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भारत सरकार/ Government of India

विद्युत मंत्रालय/ Ministry of Power

केन्द्रीय विद्युत प्राधिकरण/ Central Electricity Authority

आर. ए. प्रभाग/ Regulatory Affairs Division

Subject: Monthly Market Monitoring Report for the month of August, 2022-reg.

In the month of August, 2022 a total of 130,390 MU of electricity was transacted in the country out of which 63,161 MU was transacted through ISTS, and the remaining through state controlled generating stations.

A total of 18,331 MU was transacted under Short Term Market, out of which 7,765 MU was transacted through Power Exchanges and remaining happened as bilateral transactions & deviations. Thus, the total short term trade in August, 2022 was 14.06 % of total volume of electricity traded in August, 2022 and 5.96 % was through Power Exchanges.

If we compare these transactions with respect to the electricity supplied through ISTS, the short term transactions constitutes about 29.02 % of ISTS transactions, out of which transaction through the power exchanges constitutes 12.29 %.

The monthly market monitoring report for the month of August, 2022 giving details of electricity transaction happened in the power exchanges and other short term markets is annexed below for reference.

Pardeep Jindal
23/01/2023
Pardeep Jindal
Chief Engineer (RA)

To

All Stake holders



सत्यमेव जयते

अगस्त, 2022 मासिक मार्केट मॉनिटरिंग रिपोर्ट

Monthly Market Monitoring Report

August, 2022



भारत सरकार/ Government of India

विद्युत मंत्रालय/ Ministry of Power

केन्द्रीय विद्युत प्राधिकरण/ Central Electricity Authority

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MARKET MONITORING REPORT
FOR THE MONTH OF AUGUST, 2022

SUMMARY

SUMMARY FOR MONTH: AUGUST, 2022

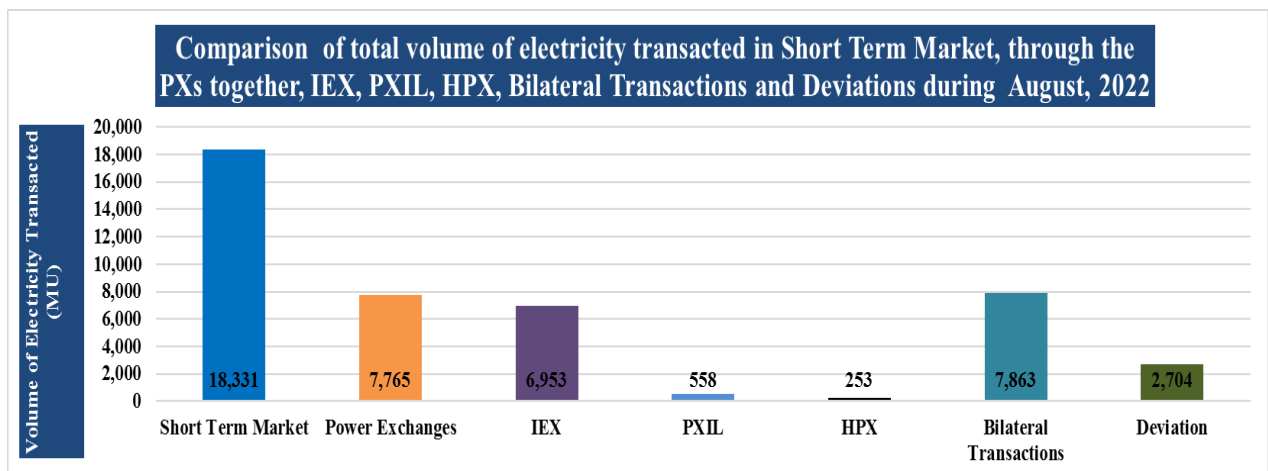
SUMMARY OF ELECTRICITY TRANSACTIONS ON POWER EXCHANGES IN INDIA

- A total volume of **7,765 MU** electricity was transacted in both the power exchanges i.e. IEX & PXIL, during the month of August, 2022. This volume of electricity is on delivery date basis and includes transactions through DAM, GDAM, RTM, TAM and GTAM market segments.

Segment	Transactions happened in PXs (IEX and PXIL combined)			
	FSV (MU)	Average MCP (Rs/kWh)	Congestion (MU)	Real Time Curtailment (MU)
DAM	3,538.82	5.26	0.00	0.00
GDAM	320.51	5.49	0.00	0.00
RTM	2265.40	4.96	0.35	0.00
TAM	1463.71	5.77	1.14	2.96
GTAM	176.93	4.86	0.00	0.10
Total in PXs	7,765	5.27*	1.49	3.06

* The total average is weighted average of all market segments.

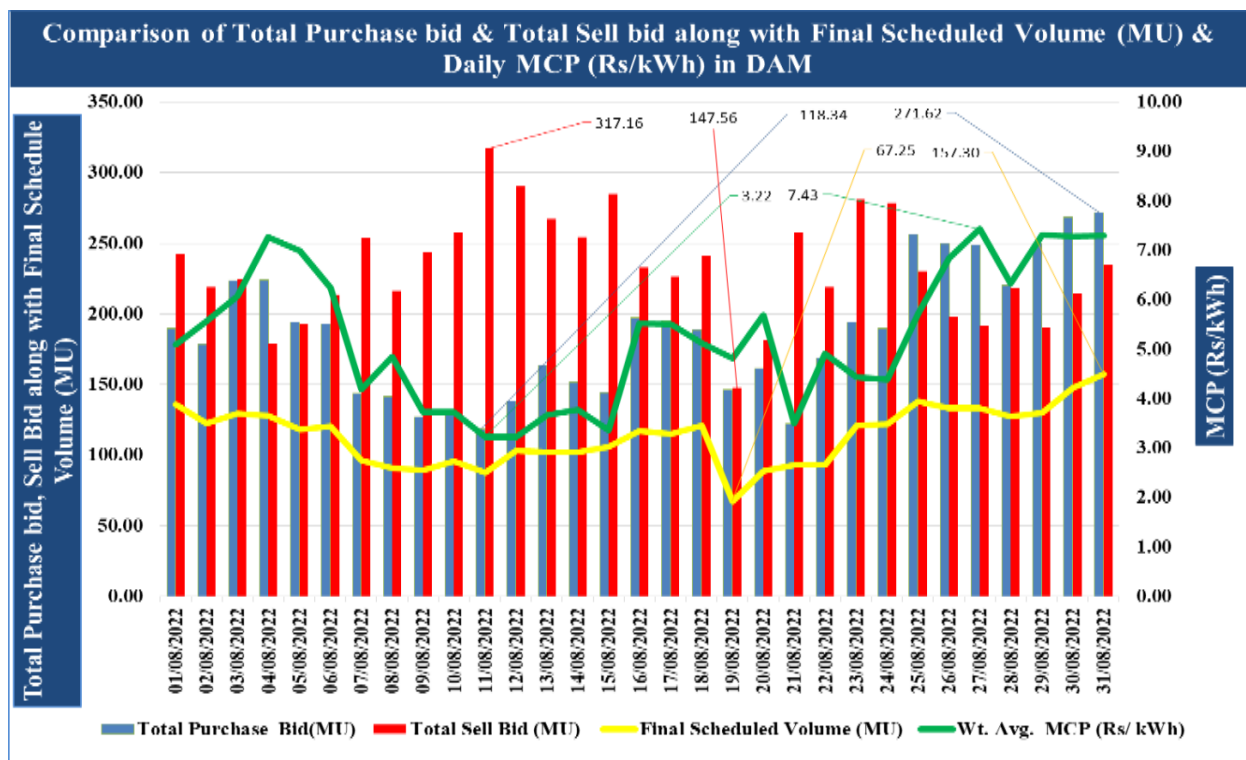
- Under the Bilateral trade a total of **7,863 MU** of electricity was transacted and **2,704 MU** was transferred as deviation. Thus a total of **18,331 MU** of electricity was transacted as short term trade. In the month of August, 2022 a total of **130,390 MU** of electricity was supplied in the country, thus the share of short term market in the total volume of electricity traded in August, 2022 was **14.06%**.



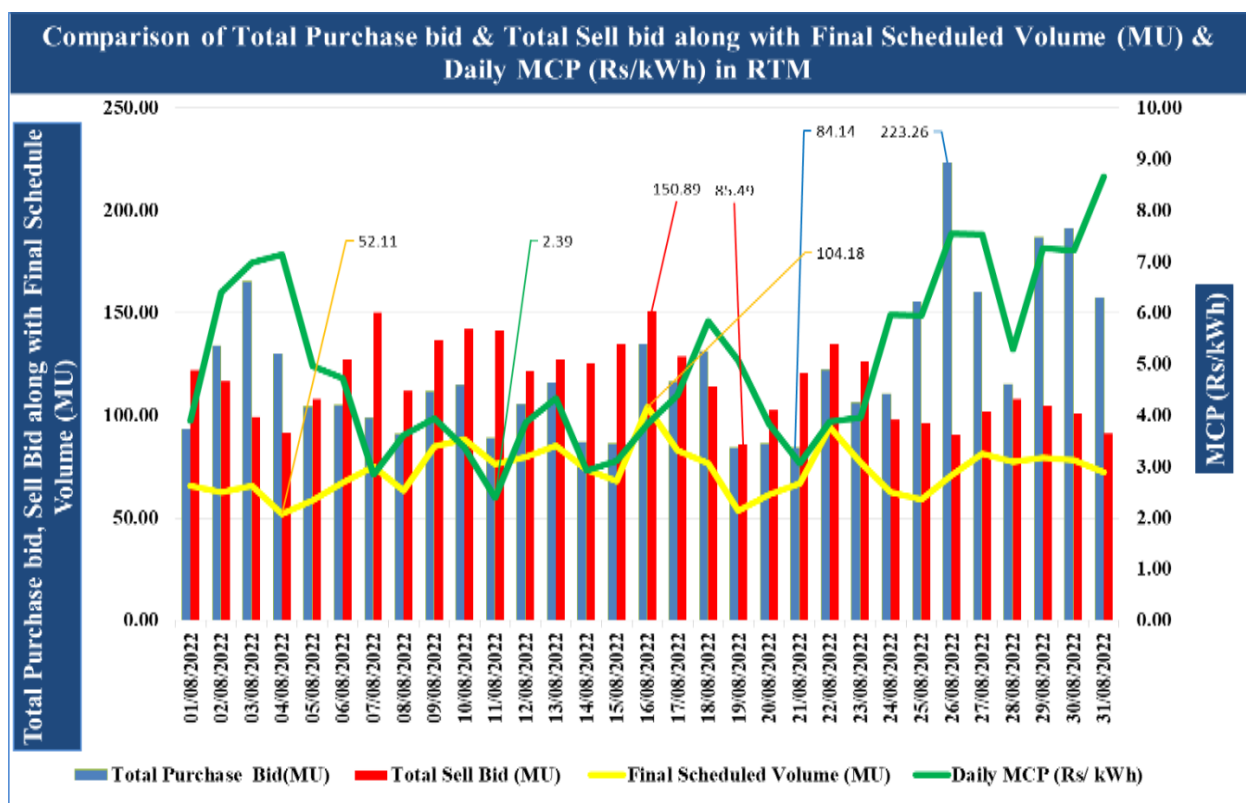
- The total volume of congestion that happened during the month of August, 2022 was **1.49 MU** which is only 0.02 % of the total volume of electricity transacted in the power exchanges and 0.001 % of total energy supplied during the month of August, 2022.
- Congestion observed in RTM for 14 time blocks on 3 days i.e. 8th, 10th & 13th August, 2022, in TAM for 2 time blocks on 5 days i.e. 8th, 14th, 22th, 25th & 30th August, 2022, whereas, there was no congestion happened in DAM, GDAM & GTAM.
- The total volume of real time curtailment reported in the month of August, 2022 was only **3.06 MU**. The total volume of electricity scheduled at ISTS during the month of August, 2022 was **63,161 MU**. **The total volume of electricity transacted in the short term market was 29.02 % of total volume schedule at ISTS in the month of August, 2022.**

- The variation of Purchase and Sell bids, Final Scheduled Volume and Daily MCP in DAM and RTM during the month of August, 2022 are shown in following figures:

