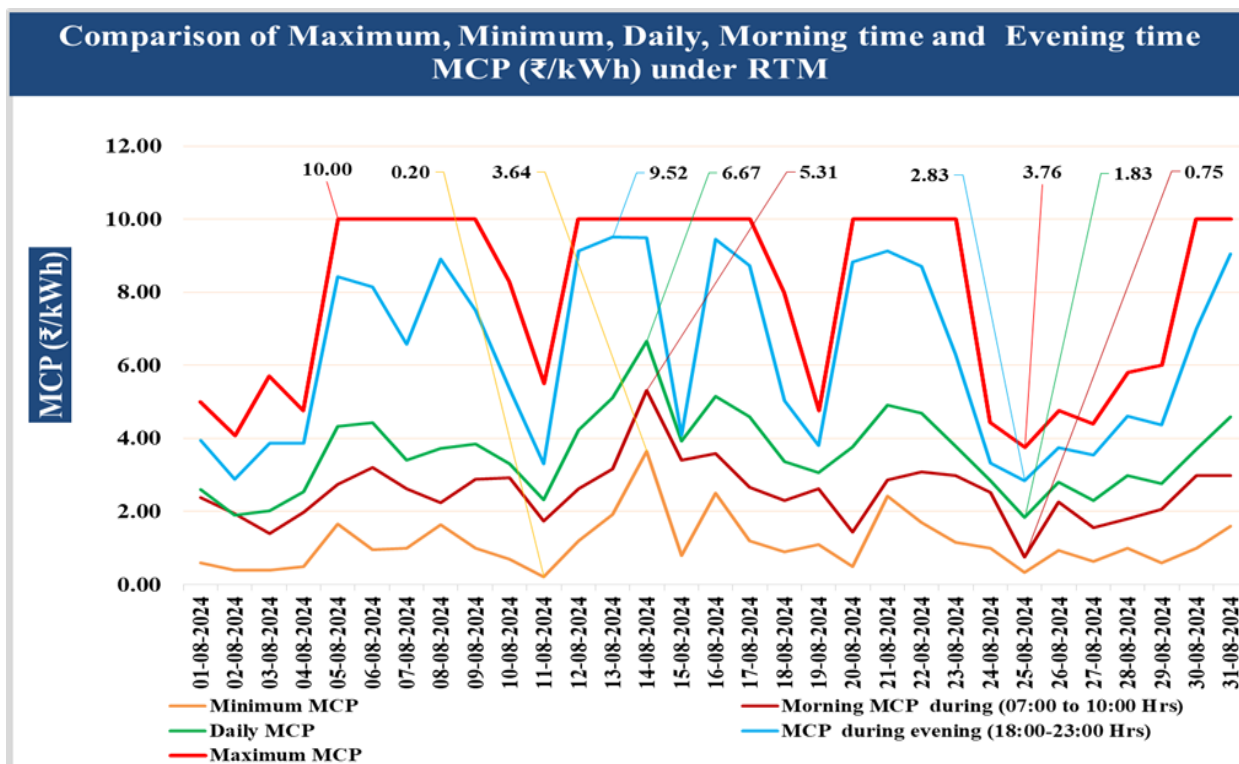


Figure-18

10.5. The Market Clearing Price duration curves for time block wise MCP for the month of August, 2024 is shown in Figure-19.

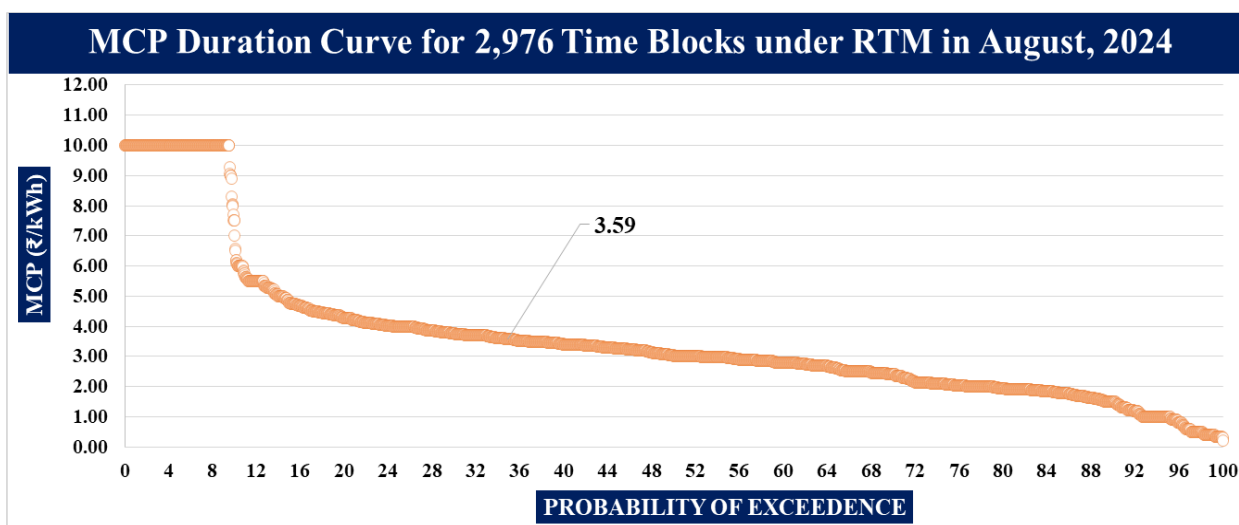


Figure-19

10.6. It can be seen in figure 19 above that in the MCP duration curve of August, 2024, for 36.00 % of the time the MCP was above the Wt. Avg. MCP of the month (i.e. ₹ 3.59/kWh) and for 64.00 % of the time the MCP was below the Wt. Avg. MCP of the month.

10.7. In August, 2024, the maximum FSV occurred mostly during the **time period 14-16 Hrs** (on 16 no. of days). Whereas, the maximum MCP also occurred mostly during the **time period 19-18 Hrs** (on 15 no. of days). Similarly, the minimum FSV occurred mostly during the **time period**

00-01 Hrs (on 8 no. of days). Whereas, the minimum MCP occurred mostly during the **time period 13-14 Hrs** (on 15 no. of days).[Annexure X]

- 10.8.** There was **no** real time curtailment in IEX, PXIL & HPX under Real Time Market (RTM) during August, 2024. Further, in July, 2024 **no** real time curtailment in IEX, PXIL & HPX. Similarly, in August, 2023, there was **no** real time curtailment in IEX, PXIL & HPX.
- 10.9.** In August, 2024, there was congestion of **7.03 MU** in IEX & **0.36 MU** in HPX and no congestion in PXIL. Further, in July, 2024, there was congestion of **77.85 MU** in IEX & **2.22 MU** in HPX and no congestion in PXIL. Similarly, in August, 2023, there was congestion **0.62MU** in IEX and no congestion in PXIL & HPX.
- 10.10.** The **top 10 sellers** on the power exchanges under Real Time Market (RTM) in August, 2024 were **Bihar, Madhya Pradesh, Rajasthan, Tamilnadu, J&K, Haryana, Himachal Pradesh, Karnataka, Punjab and Orissa**, which constituted **57.01 %** of the market volume. [Annexure XI]
- 10.11.** The **top 10 buyers** on the power exchanges under Real Time Market (RTM) in August, 2024 were **Telangana, Punjab, Uttar Pradesh, West Bengal, Andhra Pradesh, Maharashtra, Kerala, Orissa, Gujarat and Tamilnadu**, which constituted **79.09 %** of the market volume. [Annexure XI]
- 10.12.** The total volume of electricity purchased by Discoms/Licensees under RTM in August, 2024 was **3,367.15 MU**, which constituted **96.44 %** of total volume of electricity purchased on the power exchanges.
- 10.13.** Similarly, the total volume of electricity sold by Discoms/Licensees under RTM in August, 2024 was **2,662.50 MU**, which constituted **76.26 %** of total volume of electricity sold on the power exchanges.