DAM Volume

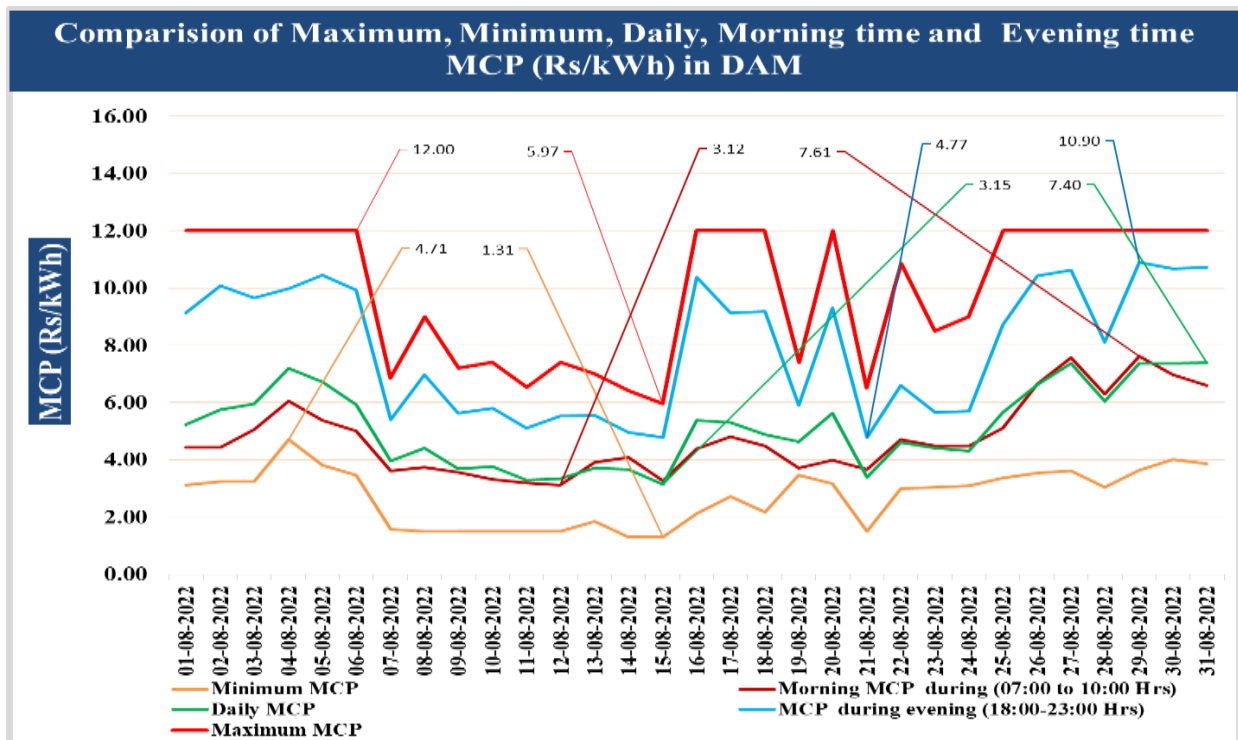


RTM Volume

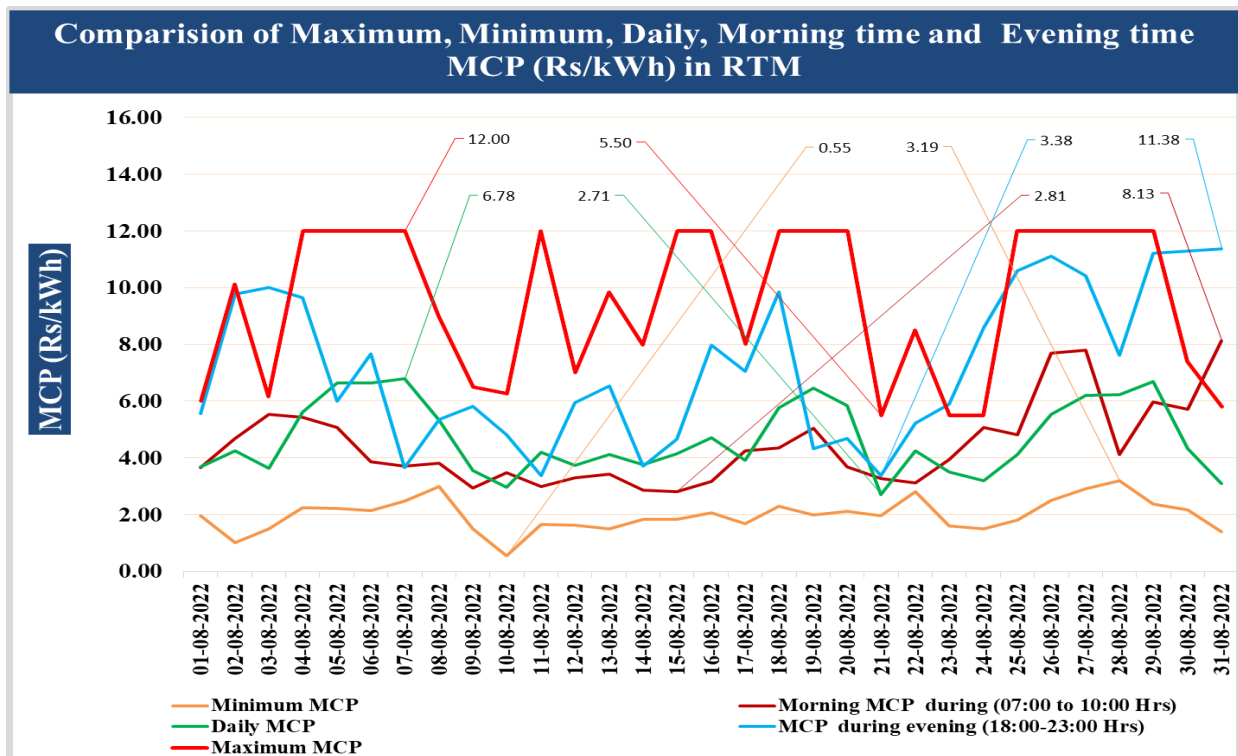


- The variation of Maximum, Minimum, Daily, Morning and Evening time MCPs in DAM and RTM during the month of August, 2022 are shown in following figures:

DAM Prices



RTM Prices



MARKET MONITORING REPORT

DETAILS

ELECTRICITY TRANSACTIONS ON POWER EXCHANGES IN INDIA

1. DAY AHEAD MARKET (DAM)

- 1.1.** The total volume of electricity transacted on both the power exchanges, viz., IEX and PXIL in the Day Ahead Market (DAM) in the month of August, 2022 was **3,538.82 MU**. The total energy supplied in the country during the month of August, 2022 was 130,390 MU. Thus, the volume of electricity transacted on both the power exchanges in DAM during August, 2022 was 2.71 % of the total energy supplied in the country. Comparing with the total volume of electricity transacted in DAM during the past month .i.e. July, 2022, it was **3,549.86 MU** which was 2.77 % of the total energy supplied [128,255 MU] in the country during July, 2022. Similarly, the total volume of electricity transacted in DAM during previous year .i.e. August, 2021, it was **6,653.88 MU** which was 3.32 % of the total energy supplied [127,881 MU] in the country during August, 2021.
- 1.2.** The volume of electricity transacted on on IEX and PXIL during August, 2022 were **3,528.70 MU** and **10.12 MU**, respectively, which means that the total volume transacted on IEX was **99.72 %** of the total volume on power exchanges. The volume of electricity transacted on IEX and PXIL during July, 2022 were **3,516.65 MU** and **31.78 MU**, respectively, which means that the total volume transacted on IEX was **99.06 %** of the total volume on power exchanges. Also, the volume of electricity transacted on IEX and PXIL during August, 2021, were **6,648.76 MU** and **5.12 MU** respectively.
- 1.3.** There DAM volume for August, 2022 in IEX is inclusive of Cross Border Transactions of Electricity happened with Nepal [details given at **Annexure XII**].
- 1.4.** The Average Market Clearing Price (MCP) on IEX during the month of August, 2022 was **Rs 5.26/kWh**, which shows a decrease of 4.36 % & an increase of 3.95 % when compared with average MCP's for the month of July, 2022 and August, 2021, which were **Rs 5.50/kWh** and **Rs 5.06/kWh**, respectively. On PXIL, the average MCP during the month of August, 2022 was **Rs 6.42/kWh**, which shows an increase of 28.14 % and 36.02 % when compared with average MCP's for the month July, 2022 and August, 2021, which were **Rs 5.01/kWh** and **Rs 4.72/kWh** respectively.

2. DAM MARKET CLEARING PRICE, AREA CLEARING PRICE AND FINAL SCHEDULED VOLUME OF DAM IN THE POWER EXCHANGES

Final Scheduled Volume (FSV), Daily Market Clearing Prices (MCP), Area Clearing Prices (ACP) in Day Ahead Market during the month of August, 2022 as compared with July, 2022 and August, 2021 is given in Table- 1 & 2:

(a) Final Scheduled Volume:

Exchange	Period	Final Scheduled Volume (MU)			
		Total	Minimum	Maximum	Average
IEX	August, 2022*	3,528.70	67.25	157.30	113.83
	July, 2022*	3,516.65	84.42	159.86	113.44

	% Change (Month over Month)	0.34	-20.34	-1.60	0.34
	August, 2021	6,648.76	114.52	296.64	214.48
	% Change (Year over Year)	-46.93	-41.28	-46.97	-46.93
PXIL	August, 2022	10.12	0.002	1.88	0.35
	July, 2022	31.78	0.39	2.06	1.03
	% Change (Month over Month)	-68.16	-99.49	-8.74	-66.02
	August, 2021	5.12	0.02	1.00	0.37
	% Change (Year over Year)	97.66	-90.00	88.00	-5.41
HPX	August, 2022	-	-	-	-
	July, 2022	-	-	-	-
	% Change Month over Month)	NA	NA	NA	NA

* DAM Volume in IEX is inclusive of Cross Border Transactions of Electricity with Nepal

Table: 1

(b) Daily Market Clearing Price (MCP) and Area Clearing Price (ACP):

Exchange	Period	Prices				
		Daily MCP (Rs/kWh)			ACP (Rs/kWh)	
		Minimum	Maximum	Average	Minimum	Maximum
IEX	August, 2022	3.22	7.43	5.26	1.00	12.00
	July, 2022	3.00	7.41	5.50	1.50	12.00
	% Change (Month over Month)	7.33	0.27	-4.36	-33.33	0.00
	August, 2021	1.90	9.81	5.06	1.10	20.00
	% Change (Year over Year)	69.47	-24.26	3.95	-9.09	-40.00
PXIL	August, 2022	3.00	9.12	6.42	2.00	12.00
	July, 2022	3.49	6.58	5.01	2.00	12.00
	% Change Month over Month)	-14.04	38.60	28.14	0.00	0.00
	August, 2021	2.88	8.16	4.72	2.41	8.99
	% Change (Year over Year)	4.17	11.76	36.02	-17.01	33.48
HPX	August, 2022	-	-	-	-	-
	July, 2022	-	-	-	-	-
	% Change Month over Month)	NA	NA	NA	NA	NA

Table: 2

2.1 The maximum Area Clearing Price (ACP) of Rs 12.00/kWh in IEX was observed in all 13 regions during 256 time blocks on 1st to 6th, 16th to 18th, 20th & 25th to 31st August, 2022. As there was no congestion in transmission system, the MCP for these time blocks was also Rs 12.00/kWh. Whereas, in PXIL, the maximum ACP of Rs 12.00/kWh was observed in all 13

regions during 72 time blocks on 3rd, 4th, 5th, 6th & 18th August, 2022. As there was no congestion in transmission system, the MCP for these time blocks was also Rs 12.00/kWh.

2.2 The minimum ACP of Rs 1.50/kWh in IEX was observed in all 13 regions during the time block 13:00-13:15 Hrs on 10th August, 2022. As there was no congestion in transmission system, the MCP for these time-block was also Rs 1.50/kWh. Whereas, in PXIL, the minimum ACP of Rs 2.00/kWh was observed in all 13 regions during 30 time blocks on 11th & 17th August, 2022. As there was no congestion in transmission system, the MCP for these time blocks were also Rs 2.0 kWh.