-
- Source DAM, GDAM, TAM, GTAM and RTM data: IEX, PXIL and HPX
 - Source Entity wise sale and purchase on PXs data: NLDC
 - Source Total Energy supplied: CEA
 - Source Generation & other data for Regression: NLDC and IEX

Final Scheduled Volume, Wt. Avg. MCP and Real-Time Curtailment under Day Ahead Market (DAM) for the months of April, 2024 to March, 2025 of IEX, PXIL and HPX.										
Quarter	Months	Final Scheduled Volume (MU)			Market Clearing Price (₹/kWh)			Real Time Curtailment (MU)		
		IEX	PXIL	HPX	IEX	PXIL	HPX	IEX	PXIL	HPX
Quarter -I	April, 2024	4,131.42	3.85	0	4.65	10.00	-	0	0	0
	May, 2024	4,315.58	0	0.10	4.76	-	10.00	0	0	0
	June, 2024	4,836.23	0	0	4.84	-	-	0	0	0
Total Quarter -I	April - June, 2024	13,283.23	3.85	0.10	4.75	10.00	10.00	0	0	0
Quarter -II	July, 2024	5,070.64	0	0	4.64	-	-	0	0	0
	August, 2024	4,711.98	0	0	4.15	-	-	0	0	0
	September, 2024									
Total Quarter -II	August - September, 2024	9,782.62	0.00	0.00	4.40	-	-	0.00	0.00	0.00
Total April, 2024 – March, 2025		23,065.85	3.85	0.10	4.60	10.00	10.00	0.00	0.00	0.00

Annexure-II

Final Scheduled Volume under Term Ahead Market (TAM) for the months of April, 2024 to March, 2025 of IEX, PXIL and HPX (Delivery date basis)					
Quarter	Months	Final Scheduled Volume (MU)			
		IEX	PXIL	HPX	Total
Quarter -I	April, 2024	1141.57	1521.03	897.57	3560.17
	May, 2024	911.93	1003.55	964.68	2880.16
	June, 2024	1054.97	564.87	396.82	2016.66
Total Quarter – I	April - June, 2024	3,108.47	3,089.45	2,259.07	8,456.99
Quarter -II	July, 2024	337.92	253.37	177.63	768.92
	August, 2024	646.40	463.63	119.80	1,229.83
	September, 2024				
Total Quarter – II	August - September, 2024	984.32	717.00	297.43	1,998.75
Total April, 2024 – March, 2025		4,092.79	3,806.45	2,556.50	10,455.74

Top Five Entities (Buyers and Sellers) in Bilateral transactions in August, 2024

(i) Top five Buyers in Bilateral transactions

Entity Name	Direct		Entity Name	Through Traders	
	(MU)	Percent		(MU)	Percent
Uttar Pradesh	1108.74	30.05%	Punjab	1151.42	21.25%
Punjab	904.35	24.51%	West Bengal	949.63	17.52%
Haryana	636.28	17.24%	Haryana	827.47	15.27%
Bihar	493.94	13.39%	Delhi	648.01	11.96%
Delhi	237.49	6.44%	Bihar	529.19	9.76%
Total Volume	3,380.80	91.62%	Total Volume	4,105.72	75.76%
Total Volume in Bilateral	3,690.08		Total Volume in Bilateral	5,419.72	

(ii) Top five Sellers in Bilateral transactions

Entity Name	Direct		Entity Name	Through Traders	
	(MU)	Percent		(MU)	Percent
Madhya Pradesh	719.17	19.49%	Maharashtra	446.34	8.24%
Rajasthan	525.37	14.24%	Adani Power Limited- Raipur TPP	410.19	7.57%
Karnataka	410.00	11.11%	Himachal Pradesh	390.04	7.20%
IGSTPS JHAJJAR	267.15	7.24%	Kerala	318.48	5.88%
NABINAGAR POWER GENERATING COMPANY LIMITED	212.20	5.75%	MAHAN ENERGEN LIMITED U#2	258.66	4.77%
Total Volume	2,133.89	57.83%	Total Volume	1,823.72	33.65%
Total Volume in Bilateral	3,690.08		Total Volume in Bilateral	5,419.72	

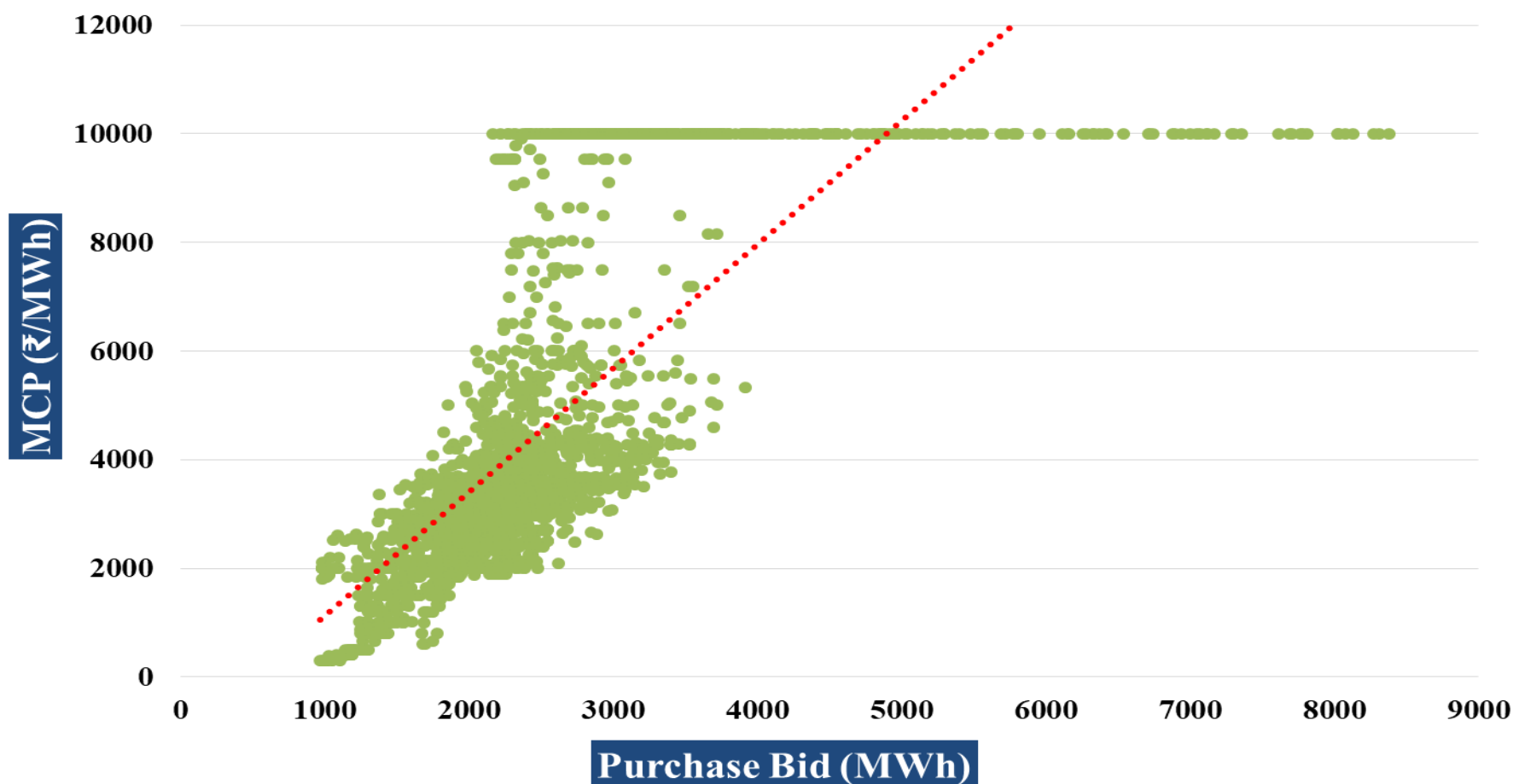
Evening, Day, Night, Morning, Maximum, Minimum, Wt. Avg. MCP (₹/kWh) and Final Scheduled Volume (MU) under DAM