3. REAL TIME MARKET (RTM)

The total volume of electricity transacted on both the power exchanges in Real Time Market in August, 2022 was **2,265.40 MU**, out of which, **2,265.25 MU** (99.99 %) was transacted in IEX and **0.15 MU** (0.01 %) was transacted in PXIL. The Final Scheduled Volume (FSV), Daily Market Clearing Prices (MCP) and Area Clearing Prices (ACP) in Real Time Market during the month of August, 2022 as compared with July, 2022 and August, 2021 are as given in table 3A & 3B:

(i) Final Scheduled Volume:

Exchange	Period	Final Scheduled Volume (MU)			
		Total	Minimum	Maximum	Average
IEX	August, 2022	2,265.25	52.11	104.18	73.07
	July, 2022	2,130.98	53.64	89.17	68.74
	Change % (Month over Month)	6.30	-2.85	16.83	6.30
	August, 2021	1,859.46	40.08	98.33	59.98
	Change % (Year over Year)	21.82	30.01	5.95	21.82
PXIL	August, 2022	0.15	0.004	0.04	0.01
	July, 2022	10.73	0.40	2.69	1.53
	Change % (Month over Month)	-98.60	-99.00	-98.51	-99.35
	August, 2021	-	-	-	-
	Change % (Year over Year)	NA	NA	NA	NA
HPX	August, 2022	-	-	-	-

-: No transaction happened

NA: Not Applicable

Table-3A

(ii) Daily Market Clearing Price (MCP) and Area Clearing Price (ACP):

Exchange	Period	Prices (Rs/kWh)				
		Daily MCP (Rs/kWh)			ACP (Rs/kWh)	
		Minimum	Maximum	Average	Minimum	Maximum
IEX	August, 2022	2.39	8.66	4.96	0.08	12.00
	July, 2022	2.87	7.11	4.88	0.55	12.00
	% Change (Month over Month)	-16.72	21.80	1.64	-85.45	0.00

	August, 2021	2.18	11.98	4.64	0.80	20.00
	% Change (Year over Year)	9.63	-27.71	6.90	-90.00	-40.00
PXIL	August, 2022	3.20	3.25	3.21	2.58	12.00
	July, 2022	11.90	12.00	11.99	11.90	12.00
	% Change (Month over Month)	-73.11	-72.92	-73.23	-78.32	0.00
	August, 2021	-	-	-	-	-
	% Change (Year over Year)	NA	NA	NA	NA	NA
HPX	August, 2022	-	-	-	-	-

-: No transaction happened

NA: Not Applicable

Table-3B**4. GREEN DAY AHEAD MARKET (GDAM):**

The total volume of electricity transacted in GDAM in the month of August, 2022 was **320.51 MU** (i.e. **320.51 MU** in IEX at an average MCP of **Rs 5.49/kWh** and no transaction happened in PXIL & HPX in GDAM. The Final Scheduled Volume (FSV), Daily Market Clearing Prices (MCP), Area Clearing Prices (ACP), Real Time Curtailment and details of Transmission Congestion under these 3 segments in Green Day Ahead Market during the month of August, 2022 are as given in Table 4A and 4B:

i) Final Scheduled Volume in IEX:

Exchange	Segment	Period	Final Scheduled Volume (MU)			
			Total	Minimum	Maximum	Average
IEX	Solar	August, 2022	151.46	2.11	14.50	4.89
		July, 2022	251.00	3.69	18.11	8.10
		% Change (Month over Month)	-39.66	-42.82	-19.93	-39.63
	Non Solar	August, 2022	169.05	2.83	8.42	5.45
		July, 2022	195.43	2.95	16.62	6.30
		% Change (Month over Month)	-13.50	-4.07	-49.34	-13.49
	Hydro	August, 2022	-	-	-	-
		July, 2022	-	-	-	-
		% Change (Month over Month)	NA	NA	NA	NA
PXIL	Solar + Non Solar	August, 2022	-	-	-	-
		July, 2022	0.16	0.01	0.14	0.05
		% Change (Month over Month)	NA	NA	NA	NA
	Hydro	August, 2022	-	-	-	-
		July, 2022	-	-	-	-
		% Change (Month over Month)	NA	NA	NA	NA

-: No transaction happened

NA: Not Applicable

Table-4A

ii) Daily Market Clearing Price (MCP) and Area Clearing Price (ACP):

Exchange	Segment	Period	Prices (Rs/kWh)				
			Daily MCP (Rs/kWh)			ACP (Rs/kWh)	
			Minimum	Maximum	Average	Minimum	Maximum
IEX	Solar and Non Solar	August, 2022	3.77	8.16	5.49	1.90	12.00
		July, 2022	3.76	7.61	4.63	2.80	12.00
		% Change (Month over Month)	0.27	7.23	18.57	-32.14	0.00
PXIL	Solar and Non Solar	August, 2022	-	-	-	-	-
		July, 2022	3.96	4.50	4.23	4.19	4.90
		% Change (Month over Month)	NA	NA	NA	NA	NA

-: No transaction happened

NA: Not Applicable

Table-4B

- 4.1.** There was no transmission congestion in Green Day Ahead Market during the month of August, 2022 and 0.69 MU of transmission congestion happened July, 2022.
- 4.2.** There was no real time curtailment in IEX in Green Day Ahead Market during the month of August, 2022 and July, 2022, respectively.
- 4.3.** The **top 10 sellers** on the power exchanges in **Green Day Ahead Market (GDAM)** in the month of August, 2022 were **Andhra Pradesh, Karnataka, Adani Wind Energy Kutchh Five Limited, Adani Hybrid Energy Jaisalmer Four Limited (Solar), Madhya Pradesh, Adani Hybrid Energy Jaisalmer Three Limited (Solar), J&K, Himachal Pradesh, Telangana and Kerala**, which constituted **85.83%** of the market volume.
- 4.4.** The **top 10 buyers** on the power exchanges in **Green Day Ahead Market (GDAM)** in the month of August, 2022 were **Maharashtra, Gujarat, Assam, ArcelorMittal Nippon steel (ESIL), DVC, Delhi, Haryana, Daman & Diu-Dadra & Nagar Haveli, Madhya Pradesh and Jharkhand**, which constituted **86.03 %** of the market volume.

5. TERM AHEAD MARKET (TAM)**Term Ahead Market (TAM) (on Trade Date Basis)**

- 5.1.** The total volume of electricity transacted on the three power exchanges in Term Ahead Market in August, 2022 on trade date basis was **1,537.06 MU**, out of which, **776.40 MU** (50.51 %) was transacted on IEX, **500.81 MU** (32.58 %) was transacted on PXIL and **259.85 MU** (16.91 %) was transacted on HPX.
- 5.2.** The total volume of electricity transacted on the three power exchanges in Term Ahead Market in July, 2022 on trade date basis was **1,264.91 MU**, out of which, **512.00 MU** (40.48 %) was transacted on IEX, **530.95 MU** (41.98 %) was transacted on PXIL and **221.96 MU** (17.55 %) was transacted on HPX.
- 5.3.** Similarly, total volume of electricity transacted on both the power exchanges in Term Ahead Market in August, 2021 on trade date basis was **767.71 MU**, out of which, **483.31 MU** (62.96 %) was transacted on IEX and **284.40 MU** (37.04 %) was transacted on PXIL.

- 5.4. With respect to the total energy supplied during month of August, 2022 in the country, the volume of electricity traded on power exchanges in TAM on trade date basis represents **1.18 %** of the total energy supplied. The same was **0.99 %** in July, 2022 and **0.59 %** in August, 2021.
- 5.5. In the month of August, 2022, there was transmission congestion of **1.14 MU** in IEX, Out of which **1.13 MU** happened under Day Ahead Contingency contract and **0.01 MU** under Intra Day contract. Whereas, in PXIL and HPX there was no transmission congestion in TAM.
- 5.6. The comparison of total volume of electricity transacted and Average MCP on both the power exchanges in Term Ahead Market (TAM) during August, 2022 with July, 2022 and August, 2021 is given in Table- 5A & 5B:

(a) August, 2022 vis- a- vis July, 2022 and August, 2021 (on Trade Date Basis)

Exchange	Period	Final Scheduled Volume (MU)				
		Intra Day	Day Ahead Contingency	Daily or Any Day	Weekly	Total
IEX	August, 2022	1.60	611.24	28.80	134.40	776.40
	July, 2022	1.47	409.73	-	100.80	512.00
	%Change (Month over Month)	8.84	49.18	NA	33.33	51.64
	August, 2021	8.47	108.11	366.73	-	483.31
	%Change Year over Year)	-81.11	465.39	-92.15	NA	60.64
PXIL	August, 2022	9.04	491.77	-	-	500.81
	July, 2022	4.75	526.20	-	-	530.95
	%Change (Month over Month)	90.32	-6.54	NA	NA	-5.68
	August, 2021	13.94	114.48	155.98	-	284.40
	%Change (Year over Year)	-35.15	329.57	NA	NA	76.09
HPX	August, 2022	-	259.85	-	-	259.85
	July, 2022	-	221.96	-	-	221.96
	%Change (Month over Month)	NA	17.07	NA	NA	17.07

-: No transaction happened

NA: Not Applicable

Table: 5A

(b) Average MCP, August, 2022 vis- a- vis July, 2022 and August, 2021 (on trade Date Basis)

Exchange	Period	Average MCP (Rs/kWh)			
		Intra Day	Day Ahead Contingency	Daily or Any Day	Weekly
IEX	August, 2022	9.33	5.86	7.0	5.98
	July, 2022	11.93	5.26	NA	5.25
	%Change (Month over Month)	-21.79	11.41	NA	13.90

	August, 2021	7.91	5.52	3.28	-
	%Change (Year over Year)	17.95	6.16	113.41	NA
PXIL	August, 2022	11.52	5.42	-	-
	July, 2022	11.65	6.01	-	-
	%Change (Month over Month)	-1.12	-9.82	NA	NA
	August, 2021	5.53	6.27	3.79	-
	%Change (Year over Year)	108.32	-13.56	84.70	NA
HPX	August, 2022	-	5.37	-	-
	July, 2022	-	6.02	-	-
	%Change (Month over Month)	NA	-10.80	NA	NA

- : No Transaction happened

NA: Not Applicable

Table: 5B**Term Ahead Market (TAM) (on Delivery Date Basis)**

- 5.7. The total volume of electricity transacted on the three power exchanges in Term Ahead Market in August, 2022 on trade date basis was **1,469.54 MU**, out of which **722.89 MU** (49.19 %) was transacted on IEX, **486.80 MU** (33.13 %) was transacted on PXIL and **259.85 MU** (17.68 %) was transacted on HPX.
- 5.8. The total volume of electricity transacted on both the power exchanges in Term Ahead Market in July, 2022 on delivery date basis was **1,1193.66 MU**, out of which, **439.81 MU** (36.85%) was transacted on IEX, **531.89 MU** (44.56%) was transacted on PXIL and **221.96 MU** (18.59%) was transacted on HPX.
- 5.9. Similarly, the total volume of electricity transacted on both the power exchanges in Term Ahead Market in August, 2021 on delivery date basis was **855.86 MU**, out of which, **617.23 MU** (72.12 %) was transacted on IEX and **238.63 MU** (27.88 %) was transacted on PXIL.
- 5.10. With respect to the total energy supplied during the month of August, 2022 in the country, the volume of electricity traded on the power exchanges in TAM on delivery date basis represents **1.13 %** of the total energy supplied. The same was **0.93 %** in July, 2022 and **0.67 %** in August, 2021.
- 5.11. In the month of August, 2022, there was real time curtailment of **2.01 MU** under Day Ahead Contingency contract in IEX. Whereas, in PXIL there was real time curtailment of **0.95 MU** under Day Ahead Contingency contract. Whereas, in HPX there was no transmission congestion in TAM.
- 5.12. **The comparison of total volume of electricity transacted and Average MCP in both the power exchanges in Term Ahead Market (TAM) on delivery date basis during August, 2022 with July, 2022 and August, 2021 is given in Table – 5C & 5D:**
- (a) **August, 2022 vis- a- vis July, 2022 (on Delivery Date Basis)**

Exchange	Period	Final Scheduled Volume (MU)				
		Intra Day	Day Ahead Contingency	Daily or Any Day	Weekly	Total
IEX	August, 2022	1.47	399.94	4.80	33.60	439.81
	July, 2022	3.67	624.11	131.25	-	759.03
	% Change (Month over Month)	-59.95	-35.92	-96.34	NA	-42.06
	August, 2021	12.88	263.75	484.63	-	761.26
	% Change (Year over Year)	-88.59	51.64	-99.01	NA	-42.23
PXIL	August, 2022	4.75	527.14	-	-	531.89
	July, 2022	3.78	724.60	31.20	-	759.58
	% Change (Month over Month)	25.66	-27.25	NA	NA	-29.98
	August, 2021	119.10	-	213.62	-	332.72
	% Change (Year over Year)	3,050.79	NA	584.68	NA	-56.20
HPX	August, 2022	-	259.85	-	-	259.85
	July, 2022	-	221.96	-	-	221.96
	% Change (Month over Month)	NA	17.07	NA	NA	17.07

- : No transaction happened

NA: Not Applicable

Table:5C

(b) Average MCP, August, 2022 vis- a- vis July, 2022 and August, 2021 (on Delivery Date Basis)

Exchange	Period	Average MCP (Rs/kWh)			
		Intra Day	Day Ahead Contingency	Daily or Any Day	Weekly
IEX	August, 2022	9.33	5.74	-	5.49
	July, 2022	11.93	5.20	4.00	4.00
	% Change (Month over Month)	-21.79	10.38	NA	37.25
	August, 2021	7.91	5.41	3.06	-
	% Change (Year over Year)	17.95	6.10	NA	NA
PXIL	August, 2022	11.52	5.30	-	-
	July, 2022	11.65	5.98	-	-
	% Change (Month over Month)	-1.12	-11.37	NA	NA
	August, 2021	5.53	6.35	3.37	-
	% Change (Year over Year)	108.32	-16.54	NA	NA
HPX	August, 2022	-	5.37	-	-
	July, 2022	-	6.02	-	-
	% Change (Month over Month)	NA	-10.80	NA	NA

-: No transaction happened

NA: Not Applicable

Table: 5D

6. GREEN TERM AHEAD MARKET (GTAM):

The total volume of electricity transacted in both the power exchanges in GTAM on trade date basis was **176.73 MU** (**38.25 MU** in Solar, **51.01 MU** in Non Solar and **87.47 MU** in Hydro), whereas, the same on delivery date basis was **176.93 MU** (**38.11 MU** in Solar, **52.77 MU** in Non Solar and **86.05 MU** in Hydro), respectively. The total volume of electricity transacted in in GTAM in Day Ahead Contingency, Intraday, Daily/ Anyday and Weekly contracts during August, 2022 on trade date basis and delivery date basis has basis been shown in Tables 6A to 6L.

6.1. Solar Energy Segment in GTAM (On Trade date basis)

The Final Scheduled Volume and the Price of electricity transacted in GTAM in IEX & PXIL during August, 2022 and its comparison with July, 2022 and August, 2021 has been shown in Table 6A & 6B below.

(i) Final Scheduled Volume:

Exchange	Solar Energy Contract	Period	Final Scheduled Volume (MU)			
			Total	Minimum	Maximum	Average
IEX	Day Ahead Contingency	August, 2022	16.80	0.14	3.67	1.87
		July, 2022	24.65	0.88	4.24	2.46
		% Change (Month over Month)	-31.85	-84.09	-13.44	-23.98
		August, 2021	137.07	0.15	11.52	4.42
		% Change (Year over Year)	-87.74	-6.67	-68.14	-57.69
	Intraday	August, 2022	1.16	1.16	1.16	1.16
		July, 2022	-	-	-	-
		% Change (Month over Month)	NA	NA	NA	NA
		August, 2021	2.86	0.04	1.20	0.12
		% Change (Year over Year)	-59.44	2800.00	-3.33	866.67
	Daily/ Anyday	August, 2022	-	-	-	-
		July, 2022	-	-	-	-
		% Change (Month over Month)	NA	NA	NA	NA
		August, 2021	2.95	0.35	0.78	0.49
		% Change (Year over Year)	NA	NA	NA	NA
	Weekly	August, 2022	-	-	-	-
		July, 2022	-	-	-	-
		% Change (Month over Month)	NA	NA	NA	NA
		August, 2021	3.85	3.85	3.85	3.85
		% Change (Year over Year)	NA	NA	NA	NA
PXIL		August, 2022	20.29	0.06	4.80	1.19

	Day Ahead Contingency	July, 2022	11.91	0.29	3.25	1.19
		% Change (Month over Month)	70.36	-79.31	47.69	0.00
		August, 2021	-	-	-	-
		% Change (Year over Year)	NA	NA	NA	NA
		August, 2022	-	-	-	-
	Intraday	July, 2022	-	-	-	-
		% Change (Month over Month)	NA	NA	NA	NA
		August, 2021	-	-	-	-
		% Change (Year over Year)	NA	NA	NA	NA
		August, 2022	-	-	-	-
	Daily/ Anyday	July, 2022	-	-	-	-
		% Change (Month over Month)	NA	NA	NA	NA
		August, 2021	-	-	-	-
		% Change (Year over Year)	NA	NA	NA	NA
		August, 2022	-	-	-	-
	Weekly	July, 2022	-	-	-	-
		% Change (Month over Month)	NA	NA	NA	NA
		August, 2021	-	-	-	-
		% Change (Year over Year)	NA	NA	NA	NA
		August, 2022	-	-	-	-

-: No transaction happened

NA: Not Applicable

Table-6A

(ii) Daily Market Clearing Price (MCP):

Exchange	Solar Energy Contract	Period	Prices(Rs/kWh)		
			Minimum	Maximum	Average
IEX	Day Ahead Contingency	August, 2022	3.00	6.36	3.76
		July, 2022	1.69	4.11	3.34
		% Change (Month over Month)	77.51	54.74	12.57
		August, 2021	2.91	7.09	4.24
		% Change (Year over Year)	3.09	-10.30	-11.32
	Intraday	August, 2022	3.05	3.05	3.05
		July, 2022	-	-	-
		% Change (Month over Month)	NA	NA	NA
		August, 2021	3.00	4.00	3.35
		% Change (Year over Year)	NA	NA	NA
	Daily/Anyday	August, 2022	-	-	-
		July, 2022	-	-	-

		% Change (Month over Month)	NA	NA	NA
		August, 2021	3.35	3.38	3.35
		% Change (Year over Year)	NA	NA	NA
	Weekly	August, 2022	-	-	-
		July, 2022	-	-	-
		% Change (Month over Month)	NA	NA	NA
		August, 2021	3.40	3.40	3.40
		% Change (Year over Year)	NA	NA	NA
PXIL	Day Ahead Contingency	August, 2022	3.13	6.00	4.17
		July, 2022	1.94	4.37	3.55
		% Change (Month over Month)	61.34	37.30	17.46
		August, 2021	-	-	-
		% Change (Year over Year)	NA	NA	NA
	Intraday	August, 2022	-	-	-
		July, 2022	-	-	-
		% Change (Month over Month)	NA	NA	NA
		August, 2021	-	-	-
		% Change (Year over Year)	NA	NA	NA
	Daily/ Anyday	August, 2022	-	-	-
		July, 2022	-	-	-
		% Change (Month over Month)	NA	NA	NA
		August, 2021	-	-	-
		% Change (Year over Year)	NA	NA	NA
	Weekly	August, 2022	-	-	-
		July, 2022	-	-	-
		% Change (Month over Month)	NA	NA	NA
		August, 2021	-	-	-
		% Change (Year over Year)	NA	NA	NA

-: No transaction happened

NA: Not Applicable

Table-6B

6.2. Solar Energy Segment in GTAM (On Delivery date basis)

The Final Scheduled Volume and the Price of electricity transacted in GTAM in IEX & PXIL during August, 2022 and its comparison with July, 2022 and August, 2021 has been shown in Table 6C & 6D below.

(i) Final Scheduled Volume:

Exchange	Solar Energy Contract	Period	Final Scheduled Volume (MU)			
			Total	Minimum	Maximum	Average
IEX		August, 2022	16.66	0.15	3.67	2.08

	Day Ahead Contingency	July, 2022	24.65	0.88	4.24	2.46
		% Change Month over Month)	-32.41	-82.95	-13.44	-15.45
		August, 2021	132.77	0.15	11.52	4.28
		% Change (Year over Year)	-87.45	0.00	-68.14	-51.40
	Intraday	August, 2022	1.16	1.16	1.16	1.16
		July, 2022	-	-	-	-
		% Change (Month over Month)	NA	NA	NA	NA
		August, 2021	2.86	0.04	1.20	0.12
		% Change (Year over Year)	NA	NA	NA	NA
	Daily/Anyday	August, 2022	-	-	-	-
		July, 2022	-	-	-	-
		% Change (Month over Month)	NA	NA	NA	NA
		August, 2021	6.22	0.36	1.08	0.62
		% Change (Year over Year)	NA	NA	NA	NA
	Weekly	August, 2022	-	-	-	-
		July, 2022	-	-	-	-
		% Change (Month over Month)	NA	NA	NA	NA
		August, 2021	3.85	0.55	0.55	0.55
		% Change (Year over Year)	NA	NA	NA	NA
PXIL	Day Ahead Contingency	August, 2022	20.29	0.06	4.80	1.19
		July, 2022	11.91	0.29	3.25	1.19
		% Change (Month over Month)	70.36	-79.31	47.69	0.00
		August, 2021	-	-	-	-
		% Change (Year over Year)	NA	NA	NA	NA
	Intraday	August, 2022	-	-	-	-
		July, 2022	-	-	-	-
		% Change (Month over Month)	NA	NA	NA	NA
		August, 2021	-	-	-	-
		% Change (Year over Year)	NA	NA	NA	NA
	Daily/Anyday	August, 2022	-	-	-	-
		July, 2022	-	-	-	-
		% Change (Month over Month)	NA	NA	NA	NA
		August, 2021	-	-	-	-
		% Change (Year over Year)	NA	NA	NA	NA
	Weekly	August, 2022	-	-	-	-
		July, 2022	-	-	-	-
		% Change (Month over Month)	NA	NA	NA	NA

		August, 2021	-	-	-	-
		% Change (Year over Year)	NA	NA	NA	NA

-: No transaction happened

NA: Not Applicable

Table-6C**(ii) Daily Market Clearing Price (MCP):**

Exchange	Solar Energy Contract	Period	Prices(Rs/kWh)		
			Minimum	Maximum	Average
IEX	Day Ahead Contingency	August, 2022	3.00	4.70	3.43
		July, 2022	1.69	4.11	3.34
		% Change (Month over Month)	77.51	14.36	2.69
		August, 2021	2.63	7.09	4.20
		% Change (Year over Year)	14.07	-33.71	-18.33
	Intraday	August, 2022	3.05	3.05	3.05
		July, 2022	-	-	-
		% Change (Month over Month)	NA	NA	NA
		August, 2021	3.00	4.00	3.35
		% Change (Year over Year)	NA	NA	NA
	Daily/Anyday	August, 2022	-	-	-
		July, 2022	-	-	-
		% Change (Month over Month)	NA	NA	NA
		August, 2021	3.18	3.35	3.22
		% Change (Year over Year)	NA	NA	NA
	Weekly	August, 2022	-	-	-
		July, 2022	-	-	-
		% Change (Month over Month)	NA	NA	NA
		August, 2021	3.40	3.40	3.40
		% Change (Year over Year)	NA	NA	NA
PXIL	Day Ahead Contingency	August, 2022	3.13	6.00	4.17
		July, 2022	1.94	4.37	3.55
		% Change (Month over Month)	61.34	37.30	17.46
		August, 2021	-	-	-
		% Change (Year over Year)	NA	NA	NA
	Intraday	August, 2022	-	-	-
		July, 2022	-	-	-
		% Change	NA	NA	NA

		(Month over Month)			
		August, 2021	-	-	-
		% Change (Year over Year)	NA	NA	NA
	Daily/Anyday	August, 2022	-	-	-
		July, 2022	-	-	-
		% Change (Month over Month)	NA	NA	NA
		August, 2021	-	-	-
		% Change (Year over Year)	NA	NA	NA
	Weekly	August, 2022	-	-	-
		July, 2022	-	-	-
		% Change (Month over Month)	NA	NA	NA
		August, 2021	-	-	-
		% Change (Year over Year)	NA	NA	NA

-: No transaction happened

NA: Not Applicable

Table-6D

- In August, 2022, there was no transmission congestion in GTAM (Solar) in both IEX and PXIL.
- In August, 2022, there was no real time curtailment in GTAM (Solar) in both IEX & PXIL.