Date	Morning MCP (07:00-10:00)	Day MCP (11:00-17:00)	Evening MCP (18:00- 23:00)	Night MCP (01:00- 06:00, 23:00-24:00)	Maximum MCP	Minimum MCP	Wt. Avg. MCP	Final Scheduled Volume (MU)
01-08-2024	2.80	2.46	7.13	4.42	10.00	2.00	6.64	168.74
02-08-2024	2.69	2.34	7.18	4.24	10.00	2.00	5.01	161.19
03-08-2024	2.77	2.26	7.75	4.58	10.00	2.00	4.86	159.99
04-08-2024	2.64	2.34	8.00	4.57	5.35	1.20	2.83	151.85
05-08-2024	2.48	2.45	7.42	4.63	10.00	2.10	4.59	178.15
06-08-2024	2.71	2.39	8.26	5.44	10.00	2.10	4.73	177.10
07-08-2024	1.81	1.33	4.58	3.75	10.00	2.00	5.06	152.54
08-08-2024	2.41	1.98	8.52	4.07	10.00	1.85	4.45	155.76
09-08-2024	2.93	2.29	8.63	4.99	10.00	1.83	4.02	147.95
10-08-2024	3.21	2.96	8.58	5.54	10.00	1.96	4.25	156.25
11-08-2024	3.57	3.22	8.97	8.02	5.50	2.00	3.38	164.90
12-08-2024	3.23	3.23	8.88	6.81	10.00	2.00	4.70	153.14
13-08-2024	2.94	2.58	8.79	5.46	10.00	2.10	5.13	149.11
14-08-2024	2.59	1.67	6.44	5.03	10.00	2.94	5.67	166.62
15-08-2024	3.19	3.14	8.97	5.11	10.00	1.00	4.90	148.70
16-08-2024	3.54	3.59	8.92	6.21	10.00	3.00	5.78	155.49
17-08-2024	3.72	2.62	8.78	6.03	10.00	2.30	5.43	165.02
18-08-2024	4.22	3.65	9.12	8.94	10.00	1.00	3.95	139.16
19-08-2024	3.79	3.26	8.98	8.30	10.00	2.00	4.73	154.66
20-08-2024	3.62	2.78	9.10	6.74	10.00	2.30	4.78	157.13
21-08-2024	2.57	0.80	7.63	7.16	10.00	1.01	3.81	126.33
22-08-2024	2.53	2.17	8.84	5.72	10.00	1.64	4.35	157.81
23-08-2024	3.29	1.97	8.57	6.11	10.00	1.00	4.29	148.96
24-08-2024	3.54	2.70	8.84	6.28	10.00	0.66	3.82	127.31
25-08-2024	2.56	2.27	8.74	4.76	4.00	0.50	2.25	123.15
26-08-2024	3.06	2.07	8.85	5.15	3.73	0.30	1.96	100.60
27-08-2024	3.03	2.05	8.63	4.02	4.29	0.60	2.46	153.19
28-08-2024	2.69	1.18	8.01	5.24	9.53	2.00	3.61	163.26
29-08-2024	3.71	2.76	9.03	5.10	5.35	1.90	3.14	147.77
30-08-2024	4.01	3.19	9.10	6.84	10.00	2.00	4.19	163.34
31-08-2024	5.63	3.60	9.64	9.50	10.00	1.34	4.11	136.80
Maximum	5.63	3.65	9.64	9.50	10.00	3.00	6.64	178.15
Minimum	1.81	0.80	4.58	3.75	3.73	0.30	1.96	100.60
Average	3.14	2.49	8.35	5.77	8.96	1.70	4.29	152.00

MCP: Market Clearing Price (₹/kWh)

FSV: Final Scheduled Volume (MU)

Comparison of MCP w.r.t. Purchase Bid for 2,976 Time Blocks during the month of August, 2024 under DAM



Annexure-VI**Maximum Final Schedule Volume (FSV), Minimum FSV, Maximum Market Clearing Price (MCP) and Minimum MCP under DAM**

Date	Max. FSV (MU)		Max. MCP (₹/kWh)		Min FSV (MU)		Min. MCP (₹/kWh)	
	Time Block	Value	Time Block	Value	Time Block	Value	Time Block	Value
01-08-2024	15:15 - 15:30	2.74	00:00 - 00:15	10.00	22:45 - 23:00	0.84	13:00 - 13:15	2.00
02-08-2024	14:45 - 15:00	2.19	00:00 - 00:15	10.00	20:45 - 21:00	1.03	13:15 - 13:30	2.00
03-08-2024	07:00 - 07:15	2.68	19:00 - 19:15	10.00	19:15 - 19:30	1.18	13:15 - 13:30	2.00
04-08-2024	06:30 - 06:45	2.07	21:30 - 21:45	5.35	18:30 - 18:45	1.14	13:30 - 13:45	1.20
05-08-2024	06:45 - 07:00	2.54	19:15 - 19:30	10.00	01:45 - 02:00	1.42	13:00 - 13:15	2.10
06-08-2024	07:00 - 07:15	2.49	19:45 - 20:00	10.00	19:15 - 19:30	1.32	13:00 - 13:15	2.10
07-08-2024	07:00 - 07:15	2.31	00:00 - 00:15	10.00	19:45 - 20:00	1.04	13:00 - 13:15	2.00
08-08-2024	07:15 - 07:30	2.25	19:00 - 19:15	10.00	19:30 - 19:45	1.19	13:00 - 13:15	1.85
09-08-2024	06:45 - 07:00	2.25	19:30 - 19:45	10.00	19:45 - 20:00	1.23	13:00 - 13:15	1.83
10-08-2024	06:45 - 07:00	2.33	20:00 - 20:15	10.00	19:15 - 19:30	1.22	13:30 - 13:45	1.96
11-08-2024	06:15 - 06:30	2.35	21:45 - 22:00	5.50	18:15 - 18:30	1.38	14:30 - 14:45	2.00
12-08-2024	06:45 - 07:00	2.28	19:00 - 19:15	10.00	20:15 - 20:30	1.08	13:00 - 13:15	2.00
13-08-2024	06:45 - 07:00	2.43	00:00 - 00:15	10.00	19:45 - 20:00	0.97	13:15 - 13:30	2.10
14-08-2024	07:00 - 07:15	2.85	00:00 - 00:15	10.00	19:45 - 20:00	0.92	13:15 - 13:30	2.94
15-08-2024	07:00 - 07:15	2.36	00:00 - 00:15	10.00	10:00 - 10:15	1.10	11:00 - 11:15	1.00
16-08-2024	07:15 - 07:30	2.39	00:00 - 00:15	10.00	19:45 - 20:00	0.81	13:00 - 13:15	3.00
17-08-2024	07:00 - 07:15	2.59	00:00 - 00:15	10.00	20:00 - 20:15	1.05	13:15 - 13:30	2.30
18-08-2024	06:30 - 06:45	2.08	00:00 - 00:15	10.00	17:30 - 17:45	0.99	13:30 - 13:45	1.00
19-08-2024	07:00 - 07:15	2.53	19:00 - 19:15	10.00	20:00 - 20:15	0.97	13:15 - 13:30	2.00
20-08-2024	07:00 - 07:15	2.43	19:00 - 19:15	10.00	20:15 - 20:30	1.07	13:00 - 13:15	2.30
21-08-2024	17:45 - 18:00	1.75	21:15 - 21:30	10.00	23:45 - 24:00	1.05	15:00 - 15:15	1.01
22-08-2024	06:45 - 07:00	2.19	19:15 - 19:30	10.00	13:30 - 13:45	1.39	13:00 - 13:15	1.64
23-08-2024	06:45 - 07:00	2.22	19:00 - 19:15	10.00	02:45 - 03:00	1.16	13:00 - 13:15	1.00
24-08-2024	00:00 - 00:15	1.61	19:15 - 19:30	10.00	23:45 - 24:00	1.10	13:15 - 13:30	0.66
25-08-2024	07:00 - 07:15	1.69	20:00 - 20:15	4.00	17:45 - 18:00	1.09	13:00 - 13:15	0.50
26-08-2024	07:15 - 07:30	1.51	19:45 - 20:00	3.73	02:45 - 03:00	0.77	13:15 - 13:30	0.30
27-08-2024	15:30 - 15:45	1.99	21:15 - 21:30	4.29	23:45 - 24:00	1.35	13:15 - 13:30	0.60
28-08-2024	17:00 - 17:15	2.20	21:15 - 21:30	9.53	23:30 - 23:45	1.24	13:00 - 13:15	2.00
29-08-2024	07:00 - 07:15	2.02	21:15 - 21:30	5.35	22:30 - 22:45	1.10	13:00 - 13:15	1.90
30-08-2024	06:45 - 07:00	2.32	19:30 - 19:45	10.00	18:00 - 18:15	1.41	13:15 - 13:30	2.00
31-08-2024	22:15 - 22:30	1.76	19:15 - 19:30	10.00	02:45 - 03:00	1.06	13:00 - 13:15	1.34

MCP: Market Clearing Price (₹/kWh)**FSV: Final Scheduled Volume (MU)**

Annexure-VII

Sellers and Buyers under Day Ahead Market (DAM) in August, 2024						
S. No.	Entity Name	Sell		Entity Name	Purchase	
		(MU)	Percent (%)		(MU)	Percent (%)
1	Karnataka	366.16	7.77%	Telangana	1967.10	41.75%
2	NVVN (SNA) - NEA	356.49	7.57%	Gujarat	514.00	10.91%
3	JITPL	202.45	4.30%	Andhra Pradesh	367.70	7.80%
4	Orissa	184.45	3.91%	Maharashtra	287.46	6.10%
5	Jindal Power Ltd. Stg-	174.09	3.69%	Daman & Diu - Dadra &	250.50	5.32%
6	Uttar Pradesh	159.33	3.38%	Uttar Pradesh	236.99	5.03%
7	Chhattisgarh	148.09	3.14%	Tamilnadu	218.84	4.64%
8	MAHAN ENERGEN	145.46	3.09%	Punjab	193.60	4.11%
9	Delhi	145.08	3.08%	West Bengal	115.02	2.44%
10	Adani Power Limited-	138.45	2.94%	Haryana	78.38	1.66%
11	Madhya Pradesh	135.33	2.87%	Kerala	57.81	1.23%
12	DB Power	129.78	2.75%	Delhi	51.33	1.09%
13	Karcham Wangtoo	120.00	2.55%	Rajasthan	50.77	1.08%
14	Jindal Power	98.38	2.09%	Uttarakhand	50.14	1.06%
15	Rajasthan	87.84	1.86%	Madhya Pradesh	37.96	0.81%
16	AD Hydro	81.27	1.72%	Karnataka	26.18	0.56%
17	Jaypee Nigrie	74.20	1.57%	BHARAT ALUMINIUM	24.37	0.52%
18	Assam	72.96	1.55%	Assam	22.29	0.47%
19	Himachal Pradesh	70.34	1.49%	MB Power	18.72	0.40%
20	Adani Power Limited	65.78	1.40%	Chhattisgarh	17.74	0.38%
21	Tamilnadu	65.11	1.38%	Orissa	17.54	0.37%
22	Haryana	64.61	1.37%	Railways	16.21	0.34%
23	SKS Power	56.03	1.19%	ArcelorMittal Nippon steel	16.05	0.34%
24	Gujarat	52.17	1.11%	Goa WR	12.94	0.27%
25	Sembcorp Energy	46.41	0.98%	Himachal Pradesh	12.26	0.26%
26	Andhra Pradesh	45.73	0.97%	Sikkim	11.92	0.25%
27	Sainj HEP	44.18	0.94%	Goa SR	10.83	0.23%
28	ADANI WIND	43.80	0.93%	Bihar	6.52	0.14%
29	Shree Cement	42.83	0.91%	J&K	5.29	0.11%
30	NEA-NR	42.72	0.91%	Chandigarh	5.24	0.11%
31	ACBIL	42.31	0.90%	Jharkhand	5.16	0.11%
32	Jindal Steel	41.75	0.89%	Tripura	2.67	0.06%
33	Nabinagar Power	38.86	0.82%	Meghalaya	1.69	0.04%
34	Maharashtra	38.43	0.82%	DVC	0.56	0.01%
35	IL&FS	38.42	0.82%	Pondicherry	0.20	0.004%
36	West Bengal	37.58	0.80%			
37	Basochhu	34.51	0.73%			
38	RENEW SURYA	32.29	0.69%			
39	Government of	30.65	0.65%			
40	Government of	30.54	0.65%			
41	IND BARATH	30.04	0.64%			
42	Government of	28.47	0.60%			
43	RENEW SURYA	28.31	0.60%			
44	ADANI	27.43	0.58%			
45	DVC	25.78	0.55%			
46	NTPC North	24.62	0.52%			
47	Renew Surya Ravi	24.54	0.52%			
48	Adept Renewable	23.77	0.50%			
49	Bihar	23.61	0.50%			
50	Mizoram	23.45	0.50%			
51	Farakka	22.11	0.47%			

52	Chandigarh	21.25	0.45%			
53	Adani Green Energy	20.65	0.44%			
54	Nikachhu Hydropower	20.52	0.44%			
55	ADANI SOLAR	20.20	0.43%			
56	Government of	18.81	0.40%			
57	Singoli Bhagwati	18.34	0.39%			
58	Talcher	17.36	0.37%			
59	Amp Energy Green	17.07	0.36%			
60	Government of	16.83	0.36%			
61	Kerala	16.64	0.35%			
62	Government of	15.70	0.33%			
63	Barh Stg-2	14.93	0.32%			
64	Simhapuri Energy	14.05	0.30%			
65	Punjab	14.04	0.30%			
66	The Tata Power Co	13.22	0.28%			
67	MAHAN ENERGEN	12.79	0.27%			
68	Jhabua Power	12.03	0.26%			
69	KBUNL(MTPS-II)	11.70	0.25%			
70	Telangana	11.58	0.25%			
71	Government of	10.89	0.23%			
72	Sipat Stg-1	10.51	0.22%			
73	Ostro Kannada Power	10.05	0.21%			
74	Sorang HEP,	9.77	0.21%			
75	Korba	8.73	0.19%			
76	ADANI	8.55	0.18%			
77	Jharkhand	8.14	0.17%			
78	Lanco Budhil	8.10	0.17%			
79	Goa WR	7.74	0.16%			
80	Government of	7.40	0.16%			
81	NTPP BRBCL	7.36	0.16%			
82	ADANI SOLAR	7.29	0.15%			
83	Farakka Stg 3	6.97	0.15%			
84	Sembcorp Gayatri	6.68	0.14%			
85	NTPC Lara	6.34	0.13%			
86	Adani Green Energy	6.18	0.13%			
87	Sipat Stg-2	6.15	0.13%			
88	Bongaigaon	6.12	0.13%			
89	Vindhyachal stg-2	5.89	0.12%			
90	Sikkim	5.72	0.12%			
91	Onevolt Energy	5.62	0.12%			
92	Maruti Clean Coal	5.56	0.12%			
93	Vindhyachal stg-4	5.48	0.12%			
94	WIND FIVE	5.31	0.11%			
95	DGEN Mega Power	4.95	0.11%			
96	RKM Power	4.91	0.10%			
97	Kahalgaon	4.82	0.10%			
98	Kahalgaon-II	4.68	0.10%			
99	Tripura	4.62	0.10%			
100	Adani Green Energy	4.61	0.10%			
101	Nagaland	4.39	0.09%			
102	ADANI	4.31	0.09%			
103	Costal Energen	4.05	0.09%			
104	Vindhyachal stg-3	4.01	0.09%			
105	GMR Warora	3.95	0.08%			
106	Vindhyachal stg-1	3.78	0.08%			
107	Adani Green Energy	3.65	0.08%			
108	J&K	3.46	0.07%			

109	Pondicherry	3.43	0.07%			
110	Korba Stg 3	3.25	0.07%			
111	Uttarakhand	2.88	0.06%			
112	Transition Energy	2.49	0.05%			
113	Unchahar-IV	2.38	0.05%			
114	IGSTPS JHAJJAR	2.32	0.05%			
115	Khargone STPP	2.19	0.05%			
116	Ramagundam Floating	2.17	0.05%			
117	TPSL 200MW	2.16	0.05%			
118	Talcher Stg-2	2.10	0.04%			
119	Palatana	2.07	0.04%			
120	Barh STPS Stg - I	1.92	0.04%			
121	Tanda Stg-2	1.92	0.04%			
122	Mouda Stg-2	1.68	0.04%			
123	Unchahar-II	1.67	0.04%			
124	NTPC Telangana	1.65	0.04%			
125	Vindhyachal stg-5	1.59	0.03%			
126	NTPC Gadawara	1.53	0.03%			
127	RENEW SURYA	1.49	0.03%			
128	ADANI WIND	1.45	0.03%			
129	Rihand-I	1.45	0.03%			
130	Arunachal Pradesh	1.45	0.03%			
131	Simhadri FSP 15 MW	1.30	0.03%			
132	Meghalaya	1.15	0.02%			
133	NTPC Sholapur	1.12	0.02%			
134	Rihand-III	0.97	0.02%			
135	Unchahar-I	0.91	0.02%			
136	Dadri Stg-2	0.88	0.02%			
137	Mouda Stg-1	0.84	0.02%			
138	NTPC Simhadri 25	0.80	0.02%			
139	Rihand-II	0.75	0.02%			
140	ADANI SOLAR	0.68	0.01%			
141	GMR Kamalanga	0.67	0.01%			
142	DHARIWAL STU	0.66	0.01%			
143	Simhadri Stg-2	0.60	0.01%			
144	Dhariwal ISTS	0.52	0.01%			
145	Unchahar-III	0.50	0.01%			
146	MB Power	0.48	0.01%			
147	Darlipalli	0.42	0.01%			
148	TPSL Banderwala	0.36	0.01%			
149	Singrauli	0.30	0.01%			
150	NLC	0.21	0.005%			
151	Ramagundam Stg-1	0.21	0.004%			
152	NTPC Kudgi	0.21	0.004%			
153	Nani Virani Wind	0.20	0.004%			
154	ADANI GREEN	0.13	0.003%			
155	Serentica Renewables	0.09	0.002%			
156	Neyveli New Thermal	0.08	0.002%			
157	NLC TPS-II	0.07	0.002%			
158	NLC TPS-II Stg-2	0.06	0.001%			
159	NTPL	0.05	0.001%			
160	NLC TPS-II Expn	0.02	0.001%			
161	Ramagundam Stg-3	0.02	0.001%			
Total Volume of top 10		2,020.04	42.87%	Total Volume of top 10	4,229.59	89.76%
Total Volume in PXs		4,711.98		Total Volume in PXs	4,711.98	