6.3. Non-Solar Energy Segment in GTAM (On Trade date basis)

The total volume of electricity transacted on both the power exchanges in non-Solar Energy Segment in GTAM in Day Ahead Contingency, Intraday, Daily/ Anyday and Weekly contracts during August, 2022 on trade date basis and delivery date basis has been shown in Tables 6E to 6F.

The Final Scheduled Volume and the Price of electricity transacted in Non-Solar GTAM in IEX & PXIL during August, 2022 on trade date basis and its comparison with July, 2022 and August, 2021 has been shown in Table 6G & 6H below.

(i) Final Scheduled Volume:

Exchange	Non-Solar Energy Contract	Period	Final Scheduled Volume (MU)			
			Total	Minimum	Maximum	Average
IEX	Day Ahead Contingency	August, 2022	15.68	0.04	2.01	0.52
		July, 2022	48.60	0.12	4.02	1.57
		% Change (Month over Month)	-67.74	-66.67	-50.00	-66.88
		August, 2021	220.82	1.98	16.31	7.12
		% Change (Year over Year)	NA	NA	NA	NA
	Intraday	August, 2022	-	-	-	-
		July, 2022	-	-	-	-

PXIL		%Change (Month over Month)	NA	NA	NA	NA	
		August, 2021	6.44	0.05	3.78	1.07	
		%Change (Year over Year)	NA	NA	NA	NA	
	Daily/ Anyday	August, 2022	-	-	-	-	
		July, 2022	-	-	-	-	
		%Change (Month over Month)	NA	NA	NA	NA	
		August, 2021	35.81	1.73	29.28	11.94	
		%Change (Year over Year)	NA	NA	NA	NA	
	Weekly	August, 2022	0.97	0.97	0.97	0.97	
		July, 2022	1.36	0.40	0.97	0.68	
		%Change (Month over Month)	-28.68	142.50	0.00	42.65	
		August, 2021	3.02	0.50	1.51	0.76	
		%Change (Year over Year)	-67.88	94.00	-35.76	27.63	
		Day Ahead Contingency	August, 2022	34.36	0.08	4.40	1.27
			July, 2022	40.88	0.08	3.22	1.32
			%Change (Month over Month)	-15.95	0.00	36.65	-3.79
			August, 2021	12.68	0.65	1.40	0.79
			%Change (Year over Year)	170.98	-87.69	214.29	60.76
		Intraday	August, 2022	-	-	-	-
			July, 2022	-	-	-	-
%Change (Month over Month)			NA	NA	NA	NA	
August, 2021			0.42	0.04	0.10	0.08	
%Change (Year over Year)			NA	NA	NA	NA	
Daily/ Anyday		August, 2022	-	-	-	-	
		July, 2022	-	-	-	-	
		%Change (Month over Month)	NA	NA	NA	NA	
		August, 2021	19.34	0.17	4.80	1.49	
		%Change (Year over Year)	NA	NA	NA	NA	
Weekly	August, 2022	-	-	-	-		
	July, 2022	-	-	-	-		
	%Change (Month over Month)	NA	NA	NA	NA		
	August, 2021	-	-	-	-		
	%Change (Year over Year)	NA	NA	NA	NA		

-: No transaction happened

NA: Not Applicable

Table-6E

(ii) Daily Market Clearing Price (MCP):

Exchange	Non-Solar Energy Contract	Period	Prices(Rs/kWh)		
			Minimum	Maximum	Average
IEX	Day Ahead Contingency	August, 2022	3.69	9.77	5.74
		July, 2022	3.16	8.98	6.03
		%Change (Month over Month)	16.77	8.80	-4.81
		August, 2021	3.39	8.57	5.29
		%Change (Year over Year)	8.85	14.00	8.51
	Intraday	August, 2022	-	-	-
		July, 2022	-	-	-
		%Change (Month over Month)	NA	NA	NA
		August, 2021	4.15	7.55	5.32
		%Change (Year over Year)	NA	NA	NA
	Daily/Anyday	August, 2022	-	-	-
		July, 2022	-	-	-
		%Change (Month over Month)	NA	NA	NA
		August, 2021	4.30	5.50	4.87
		%Change (Year over Year)	NA	NA	NA
	Weekly	August, 2022	5.80	5.80	5.80
		July, 2022	5.80	5.80	5.80
		%Change (Month over Month)	0.00	0.00	0.00
		August, 2021	4.00	5.00	4.40
		%Change (Year over Year)	45.00	16.00	31.82
PXIL	Day Ahead Contingency	August, 2022	3.68	8.84	5.54
		July, 2022	3.55	11.83	6.65
		% Change (Month over Month)	3.66	-25.27	-16.69
		August, 2021	3.67	5.16	4.74
		%Change (Year over Year)	0.27	71.32	16.88
	Intraday	August, 2022	-	-	-
		July, 2022	-	-	-
		% Change (Month over Month)	NA	NA	NA
		August, 2021	3.42	5.25	4.05
		%Change (Year over Year)	NA	NA	NA
	Daily/ Anyday	August, 2022	-	-	-
		July, 2022	-	-	-
		% Change (Month over Month)	NA	NA	NA

Weekly	August, 2021	3.50	4.45	3.93
	%Change (Year over Year)	NA	NA	NA
	August, 2022	-	-	-
	July, 2022	-	-	-
	%Change (Month over Month)	NA	NA	NA
	August, 2021	-	-	-
	%Change (Year over Year)	NA	NA	NA

-: No transaction happened

NA: Not Applicable

Table-6F

6.4. Non-Solar Energy Segment in GTAM (On Delivery date basis)

The Final Scheduled Volume and the Price of electricity transacted in GTAM in IEX & PXIL during August, 2022 and its comparison with July, 2022 has been shown in Table 6G & 6H below.

(i) Final Scheduled Volume:

Exchange	Non-Solar Energy Contract	Period	Final Scheduled Volume (MU)			
			Total	Minimum	Maximum	Average
IEX	Day Ahead Contingency	August, 2022	15.23	0.04	2.01	0.51
		July, 2022	49.41	0.12	4.02	4.59
		%Change (Month over Month)	-69.18	-66.67	-50.00	-88.89
		August, 2021	226.27	1.98	16.31	7.30
		%Change (Year over Year)	-93.27	-97.98	-87.68	-93.01
	Intraday	August, 2022	-	-	-	-
		July, 2022	-	-	-	-
		%Change (Month over Month)	NA	NA	NA	NA
		August, 2021	6.44	0.05	3.78	1.07
		%Change (Year over Year)	NA	NA	NA	NA
	Daily/Anyday	August, 2022	-	-	-	-
		July, 2022	-	-	-	-
		%Change (Month over Month)	NA	NA	NA	NA
		August, 2021	76.80	0.07	5.59	2.95
		%Change (Year over Year)	NA	NA	NA	NA
	Weekly	August, 2022	1.93	0.07	0.07	0.07
		July, 2022	0.40	0.06	0.06	0.06
		%Change (Month over Month)	382.50	16.67	16.67	16.67

PXIL		August, 2021	10.44	0.07	1.03	0.36
		%Change (Year over Year)	-81.51	0.00	-93.20	-80.56
	Day Ahead Contingency	August, 2022	35.61	0.08	4.40	1.27
		July, 2022	39.70	0.07	3.22	1.28
		%Change (Month over Month)	-10.30	14.29	36.65	-0.78
		August, 2021	12.68	0.65	1.40	0.79
		%Change (Year over Year)	180.84	-87.69	214.29	60.76
	Intraday	August, 2022	-	-	-	-
		July, 2022	-	-	-	-
		%Change (Month over Month)	NA	NA	NA	NA
		August, 2021	0.42	0.04	0.10	0.08
		%Change (Year over Year)	NA	NA	NA	NA
	Daily/Anyday	August, 2022	-	-	-	-
		July, 2022	-	-	-	-
		%Change (Month over Month)	NA	NA	NA	NA
		August, 2021	19.70	0.24	2.78	0.68
		%Change (Year over Year)	NA	NA	NA	NA
	Weekly	August, 2022	-	-	-	-
		July, 2022	-	-	-	-
		%Change (Month over Month)	NA	NA	NA	NA
		August, 2021	-	-	-	-
		%Change (Year over Year)	NA	NA	NA	NA

-: No transaction happened

NA: Not Applicable

Table-6G

(ii) Daily Market Clearing Price (MCP):

Exchange	Non-Solar Energy Contract	Period	Prices(Rs/kWh)		
			Minimum	Maximum	Average
IEX	Day Ahead Contingency	August, 2022	3.69	9.77	5.77
		July, 2022	3.16	8.98	5.89
		%Change (Month over Month)	16.77	8.80	-2.04
		August, 2021	3.29	8.57	5.24
		%Change (Year over Year)	12.16	14.00	10.11
	Intraday	August, 2022	-	-	-
		July, 2022	-	-	-
		%Change	NA	NA	NA

		(Month over Month)			
		August, 2021	4.15	7.55	5.32
		%Change (Year over Year)	NA	NA	NA
	Daily/Anyday	August, 2022	-	-	-
		July, 2022	-	-	-
		%Change (Month over Month)	NA	NA	NA
		August, 2021	3.88	5.50	4.37
		%Change (Year over Year)	NA	NA	NA
	Weekly	August, 2022	5.80	5.80	5.80
		July, 2022	5.80	5.80	5.80
		%Change (Month over Month)	0.00	0.00	0.00
		August, 2021	3.65	5.00	4.26
		%Change (Year over Year)	58.90	16.00	36.15
PXIL	Day Ahead Contingency	August, 2022	3.68	8.84	5.54
		July, 2022	3.55	11.83	6.64
		%Change (Month over Month)	3.66	-25.27	-16.57
		August, 2021	3.67	5.16	4.74
		%Change (Year over Year)	0.27	71.32	16.88
	Intraday	August, 2022	-	-	-
		July, 2022	-	-	-
		%Change (Month over Month)	NA	NA	NA
		August, 2021	3.42	5.25	4.05
		%Change (Year over Year)	NA	NA	NA
	Daily/Anyday	August, 2022	-	-	-
		July, 2022	-	-	-
		%Change (Month over Month)	NA	NA	NA
		August, 2021	3.50	4.45	4.12
		%Change (Year over Year)	NA	NA	NA
	Weekly	August, 2022	-	-	-
		July, 2022	-	-	-
		%Change (Month over Month)	NA	NA	NA
		August, 2021	-	-	-
		%Change (Year over Year)	NA	NA	NA

-: No transaction happened

NA: Not Applicable

Table-6H

- In August, 2022, there was no transmission congestion in GTAM (Non Solar) in both IEX and PXIL.

- In August, 2022, there was no real time curtailment in GTAM (Non Solar) in both IEX & PXIL.

6.5. Hydro Energy Segment in GTAM- In the Hydro Energy Segment in GTAM, in Day Ahead Contingency, Intraday, Daily/ Anyday and Weekly contracts during August, 2022 on trade date basis and delivery date has basis been shown in Tables 6I, 6J, 6K & 6L.