Annexure-VIII

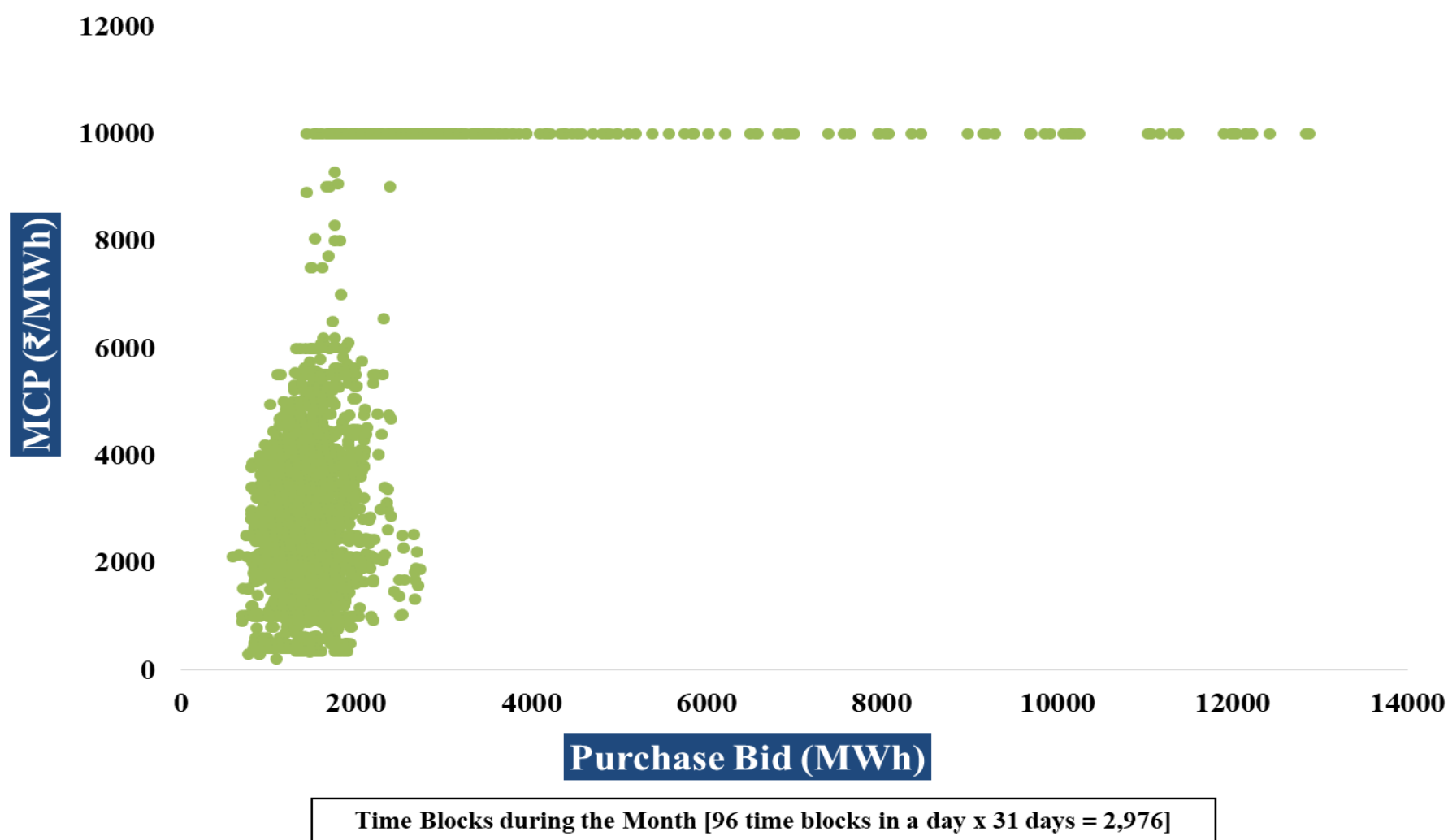
Evening, Day, Night, Morning, Maximum, Minimum, Wt. Avg. MCP (₹/kWh) and Final Scheduled Volume (MU) under RTM

Date	Morning MCP (07:00-10:00)	Day MCP (11:00-17:00)	Evening MCP (18:00- 23:00)	Night MCP (01:00- 06:00, 23:00-24:00)	Maximum MCP	Minimum MCP	Wt. Avg. MCP	Final Scheduled Volume (MU)
01-08-2024	2.37	1.66	3.94	2.51	5.00	0.60	2.59	130.91
02-08-2024	1.93	0.95	2.88	1.91	4.09	0.40	1.90	119.48
03-08-2024	1.39	1.08	3.87	1.73	5.70	0.38	2.01	126.37
04-08-2024	1.99	1.09	3.87	3.23	4.75	0.50	2.54	148.69
05-08-2024	2.73	2.56	8.42	3.85	10.00	1.67	4.33	126.85
06-08-2024	3.20	2.27	8.14	3.96	10.00	0.95	4.42	117.16
07-08-2024	2.62	1.70	6.58	3.08	10.00	1.00	3.40	108.21
08-08-2024	2.25	2.00	8.92	2.51	10.00	1.64	3.72	99.36
09-08-2024	2.88	2.10	7.50	3.54	10.00	1.00	3.85	113.65
10-08-2024	2.92	1.59	5.36	3.48	8.29	0.70	3.30	109.16
11-08-2024	1.74	0.55	3.31	3.53	5.50	0.20	2.33	108.34
12-08-2024	2.61	2.28	9.12	3.84	10.00	1.20	4.22	104.14
13-08-2024	3.16	3.03	9.52	4.72	10.00	1.92	5.12	86.47
14-08-2024	5.31	4.78	9.50	6.26	10.00	3.64	6.67	93.71
15-08-2024	3.41	1.80	4.08	5.76	10.00	0.80	3.93	130.87
16-08-2024	3.58	4.21	9.46	4.21	10.00	2.50	5.15	104.71
17-08-2024	2.65	2.80	8.72	4.52	10.00	1.19	4.59	87.31
18-08-2024	2.29	2.28	5.04	3.67	8.00	0.90	3.37	118.23
19-08-2024	2.63	2.10	3.80	3.66	4.75	1.09	3.06	89.20
20-08-2024	1.43	1.98	8.83	3.16	10.00	0.50	3.77	96.18
21-08-2024	2.87	3.31	9.12	4.71	10.00	2.43	4.91	102.95
22-08-2024	3.09	3.05	8.70	4.21	10.00	1.70	4.68	103.66
23-08-2024	2.98	2.24	6.30	3.68	10.00	1.16	3.78	98.47
24-08-2024	2.52	1.90	3.32	3.26	4.44	1.00	2.84	123.19
25-08-2024	0.75	0.54	2.83	2.70	3.76	0.34	1.83	123.63
26-08-2024	2.27	1.81	3.75	3.23	4.75	0.93	2.81	155.75
27-08-2024	1.55	1.58	3.55	2.31	4.39	0.62	2.30	128.80
28-08-2024	1.79	2.37	4.62	3.00	5.80	1.00	2.98	99.35
29-08-2024	2.05	1.71	4.37	2.97	6.00	0.59	2.76	132.74
30-08-2024	2.99	2.61	7.01	3.06	10.00	1.00	3.70	98.39
31-08-2024	2.99	2.83	9.05	3.96	10.00	1.60	4.60	98.95
Maximum	5.31	4.78	9.52	6.26	10.00	3.64	6.67	155.75
Minimum	0.75	0.54	2.83	1.73	3.76	0.20	1.83	86.47
Average	2.55	2.15	6.24	3.55	7.91	1.13	3.60	112.41

MCP: Market Clearing Price (₹/kWh)

FSV: Final Scheduled Volume (MU)

Comparison of MCP w.r.t. Purchase Bid for 2,976 Time Blocks during the month of August, 2024 under RTM



Maximum Final Schedule Volume (FSV), Minimum FSV, Maximum Market Clearing Price (MCP) and Minimum MCP under RTM

Date	Max. FSV (MU)		Max. MCP (₹/kWh)		Min FSV (MU)		Min. MCP (₹/kWh)	
	Time Block	Value	Time Block	Value	Time Block	Value	Time Block	Value
01-08-2024	00:00 - 00:15	1.83	19:15 - 19:30	5.00	18:30 - 18:45	1.03	13:30 - 13:45	0.60
02-08-2024	18:45 - 19:00	1.77	19:15 - 19:30	4.09	00:45 - 01:00	0.89	14:45 - 15:00	0.40
03-08-2024	15:45 - 16:00	2.00	21:15 - 21:30	5.70	02:45 - 03:00	0.81	13:00 - 13:15	0.38
04-08-2024	23:00 - 23:15	2.00	23:15 - 23:30	4.75	06:45 - 07:00	1.11	16:00 - 16:15	0.50
05-08-2024	00:00 - 00:15	1.84	00:00 - 00:15	10.00	18:00 - 18:15	0.93	11:15 - 11:30	1.67
06-08-2024	00:15 - 00:30	1.70	00:00 - 00:15	10.00	22:15 - 22:30	0.81	13:00 - 13:15	0.95
07-08-2024	13:45 - 14:00	1.38	19:30 - 19:45	10.00	23:00 - 23:15	0.86	13:00 - 13:15	1.00
08-08-2024	12:30 - 12:45	1.44	19:00 - 19:15	10.00	04:45 - 05:00	0.71	13:00 - 13:15	1.64
09-08-2024	15:00 - 15:15	1.97	19:15 - 19:30	10.00	07:15 - 07:30	0.81	13:30 - 13:45	1.00
10-08-2024	15:45 - 16:00	1.80	19:30 - 19:45	8.29	07:45 - 08:00	0.73	13:30 - 13:45	0.70
11-08-2024	21:00 - 21:15	1.48	00:00 - 00:15	5.50	13:30 - 13:45	0.76	15:30 - 15:45	0.20
12-08-2024	14:45 - 15:00	1.63	18:45 - 19:00	10.00	19:30 - 19:45	0.61	13:15 - 13:30	1.20
13-08-2024	14:45 - 15:00	1.68	00:00 - 00:15	10.00	22:00 - 22:15	0.28	13:00 - 13:15	1.92
14-08-2024	14:45 - 15:00	1.83	00:00 - 00:15	10.00	22:15 - 22:30	0.24	02:45 - 03:00	3.64
15-08-2024	15:30 - 15:45	2.18	00:00 - 00:15	10.00	00:30 - 00:45	0.60	11:15 - 11:30	0.80
16-08-2024	14:00 - 14:15	1.79	18:30 - 18:45	10.00	19:45 - 20:00	0.53	01:30 - 01:45	2.50
17-08-2024	20:45 - 21:00	1.23	19:00 - 19:15	10.00	01:00 - 01:15	0.40	10:00 - 10:15	1.19
18-08-2024	12:15 - 12:30	1.83	20:45 - 21:00	8.00	00:45 - 01:00	0.60	11:00 - 11:15	0.90
19-08-2024	14:00 - 14:15	1.24	19:15 - 19:30	4.75	05:45 - 06:00	0.54	18:15 - 18:30	1.09
20-08-2024	16:30 - 16:45	1.42	19:00 - 19:15	10.00	03:15 - 03:30	0.61	13:15 - 13:30	0.50
21-08-2024	12:45 - 13:00	1.66	19:00 - 19:15	10.00	20:45 - 21:00	0.67	13:00 - 13:15	2.43
22-08-2024	12:45 - 13:00	1.81	19:00 - 19:15	10.00	00:15 - 00:30	0.51	12:00 - 12:15	1.70
23-08-2024	14:45 - 15:00	1.63	19:15 - 19:30	10.00	02:45 - 03:00	0.61	13:30 - 13:45	1.16
24-08-2024	14:45 - 15:00	2.09	00:30 - 00:45	4.44	00:45 - 01:00	0.71	13:30 - 13:45	1.00
25-08-2024	14:45 - 15:00	1.91	00:45 - 01:00	3.76	00:00 - 00:15	0.76	12:15 - 12:30	0.34
26-08-2024	15:00 - 15:15	2.66	18:45 - 19:00	4.75	19:45 - 20:00	0.96	11:45 - 12:00	0.93
27-08-2024	14:15 - 14:30	1.91	22:45 - 23:00	4.39	20:45 - 21:00	0.83	13:15 - 13:30	0.62
28-08-2024	14:15 - 14:30	1.50	19:15 - 19:30	5.80	00:15 - 00:30	0.65	09:30 - 09:45	1.00
29-08-2024	15:15 - 15:30	2.06	20:45 - 21:00	6.00	00:00 - 00:15	0.93	10:00 - 10:15	0.59
30-08-2024	09:00 - 09:15	1.37	19:00 - 19:15	10.00	19:15 - 19:30	0.53	10:00 - 10:15	1.00
31-08-2024	13:45 - 14:00	1.75	19:15 - 19:30	10.00	19:15 - 19:30	0.55	13:00 - 13:15	1.60

MCP: Market Clearing Price (₹/kWh)

FSV: Final Scheduled Volume (MU)

Sellers and Buyers under Real Time Market (RTM) in August, 2024						
S. No.	Entity Name	Sell		Entity Name	Purchase	
		(MU)	Percent (%)		(MU)	Percent (%)
1	Bihar	366.62	10.50%	Telangana	665.77	19.07%
2	Madhya Pradesh	273.11	7.82%	Punjab	624.61	17.89%
3	Rajasthan	257.22	7.37%	Uttar Pradesh	318.38	9.12%
4	Tamilnadu	200.47	5.74%	West Bengal	217.36	6.23%
5	J&K	183.56	5.26%	Andhra Pradesh	205.01	5.87%
6	Haryana	169.51	4.86%	Maharashtra	191.87	5.50%
7	Himachal Pradesh	153.81	4.41%	Kerala	163.62	4.69%
8	Karnataka	144.05	4.13%	Orissa	135.85	3.89%
9	Punjab	122.16	3.50%	Gujarat	135.81	3.89%
10	Orissa	119.95	3.44%	Tamilnadu	102.95	2.95%
11	Delhi	116.59	3.34%	Assam	96.11	2.75%
12	Uttar Pradesh	79.75	2.28%	Uttarakhand	81.79	2.34%
13	Chhattisgarh	70.11	2.01%	Delhi	77.91	2.23%
14	Andhra Pradesh	58.35	1.67%	Rajasthan	77.17	2.21%
15	West Bengal	45.89	1.31%	DVC	39.65	1.14%
16	Jharkhand	43.65	1.25%	Daman & Diu - Dadra &	34.56	0.99%
17	Sasan UMPP	40.64	1.16%	Chhattisgarh	28.81	0.83%
18	Arunachal Pradesh	40.08	1.15%	Madhya Pradesh	28.59	0.82%
19	Assam	39.67	1.14%	Karnataka	28.52	0.82%
20	Telangana	32.06	0.92%	Haryana	23.26	0.67%
21	Sembcorp Energy	30.55	0.88%	Jharkhand	21.82	0.63%
22	Maharashtra	30.40	0.87%	Himachal Pradesh	21.15	0.61%
23	Jhabua Power	27.28	0.78%	MB Power	20.81	0.60%
24	MEENAKSHI	24.18	0.69%	Jindal Power Ltd. Stg-II	19.88	0.57%
25	DVC	23.40	0.67%	Bihar	17.12	0.49%
26	Adani Power	23.22	0.66%	MAHAN ENERGEN	15.11	0.43%
27	TRN Energy	23.21	0.66%	BHARAT ALUMINIUM	13.51	0.39%
28	Farakka	20.32	0.58%	ArcelorMittal Nippon steel	11.24	0.32%
29	Gujarat	19.50	0.56%	Manipur	7.40	0.21%
30	Karcham Wangtoo	18.47	0.53%	Jindal Steel	7.29	0.21%
31	ADANI	18.25	0.52%	Meghalaya	6.39	0.18%
32	RENEW SURYA	18.07	0.52%	Tripura	5.73	0.16%
33	Nabinagar Power	17.31	0.50%	Jindal Power	4.89	0.14%
34	Singrauli	17.25	0.49%	Railways	4.56	0.13%
35	AD Hydro	15.42	0.44%	Goa WR	4.30	0.12%
36	NTPL	15.01	0.43%	Jhabua Power	2.86	0.08%
37	Sipat Stg-1	14.82	0.42%	Government of Himachal	2.70	0.08%
38	Uttarakhand	14.40	0.41%	Goa SR	2.68	0.08%
39	Jindal Power Ltd.	14.17	0.41%	Singoli Bhagwati	2.43	0.07%
40	ADANI	14.02	0.40%	Government of Himachal	2.06	0.06%
41	Kahalgaoon-II	13.41	0.38%	Adani Power Limited-	1.93	0.06%
42	Adani Green Energy	12.16	0.35%	Government of Himachal	1.80	0.05%
43	Tripura	11.79	0.34%	MAHAN ENERGEN	1.71	0.05%
44	Rihand-III	11.64	0.33%	MEENAKSHI ENERGY	1.59	0.05%
45	Talcher Stg-2	11.62	0.33%	Government of Himachal	1.51	0.04%
46	NREL-Dayapar	11.13	0.32%	Sainj HEP	1.43	0.04%
47	Vindhyachal stg-4	11.07	0.32%	Ratnagiri Gas & Power	1.15	0.03%