Hydro Energy Contract in GTAM (On Trade Date Basis)

(i) Final Scheduled Volume (On Trade date basis):

Exchange	Hydro Energy Contract	Period	Final Scheduled Volume (MU)			
			Total	Minimum	Maximum	Average
IEX	Day Ahead Contingency	August, 2022	81.99	1.10	3.85	2.64
		July, 2022	65.35	0.18	3.23	2.18
		% Change (Month over Month)	25.46	511.11	19.20	21.10
	Intraday	August, 2022	0.03	0.03	0.03	0.03
		July, 2022	1.75	0.16	0.74	0.44
		% Change (Month over Month)	-98.29	-81.25	-95.95	-93.18
	Daily/Anyday	August, 2022	-	-	-	-
		July, 2022	-	-	-	-
		% Change (Month over Month)	NA	NA	NA	NA
	Weekly	August, 2022	-	-	-	-
		July, 2022	-	-	-	-
		% Change (Month over Month)	NA	NA	NA	NA
PXIL	Day Ahead Contingency	August, 2022	5.45	0.16	0.83	0.45
		July, 2022	-	-	-	-
		% Change (Month over Month)	NA	NA	NA	NA
	Intraday	August, 2022	-	-	-	-
		July, 2022	-	-	-	-
		% Change (Month over Month)	NA	NA	NA	NA
	Daily/Anyday	August, 2022	-	-	-	-
		July, 2022	-	-	-	-
		% Change (Month over Month)	NA	NA	NA	NA
	Weekly	August, 2022	-	-	-	-
		July, 2022	-	-	-	-
		% Change (Month over Month)	NA	NA	NA	NA

-: No transaction happened

NA: Not Applicable

Table: 6I

(ii) Daily Market Clearing Price (MCP) (On Trade date basis):

Exchange	Hydro Energy Contract	Period	Prices(Rs/kWh)		
			Minimum	Maximum	Average

IEX	Day Ahead Contingency	August, 2022	3.08	8.42	5.32
		July, 2022	2.99	7.29	5.15
		%Change (Month over Month)	3.01	15.50	3.30
	Intraday	August, 2022	3.72	3.72	3.72
		July, 2022	8.49	12.00	10.77
		%Change (Month over Month)	-56.18	-69.00	-65.46
	Daily/Anyday	August, 2022	-	-	-
		July, 2022	-	-	-
		%Change (Month over Month)	NA	NA	NA
	Weekly	August, 2022	-	-	-
		July, 2022	-	-	-
		%Change (Month over Month)	NA	NA	NA
PXIL	Day Ahead Contingency	August, 2022	2.89	4.78	3.68
		July, 2022	-	-	-
		%Change (Month over Month)	NA	NA	NA
	Intraday	August, 2022	-	-	-
		July, 2022	-	-	-
		%Change (Month over Month)	NA	NA	NA
	Daily/Anyday	August, 2022	-	-	-
		July, 2022	-	-	-
		%Change (Month over Month)	NA	NA	NA
	Weekly	August, 2022	-	-	-
		July, 2022	-	-	-
		%Change (Month over Month)	NA	NA	NA

-: No transaction happened

NA: Not Applicable

Table - 6J

Hydro Energy Contract in GTAM (On Delivery Date Basis)**(i) Final Scheduled Volume (On Trade date basis):**

Exchange	Hydro Energy Contract	Period	Final Scheduled Volume (MU)			
			Total	Minimum	Maximum	Average
		August, 2022	80.57	1.10	3.85	2.60
		July, 2022	66.06	0.18	3.23	2.20
		%Change (Month over Month)	21.96	511.11	19.20	18.18
	Intraday	August, 2022	0.03	0.03	0.03	0.03
		July, 2022	1.75	0.16	0.74	0.44
		%Change (Month over Month)	-98.29	-81.25	-95.95	-93.18
	Daily/Anyday	August, 2022	-	-	-	-
		July, 2022	-	-	-	-

		%Change (Month over Month)	NA	NA	NA	NA
	Weekly	August, 2022	-	-	-	-
		July, 2022	-	-	-	-
		%Change (Month over Month)	NA	NA	NA	NA
PXIL	Day Ahead Contingency	August, 2022	5.45	0.16	0.83	0.45
		July, 2022	-	-	-	-
		%Change (Month over Month)	NA	NA	NA	NA
	Intraday	August, 2022	-	-	-	-
		July, 2022	-	-	-	-
		%Change (Month over Month)	NA	NA	NA	NA
	Daily/Anyday	August, 2022	-	-	-	-
		July, 2022	-	-	-	-
		%Change (Month over Month)	NA	NA	NA	NA
	Weekly	August, 2022	-	-	-	-
		July, 2022	-	-	-	-
		%Change (Month over Month)	NA	NA	NA	NA

-: No transaction happened

NA: Not Applicable

Table: 6K

(ii) Daily Market Clearing Price (MCP) (On Trade date basis):

Exchange	Hydro Energy Contract	Period	Prices(Rs/kWh)		
			Minimum	Maximum	Average
IEX	Day Ahead Contingency	August, 2022	3.80	7.95	5.21
		July, 2022	2.99	7.23	5.11
		%Change (Month over Month)	27.09	9.96	1.96
	Intraday	August, 2022	3.72	3.72	3.72
		July, 2022	8.49	12.00	10.77
		%Change (Month over Month)	-56.18	-69.00	-65.46
	Daily/Anyday	August, 2022	-	-	-
		July, 2022	-	-	-
		%Change (Month over Month)	NA	NA	NA
	Weekly	August, 2022	-	-	-
		July, 2022	-	-	-
		%Change (Month over Month)	NA	NA	NA
PXIL	Day Ahead Contingency	August, 2022	2.89	4.78	3.68
		July, 2022	-	-	-

		%Change (Month over Month)	NA	NA	NA
Intraday	August, 2022	-	-	-	-
	July, 2022				
	%Change (Month over Month)	NA	NA	NA	NA
Daily/Anyday	August, 2022	-	-	-	-
	July, 2022	-	-	-	-
	%Change (Month over Month)	NA	NA	NA	NA
Weekly	August, 2022	-	-	-	-
	July, 2022	-	-	-	-
	%Change (Month over Month)	NA	NA	NA	NA

-: No transaction happened

NA: Not Applicable

Table – 6L

- In August, 2022, there was no transmission congestion in GTAM (Hydro) in both IEX and PXIL.
- In August, 2022, there was real time curtailment of **0.10 MU** in IEX under Day Ahead Contingency Contract. Whereas, there was no real time curtailment in PXIL in GTAM (Hydro).

7. BILATRAL TRANSACTIONS:

The total volume of electricity transacted through **Bilateral transactions** in the month of August, 2022 was **7,862.84 MU**. The total buy volume of electricity transacted in bilateral market through direct transactions and traders in the month of August, 2022 were **3,042.02 MU** and **4,820.83 MU** respectively. The details of Bilateral transactions of Electricity happened during August, 2022 have been shown in Table Below:

August, 2022	Direct	Traders	Total Bilateral Transaction (MU)
Total	3042.02	4820.83	7862.84
Minimum	0.03	0.14	-
Maximum	879.65	1262.34	-

Table -7A

The region-wise maximum/ minimum volume of electricity transaction happened bilaterally during August, 2022 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	279.53	1041.01	536.70	721.46	1954.07	2841.12	271.71	140.10	0.00	77.14
Minimum	0.97	0.78	14.00	3.13	10.26	0.66	0.03	0.14	0.00	15.65
Maximum	157.89	550.49	422.00	173.51	879.65	1262.34	251.28	89.88	0.00	61.49

Table-7B

- 7.1. The **top 5 buyers** on bilateral transaction through direct transactions in the month of August, 2022 were **PUNJAB, HARYANA, MAHARASHTRA, UTTARPRADESH** and **TELANGANA**, which constituted **75.91 %** of the market volume. Whereas **top 5 buyers** on bilateral transaction through traders in the month of August, 2022 were **PUNJAB, DELHI, Odisha, HARYANA** and **UTTARPRADESH**, which constituted **70.34 %** of the market volume. [Annexure III]
- 7.2. The **top 5 sellers** on bilateral transaction through direct transactions in the month of August, 2022 were **MP, MAHARASHTRA, SEILP2, TAMILNADU** and **JK & LADAKH**, which constituted **60.83 %** of the market volume. Whereas **top 5 sellers** on bilateral transaction through traders in the month of August, 2022 were **HIMACHAL, TEESTA III TUL, RPREL, KARNATAKA** and **JITPL**, which constituted **49.47 %** of the market volume. [Annexure III]
- 7.3. **Deviation Volume** - The volume of Deviation observed in the month of August, 2022 in import and export were **2,662.99 MU** and **2,744.29 MU** respectively. The total volume of Deviation observed in the month of August, 2022 can be taken as **2,703.64 MU**.
- 7.4. A comparison of volume of electricity transacted through both the Power Exchanges together in DAM, TAM, RTM, GTAM, GDAM (on delivery date basis) with Bilateral transactions and Deviation in the month of August, 2022 is shown in **Figure 1**:

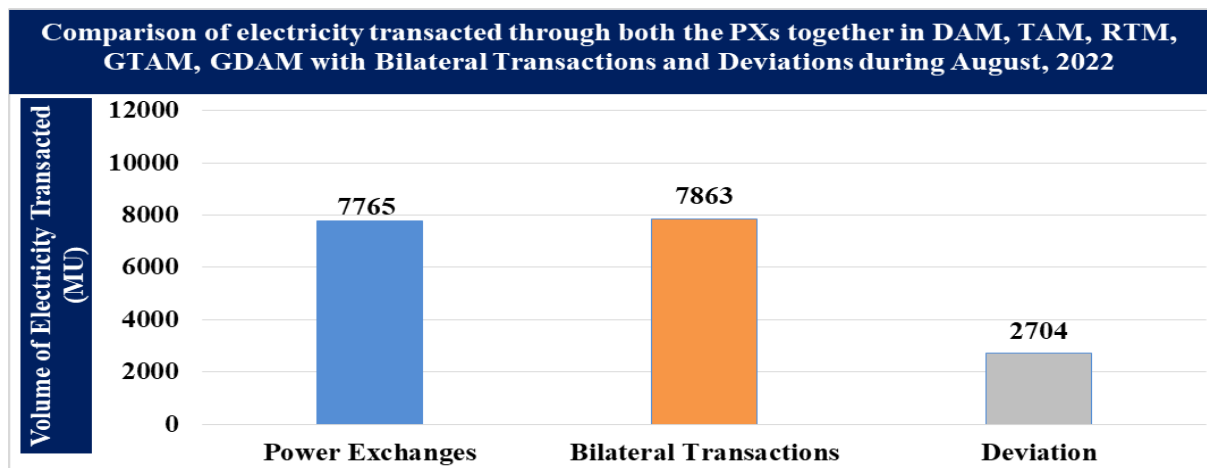


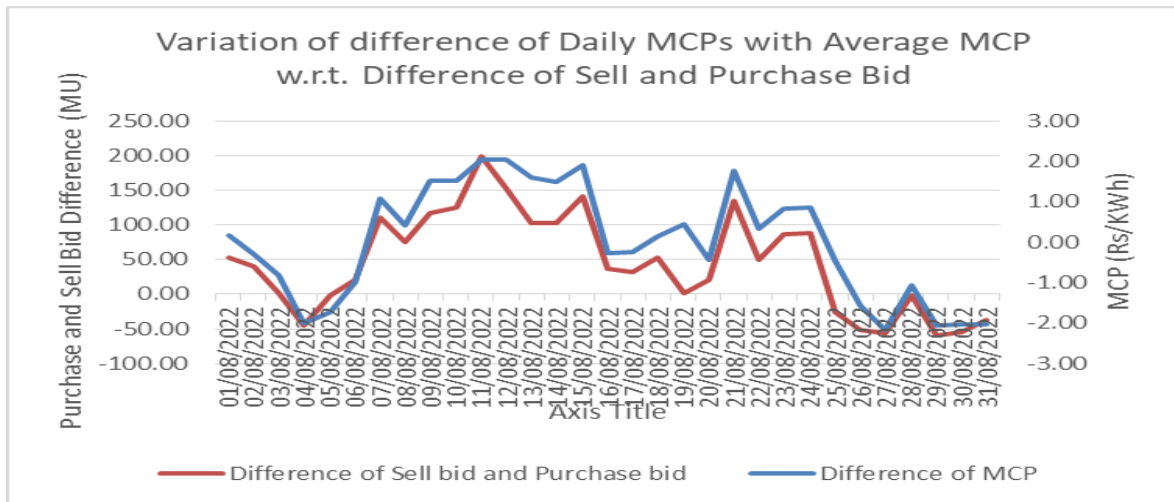
Figure -1

8. ANALYSIS OF MOVEMENT OF PRICES OBSERVED IN DAM DURING AUGUST, 2022

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, 2022 month. The observations made are as under:

- 8.1. In order to find out the determinants which are responsible for the Daily MCP, a regression analysis has been carried out where the Daily 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.

- 8.2. A double log function was used so that elasticity of Daily MCP could be read off from the coefficients of independent variables. The regression analysis revealed that the only significant variable were the Total Sell Bid, Hydro Generation and Total Purchase Bid, whereas all the other variables were found to be insignificant. Further, the regression analysis revealed that the elasticity of the Daily MCP with respect to total purchase bid was **0.72**, which signifies that there is high multicollinearity among the predictor variables/ independent variables used in regression analysis.
- 8.3. The variation of difference of Daily MCPs with Average MCP w.r.t Difference of Sell and Purchase bid is Shown below:



- 8.4. The same relationship is visible from the analysis carried out from the plot in **Figure 2**.

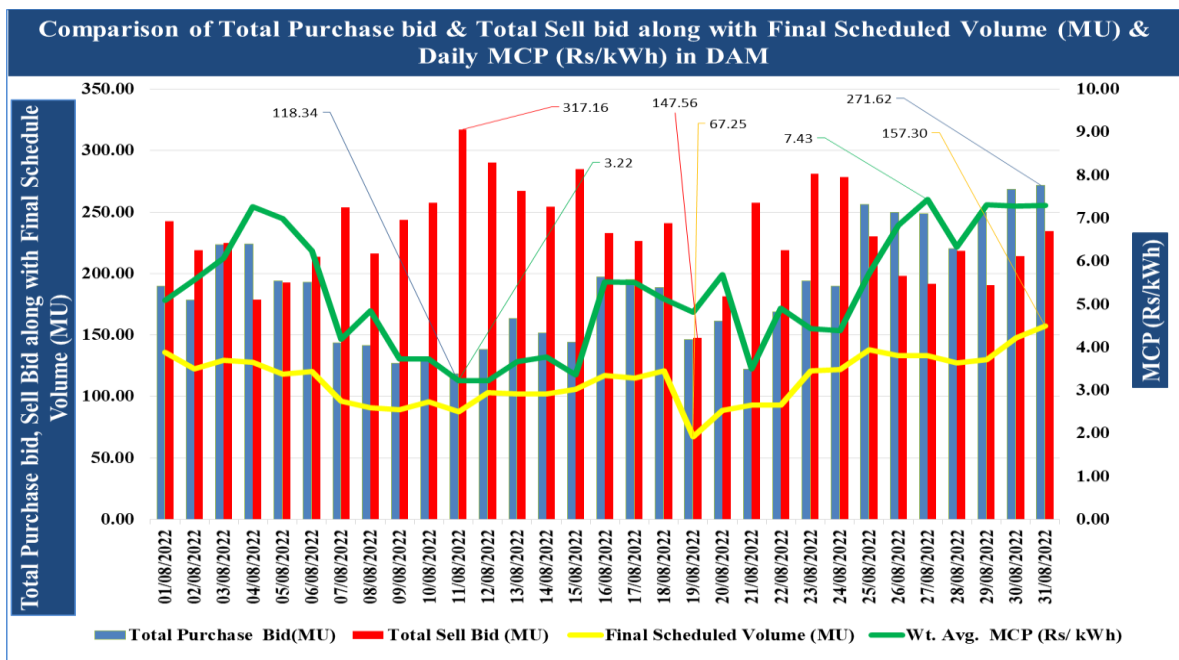


Figure -2

- 8.5. Invariably, the Final Scheduled Volume (MU) and the Daily MCP (Rs/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, 2022, it is observed that on second Monday (8th August, 2022), FSV showed decreasing trend in comparison to First Sunday (7th August, 2022), on third Sunday

(21st August, 2022), FSV showed increasing trend in comparison to third Saturday (20th August, 2022). The detailed analysis on this is given at **Appendix-I**.

- 8.6. A comparison of maximum, minimum, daily, evening time MCP is shown in **Figure -3**. The same are also tabulated in **Annexure-I**

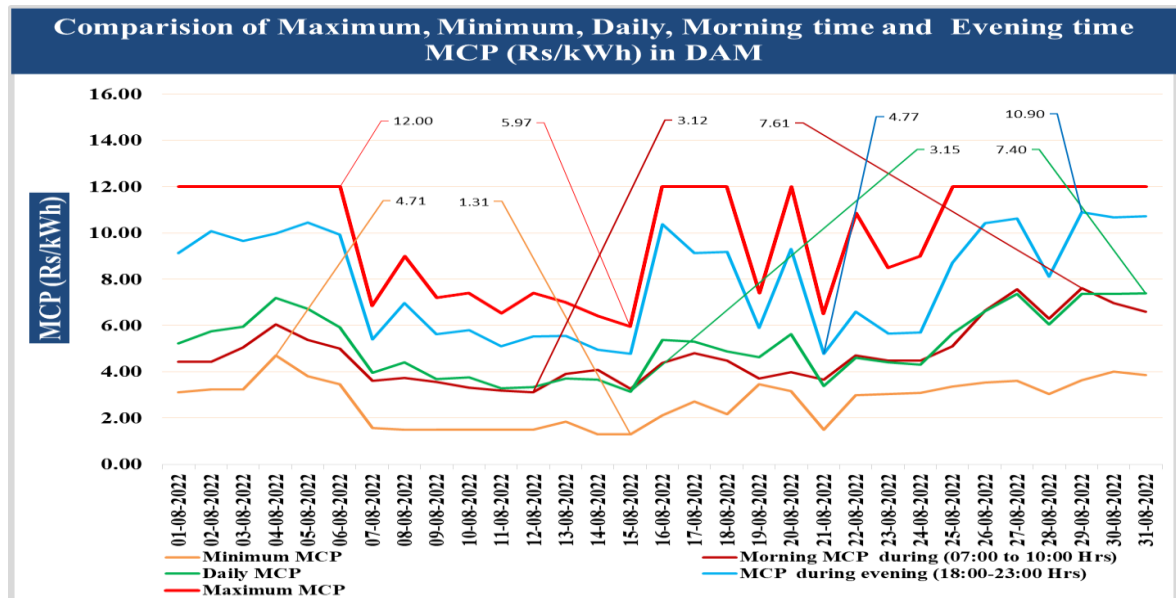


Figure -3

- 8.7. The Market Clearing Price duration curves for time block wise MCP for the month of August, 2022 is shown in **Figure 4**, whereas the time block wise MCP duration curve for the period 1st April, 2022 to 31st August, 2022 is shown in **Figure 5**.

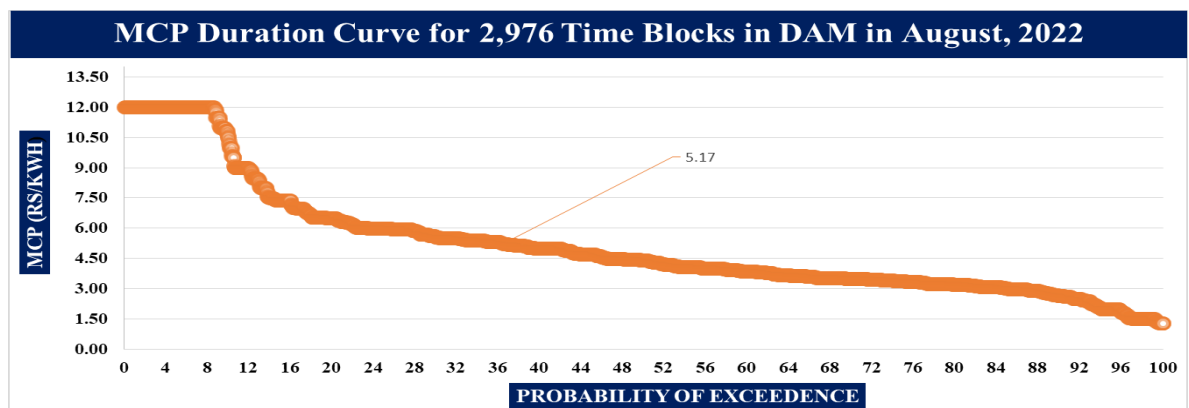


Figure-4

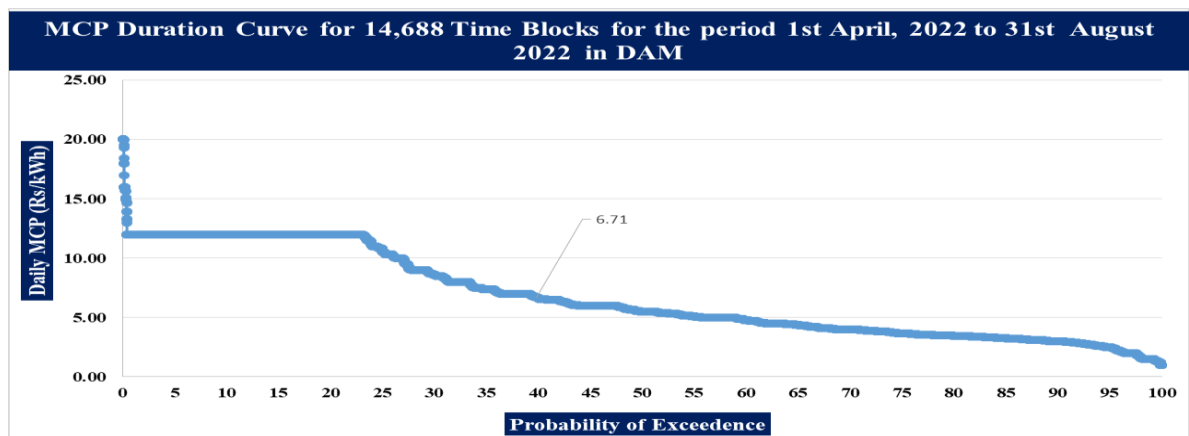
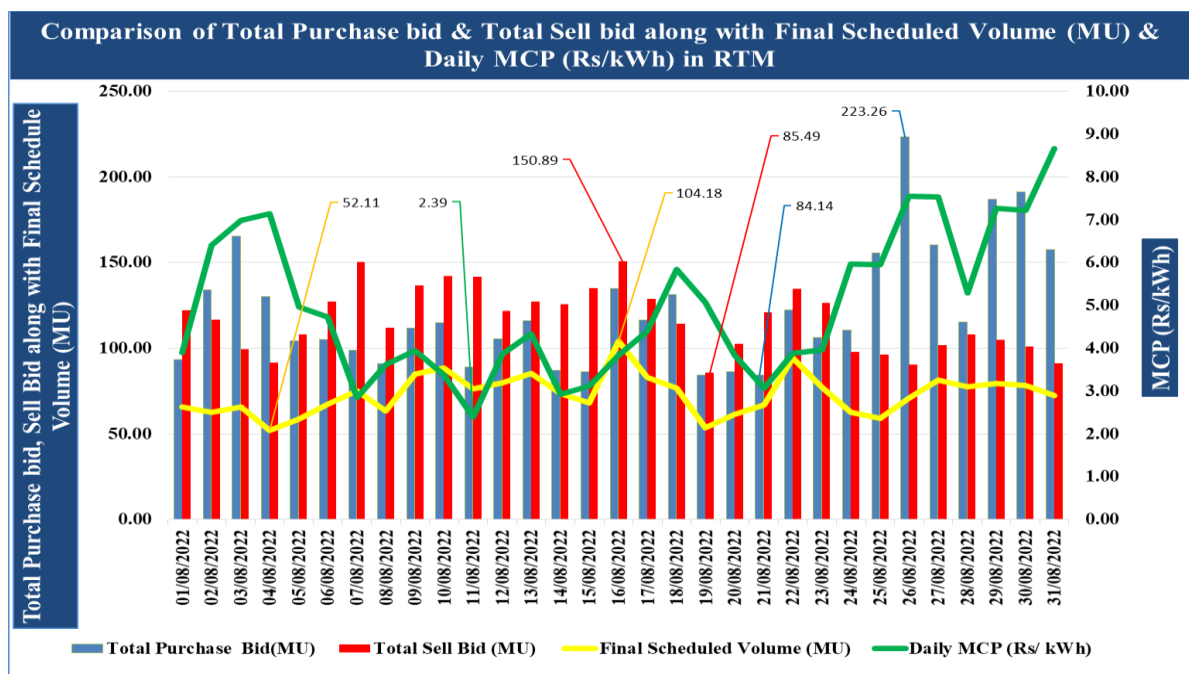