48	Pondicherry	10.74	0.31%	Chandigarh	1.13	0.03%
49	Rihand-II	10.63	0.30%	ACBIL	1.09	0.03%
50	Korba	10.54	0.30%	Government of Himachal	0.76	0.02%
51	Sikkim	10.25	0.29%	Gandhar	0.76	0.02%
52	Rihand-I	10.17	0.29%	Government of Himachal	0.70	0.02%
53	SKS Power	9.84	0.28%	Kawas	0.68	0.02%
54	Renew Surya Ravi	9.74	0.28%	Pondicherry	0.65	0.02%
55	ADANI WIND	9.50	0.27%	J&K	0.56	0.02%
56	Manipur	9.45	0.27%	Sikkim	0.55	0.02%
57	JITPL	8.87	0.25%	Maruti Clean Coal Power	0.48	0.01%
58	Sipat Stg-2	8.82	0.25%	Simhapuri Energy Limited	0.45	0.01%
59	NTPC Lara	8.21	0.24%	The Tata Power Co Ltd	0.36	0.01%
60	The Tata Power Co	8.14	0.23%	Government of Himachal	0.23	0.01%
61	DB Power	7.61	0.22%	SKS Power	0.09	0.003%
62	Kahalgaoon	7.27	0.21%	Government of Himachal	0.08	0.002%
63	Vindhyachal stg-1	7.12	0.20%	Nagaland	0.06	0.002%
64	Transition Green	7.03	0.20%			
65	MB Power	6.98	0.20%			
66	Tanda Stg-2	6.83	0.20%			
67	Vindhyachal stg-2	6.58	0.19%			
68	NVVN (SNA) -	6.42	0.18%			
69	Barh Stg-2	6.41	0.18%			
70	Vindhyachal stg-3	6.34	0.18%			
71	Farakka Stg 3	6.12	0.18%			
72	MAHAN	6.05	0.17%			
73	Sorang HEP,	5.85	0.17%			
74	RENEW SURYA	5.66	0.16%			
75	NTPC Gadawara	5.38	0.15%			
76	NTPC Telangana	5.32	0.15%			
77	Adani Power	5.22	0.15%			
78	Khargone STPP	5.21	0.15%			
79	Palatana	5.13	0.15%			
80	Maithon Power	4.99	0.14%			
81	Vindhyachal stg-5	4.94	0.14%			
82	ACBIL	4.92	0.14%			
83	Kerala	4.78	0.14%			
84	Singoli Bhagwati	4.76	0.14%			
85	Serentica	4.50	0.13%			
86	NTPC North	4.49	0.13%			
87	RENEW SURYA	4.35	0.12%			
88	NTPC Kudgi	4.23	0.12%			
89	Onevolt Energy	4.17	0.12%			
90	Darlipalli	4.10	0.12%			
91	Grian Energy Private	4.06	0.12%			
92	Jindal Steel	3.97	0.11%			
93	Meghalaya	3.97	0.11%			
94	Ostro Kannada	3.86	0.11%			
95	Jindal Power	3.81	0.11%			
96	Amplus Ages	3.80	0.11%			
97	RENEW SURYA	3.79	0.11%			
98	Dadri Stg-2	3.77	0.11%			
99	Bongaigaon	3.74	0.11%			

100	Chandigarh	3.71	0.11%			
101	NLC TPS-II Stg-2	3.70	0.11%			
102	Mouda Stg-2	3.66	0.10%			
103	Amp Energy Green	3.63	0.10%			
104	NLC	3.54	0.10%			
105	Transition Energy	3.49	0.10%			
106	Neyveli New	3.48	0.10%			
107	Talcher	3.43	0.10%			
108	Simhadri Stg-2	3.34	0.10%			
109	Unchahar-II	3.21	0.09%			
110	Korba Stg 3	3.21	0.09%			
111	KBUNL(MTPS-II)	3.13	0.09%			
112	MAHAN	3.00	0.09%			
113	ADANI SOLAR	2.92	0.08%			
114	ADANI SOLAR	2.91	0.08%			
115	RKM Power	2.87	0.08%			
116	Serentica	2.83	0.08%			
117	Shree Cement	2.73	0.08%			
118	Serentica	2.70	0.08%			
119	Unchahar-IV	2.59	0.07%			
120	NTPP BRBCL	2.47	0.07%			
121	ADHUNIK POWER	2.41	0.07%			
122	Mouda Stg-1	2.31	0.07%			
123	IGSTPS JHAJJAR	2.29	0.07%			
124	Adept Renewable	2.16	0.06%			
125	Nagaland	2.14	0.06%			
126	Ramagundam Stg-1	2.11	0.06%			
127	Jorethang	2.07	0.06%			
128	IL&FS	2.07	0.06%			
129	Simhapuri Energy	1.99	0.06%			
130	TPSL 200MW	1.83	0.05%			
131	NTPC Sholapur	1.76	0.05%			
132	IND BARATH	1.65	0.05%			
133	TPSL Banderwala	1.62	0.05%			
134	Maruti Clean Coal	1.61	0.05%			
135	AGBPP	1.44	0.04%			
136	NEA-NR	1.35	0.04%			
137	Government of	1.34	0.04%			
138	Simhadri Stg-1	1.33	0.04%			
139	Lanco Budhil	1.27	0.04%			
140	Barh STPS Stg - I	1.26	0.04%			
141	NLC TPS-II	1.23	0.04%			
142	Tashiding HEP	1.21	0.03%			
143	Sembcorp Gayatri	1.17	0.03%			
144	Unchahar-III	1.17	0.03%			
145	Basochhu	1.15	0.03%			
146	Unchahar-I	1.14	0.03%			
147	NTECL Vallur	1.07	0.03%			
148	Government of	1.04	0.03%			
149	ADANI	0.95	0.03%			
150	Ramagundam Stg-3	0.94	0.03%			
151	Goa WR	0.89	0.03%			

152	Dadri TPS	0.83	0.02%			
153	DGEN Mega Power	0.82	0.02%			
154	AGTPP	0.74	0.02%			
155	NLC TPS-II Expn	0.73	0.02%			
156	Adani Green Energy	0.66	0.02%			
157	Sainj HEP	0.60	0.02%			
158	Kameng HEP	0.48	0.01%			
159	Daman & Diu -	0.45	0.01%			
160	RENEW SURYA	0.38	0.01%			
161	Ramagundam	0.35	0.01%			
162	Government of	0.33	0.01%			
163	Continuum Power	0.32	0.01%			
164	GMR Warora	0.28	0.01%			
165	Chuzachen	0.26	0.01%			
166	Government of	0.25	0.01%			
167	Jaypee Nigrie	0.24	0.01%			
168	Nani Virani Wind	0.23	0.01%			
169	GMR Kamalanga	0.22	0.01%			
170	NSPCL Bhilai	0.12	0.003%			
171	WIND FIVE	0.10	0.003%			
172	Costal Energen	0.10	0.003%			
173	Adani Green Energy	0.09	0.003%			
174	ADANI WIND	0.06	0.002%			
175	NTPC Simhadri 25	0.06	0.002%			
176	Government of	0.05	0.001%			
177	Dhariwal ISTS	0.05	0.001%			
178	DHARIWAL STU	0.04	0.001%			
179	Nikachhu	0.03	0.001%			
180	Adani Green Energy	0.02	0.001%			
181	Government of	0.02	0.001%			
182	Government of	0.02	0.001%			
183	Government of	0.01	0.0003%			
184	Goa SR	0.01	0.0002%			
Total Volume of top 10		1,990.46	57.01%	Total Volume of top 10	2,761.23	79.09%
Total Volume in PXs		3,491.31		Total Volume in PXs	3,491.31	

Cross Border Electricity Transactions under Day Ahead Market (DAM) in IEX with Nepal and Bhutan during the month of August, 2024

S. No	Delivery Date	Buy Volume By Nepal (MU)	Sell Volume by Nepal (MU)	Buy Volume By Bhutan (MU)	Sell Volume by Bhutan (MU)
1	01-08-2024	-	11.45	-	2.04
2	02-08-2024	-	11.79	-	2.06
3	03-08-2024	-	12.93	-	1.90
4	04-08-2024	-	12.39	-	1.84
5	05-08-2024	-	12.36	-	2.33
6	06-08-2024	-	12.09	-	2.18
7	07-08-2024	-	9.38	-	1.99
8	08-08-2024	-	12.33	-	1.89
9	09-08-2024	-	12.38	-	1.78
10	10-08-2024	-	13.64	-	1.79
11	11-08-2024	-	10.14	-	1.79
12	12-08-2024	-	13.50	-	1.87
13	13-08-2024	-	13.68	-	2.04
14	14-08-2024	-	13.68	-	1.02
15	15-08-2024	-	13.68	-	1.09
16	16-08-2024	-	13.68	-	2.33
17	17-08-2024	-	13.68	-	2.33
18	18-08-2024	-	13.50	-	1.26
19	19-08-2024	-	13.60	-	1.92
20	20-08-2024	-	13.60	-	2.33
21	21-08-2024	-	13.60	-	1.87
22	22-08-2024	-	13.60	-	1.67
23	23-08-2024	-	13.61	-	1.77
24	24-08-2024	-	13.66	-	1.67
25	25-08-2024	-	13.61	-	1.65
26	26-08-2024	-	11.35	-	0.74
27	27-08-2024	-	13.64	-	1.49
28	28-08-2024	-	13.67	-	2.10
29	29-08-2024	-	13.67	-	1.47
30	30-08-2024	-	12.49	-	1.50
31	31-08-2024	-	12.83	-	1.30
Total		-	399.21	-	55.02
Grand Total		454.23			

-: No transaction took place

Note: Cross Border Transactions of Electricity of **454.23 MU (i.e. 399.21 MU sold by Nepal, 55.02 MU sold by Bhutan)** happened during August, 2024 in IEX, which is included under DAM Volume of August, 2024 in IEX. No Cross Border drawal Transactions of Electricity happened with **Nepal & Bhutan** for the month of August, 2024 in IEX under DAM.

Cross Border Electricity Transactions under Real Time Market (RTM) in IEX with Nepal and Bhutan during the month of August, 2024					
S. No	Delivery Date	Buy Volume By Nepal (MU)	Sell Volume by Nepal (MU)	Buy Volume By Bhutan (MU)	Sell Volume by Bhutan (MU)
1	01-08-2024	-	0.41	-	-
2	02-08-2024	-	0.21	-	-
3	03-08-2024	-	0.32	-	-
4	04-08-2024	-	-	-	-
5	05-08-2024	-	0.15	-	-
6	06-08-2024	-	0.36	-	-
7	07-08-2024	-	3.42	-	-
8	08-08-2024	-	0.30	-	-
9	09-08-2024	-	0.80	-	-
10	10-08-2024	-	0.01	-	-
11	11-08-2024	-	0.20	-	-
12	12-08-2024	-	0.18	-	-
13	13-08-2024	-	-	-	-
14	14-08-2024	-	-	-	0.64
15	15-08-2024	-	-	-	0.45
16	16-08-2024	-	-	-	-
17	17-08-2024	-	-	-	-
18	18-08-2024	-	-	-	-
19	19-08-2024	-	-	-	-
20	20-08-2024	-	-	-	-
21	21-08-2024	-	-	-	-
22	22-08-2024	-	-	-	-
23	23-08-2024	-	-	-	-
24	24-08-2024	-	-	-	-
25	25-08-2024	-	-	-	-
26	26-08-2024	-	1.41	-	-
27	27-08-2024	-	-	-	-
28	28-08-2024	-	-	-	-
29	29-08-2024	-	-	-	0.04
30	30-08-2024	-	-	-	-
31	31-08-2024	-	-	-	0.05
Total		-	7.76	-	1.18
Grand Total		8.95			

-: No transaction took place

Note: Cross Border Transactions of Electricity of 8.95 MU (i.e. 7.76 MU sold by Nepal, 1.18 MU sold by Bhutan) happened during August, 2024 in IEX, which is included under RTM Volume of August, 2024 in IEX. No Cross Border drawal Transactions of Electricity happened with Nepal & Bhutan for the month of August, 2024 in IEX under RTM.

Analysis for change in trend of Final Scheduled Volume under DAM on 2nd Sunday & 4th Monday of August, 2024 (i.e. 11th & 26th August, 2024)

Final Scheduled Volume (MU) and the Daily Wt. Avg. MCP (₹/kWh) invariably shows decreasing trend on Sundays and increasing trend on Mondays as the demand of electricity in the country is less on Sundays as compared to other days of week. However, during the month of August, 2024, it is observed that on second Sunday (11th August, 2024), FSV showed increasing trend in comparison to second Saturday (10th August, 2024), on fourth Monday (26th August, 2024), FSV showed decreasing trend in comparison to fourth Sunday (25th August, 2024).

- (i) On second Sunday (11th August, 2024), although there was decrease in purchase on power exchange by some of the States in comparison to second Saturday (10th August, 2024) by **20.45 MU** [i.e. Gujarat (8.87 MU), Daman & Diu - Dadra & Nagar Haveli (1.84 MU), Haryana (1.78 MU), Delhi (1.74 MU) and Uttarakhand (1.72 MU), etc.], there was also increase in purchase on power exchange by some of the States by **29.10 MU** [i.e. Andhra Pradesh (8.96 MU), Telangana (6.55 MU), Himachal Pradesh (6.26 MU), Tamilnadu (3.30 MU) and Maharashtra (2.81 MU), etc.]. This resulted in an overall increase in FSV by **8.65 MU** on Sunday (11th August, 2024) as compared to Saturday (10th August, 2024).
- (ii) On fourth Monday (26th August, 2024), although there was increase in purchase on power exchange by some of the States in comparison to fourth Sunday (25th August, 2024) by **8.35 MU** [i.e. West Bengal (2.85 MU), Haryana (1.15 MU), Andhra Pradesh (0.88 MU), Delhi (0.82 MU) and Uttarakhand (0.69 MU), etc.], there was also decrease in purchase on power exchange by some of the States by **30.91 MU** [i.e. Rajasthan (7.98 MU), Madhya Pradesh (4.92 MU), Uttar Pradesh (4.44 MU), Gujarat (4.27 MU) and Maharashtra (3.58 MU), etc.]. This resulted in an overall decrease in FSV by **22.56 MU** on Monday (26th August, 2024) as compared to Sunday (25th August, 2024).

Definitions/ Terminologies used in the Report

- 1. Area Clearing Price (ACP)** is price discovered in each time block of concerned bid area. The country has been divided into 13 bid areas for the purpose of calculating prices in Power Exchanges.
The 13 Bid areas are as under:
N1: Jammu and Kashmir, Himachal Pradesh, Chandigarh, Haryana; **N2:** Uttar Pradesh, Uttaranchal, Rajasthan, Delhi; **N3:** Punjab; **E1:** West Bengal, Sikkim, Bihar, Jharkhand; **E2:** Odisha; **W1:** Madhya Pradesh; **W2:** Maharashtra, Gujarat, Daman and Diu, Dadar and Nagar Haveli, North Goa; **W3:** Chhattisgarh; **S1:** Andhra Pradesh, Telangana, Karnataka, Pondicherry (Yanam), South Goa; **S2:** Tamil Nadu, Pondicherry (Puducherry), Pondicherry (Karaikal), Pondicherry (Mahe); **S3:** Kerala; **A1:** Tripura, Manipur, Mizoram, Nagaland; **A2:** Assam, Arunachal Pradesh, Meghalaya.
- 2. Wt. Avg. MCP** is the average of Daily Wt. Avg. MCP of the days during the month on which transaction happened.
- 3. Bilateral Transaction** means a transaction for exchange of electrical energy (MWh) between a specified buyer and a specified seller, from a specified point of injection to a specified point of drawal for a fixed or varying quantum of power (MW) for any time block during a month.
- 4. Daily Wt. Avg. MCP** is the average of MCP of all 96 Time Blocks of the day during which transaction happened.
- 5. Day-Ahead Market (DAM)** means a market where Day Ahead Contracts are transacted on the Power Exchanges, wherein Collective Transactions occur on day (T) and delivery of electricity is on the next day (T+1).
- 6. Elasticity** is percentage of change in MCP with respect to change in independent variable viz. peak demand, average purchase bid, average sell bid, generation from coal based plants, generation from hydro based plants, generation from wind based plants and generation from solar plants.
- 7. Energy Supplied** is the total energy (MU) available at the States' periphery.
- 8. Final Scheduled Volume** is the total of scheduled volume of all 96 time blocks in a day during the month in which transaction happened.
- 9. Green Term Ahead Market (GTAM)** is based on the principles of current Term Ahead Market (TAM) and will offer trade for Solar, Non-Solar and Hydro Renewable Energy (RE) generation.

- 10. Green Day Ahead Market (GDAM)** is based on the principles of current Day Ahead Market (DAM), where market participants purchase and sell electricity generated from renewable sources.
- 11. Long Duration Contracts** on the power exchanges is a product segment under which the participants are allowed to trade for delivery of power upto 90 Days (Delivery Starting from T+2 to T+90 Days).
- 12. MCP** is the price discovered in each of the 15 Minute Time Block. The day is divided in 96-time blocks of 15 minutes each.
- 13. Real Time Market (RTM)** means a market where Real-Time Contracts are transacted on the Power Exchange(s), i.e. a contract other than Day Ahead Contract or Intraday Contract or Contingency Contract. Under RTM collective transactions occur on day (T) or day (T-1) and delivery of electricity is on day (T) for a specified delivery period.
- 14. Term Ahead Market (TAM)** means a market where Term Ahead Contracts are transacted on the Power Exchange(s), i.e. a contract wherein transactions occur on day (T) and physical delivery of electricity is on a day more than one day ahead (T + 2 or more).