Figure-5

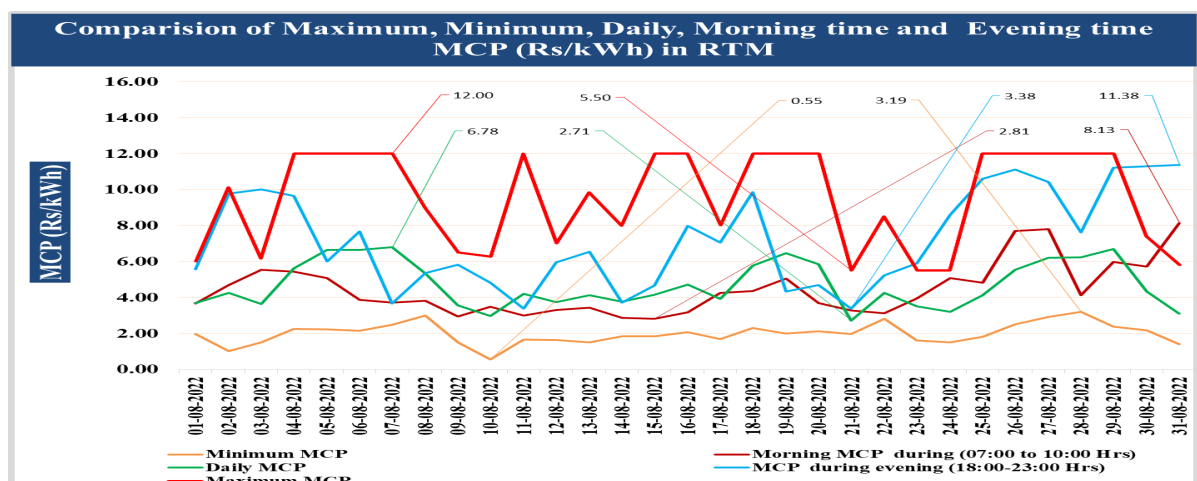
- 8.8.** It can be seen in figure 4 above that in the MCP duration curve of August, 2022, for 36.50 % of the time MCP was above average MCP of the month (i.e. **Rs. 5.17/kWh**) and almost 63.50 % of the time MCP was below the average MCP of the month. Similarly, it can be seen in the MCP duration curve from 1st April, 2022 to 31st August, 2022 (figure-5), that for 38.50 % of the time the MCP was above the average MCP for the period (i.e. **Rs. 6.71/kWh**) and for 61.50 % of the time the daily MCP was below the average MCP for the period.
- 8.9.** 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 8.1 and 8.2 above**.
- 8.10.** In August, 2022, 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 18-19 Hrs** (on 11 no. of days). Similarly, the minimum FSV occurred mostly during the **time period 18-20 Hrs** (on 9 no. of days). Whereas, the minimum MCP occurred mostly during the **time period 13-14 Hrs** (on 22 no. of days). [**Annexure VI**]
- 8.11.** In the month of August, 2022, there was no congestion in IEX and PXIL. Further, in the month of July, 2022, there was congestion of 4.45 MU in the transmission system in IEX, whereas there was no congestion in PXIL, respectively. In the month of August, 2021 also, there was no transmission congestion in IEX and PXIL, respectively.
- 8.12.** In the month of August, 2022, there was **no** real time curtailment in IEX and PXIL, respectively. Further, in the month of July, 2022 also, there was no real time curtailment both IEX and PXIL. In the month of August, 2021 also, there was no real time curtailment in both IEX and PXIL.
- 8.13.** The **top 10 sellers** on the power exchanges in **Day Ahead Market (DAM)** in the month of August, 2022 were **Telangana, Kerala, NVVN (SNA)-NEA, Karnataka, Madhya Pradesh, Uttar Pradesh, Himachal Pradesh, Kameng HEP, Rajasthan and Sembcorp Gayatri**, which constituted **57.14 %** of the market volume.[**Annexure VII**].
- 8.14.** The **top 10 purchasers** on the power exchanges in **Day Ahead Market (DAM)** in the month of August, 2022 **Gujarat, Maharashtra, Uttar Pradesh, Andhra Pradesh, West Bengal, Telangana, Tamil Nadu, Haryana, Odisha and Assam**, which constituted **76.26 %** of the market volume. [**Annexure VII**]
- 8.15.** The total volume of electricity purchased by Discoms/Licensees in DAM in the month of August, 2022 was **3,208.78 MU**, which constituted **90.67%** of total volume of electricity purchased on both the power exchanges.
- 8.16.** Similarly, the total volume of electricity sold by Discoms/Licensees in DAM in the month of August, 2022 was **2,217.39 MU**, which constituted **62.66%** of total volume of electricity sold on both the power exchanges.

9. ANALYSIS OF MOVEMENT OF PRICES OBSERVED IN REAL TIME MARKET (RTM) TRANSACTIONS IN AUGUST, 2022

- 9.1. 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 variables was the Total Purchase Bid, Total Sell Bid and Coal Generation, whereas all the other variables were found to be insignificant. Further, the regression analysis revealed that the elasticity of the Daily MCP with respect to total Sell Bid was **0.67**, which signifies that there is high multicollinearity among the predictor variables/ independent variables used in regression analysis.
- 9.2. 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 9.1 above**.
- 9.3. The Total Purchase Bid, Total Sell Bid, Daily MCP and FSV are shown in Figure-6 below:



- 9.4. A comparison of maximum, minimum, daily, evening time MCP is shown in **Figure-7**. The same are also tabulated in **Annexure-VIII**.



- 9.5. The Market Clearing Price duration curves for time block wise MCP for the month of August, 2022 is shown in **Figure 8**, whereas the day wise MCP duration curve for the period 1st August, 2022 to 31st August, 2022 is shown in **Figure 9**.

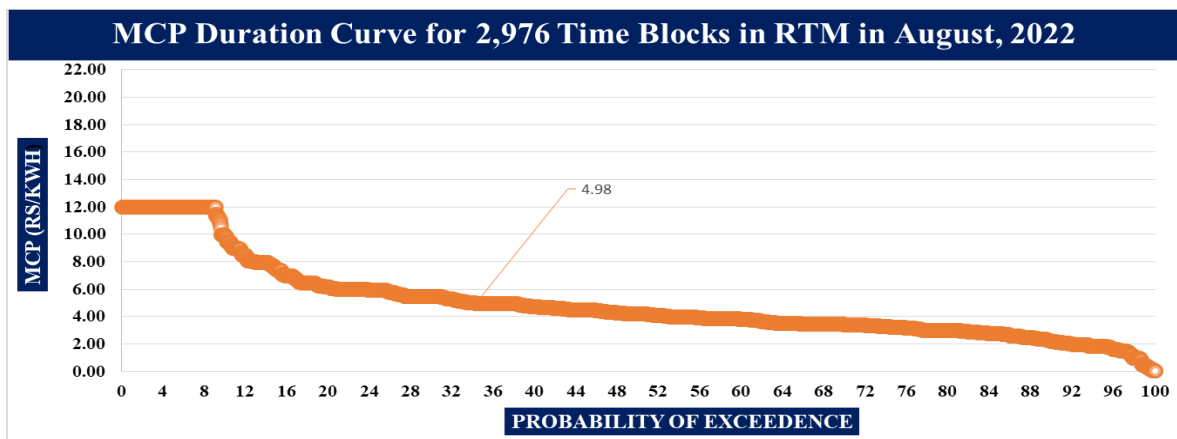


Figure-8

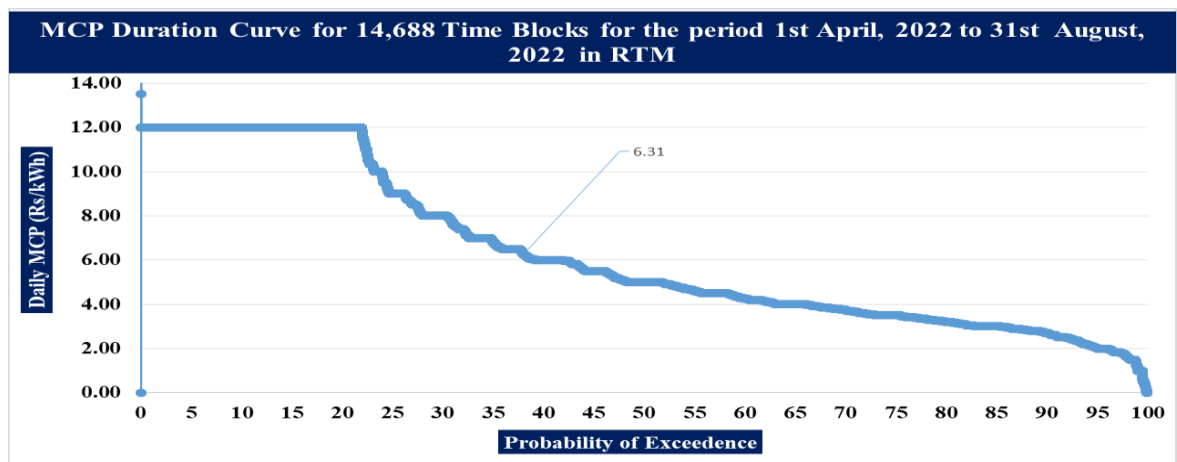


Figure-9

- 9.6. It can be seen in figure 8 above that in the MCP duration curve of August, 2022, for 34.00 % of the time the MCP was above the average MCP of the month (i.e. **Rs. 4.98/kWh**) and for 66.00 % of the time the MCP was below the average MCP of the month. Similarly, it can be seen in the cumulative MCP duration curve from 1st April, 2022 to 31st August, 2022 (figure 9) that, for 37.00 % of the time the daily MCP was above the average MCP for the period (i.e. **Rs. 6.31/kWh**) and for 63.00 % of the time the daily MCP was below the average MCP for the period.
- 9.7. In August, 2022, the maximum FSV occurred mostly during the **time period 11-12 Hrs** (on 10 no. of days). Whereas, the maximum MCP also occurred mostly during the **time period 19-20 Hrs** (on 12 no. of days). Similarly, the minimum FSV occurred mostly during the **time period 7-9 Hrs** (on 7 no. of days). Whereas, the minimum MCP occurred mostly during the **time period 13-14 Hrs** (on 19 no. of days). **[Annexure X]**
- 9.8. There was **no** real time curtailment in IEX in Real Time Market (RTM) during August, 2022 and July, 2022, whereas, **no** real time curtailment in PXIL during August, 2022 and no transaction of electricity happened in PXIL during July, 2022. Similarly, in August, 2021,

there was no real time curtailment in IEX, whereas, no transaction of electricity happened in PXIL during August, 2021 in Real Time Market (RTM).

- 9.9.** In the month of August, 2022, there was congestion of **0.35 MU** in the transmission system in IEX on 3 day (08th, 10th & 13th August, 2022), whereas, in PXIL, there was no congestion in August, 2022. Further, In the month of July, 2022, there was congestion of **0.04 MU** in the transmission system in IEX, whereas, in PXIL, there was no congestion. In the month of August, 2021, there was congestion of **9.35 MU** in transmission system in IEX in Real Time Market), whereas, in PXIL, no transaction of electricity happened in August, 2021 in Real Time Market.
- 9.10.** The **top 10 sellers** on the power exchanges in **Real Time Market (RTM)** in the month of August, 2022 were **Madhya Pradesh, Kerala, Rajasthan, Karnataka, Bihar, Andhra Pradesh, Kameng HEP, J&K, Telangana and Delhi**, which constituted **67.41%** of the market volume. . [Annexure XI]
- 9.11.** The **top 10 buyers** on the power exchanges in **Real Time Market (RTM)** in the month of August, 2022 were **Maharashtra, Telangana, Uttar Pradesh, West Bengal, Punjab, Rajasthan, Odisha, Haryana, Gujarat and Tamil Nadu**, which constituted **78.24%** of the market volume. [Annexure XI]
- 9.12.** The total volume of electricity purchased by Discoms/Licensees in RTM in the month of August, 2022 was **2,142.04 MU**, which constituted **94.55 %** of total volume of electricity purchased on both the power exchanges.
- 9.13.** Similarly, the total volume of electricity sold by Discoms/Licensees in RTM in the month of August, 2022 was **1,956.00 MU**, which constituted **86.34 %** of total volume of electricity sold on both 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, Average MCP and Real-Time Curtailment in Day Ahead Market (DAM) for the months of April, 2022 to March, 2023 of IEX and PXIL

Quarter	Months	Final Scheduled Volume (MU)		Market Clearing Price (Rs/kWh)		Real Time Curtailment (MU)	
		IEX	PXIL	IEX	PXIL	IEX	PXIL
Quarter -I	April, 2022	4,113.65	0	10.06	0	8.86	0
	May, 2022	3,172.50	13.02	6.80	4.30	0	0
	June, 2022	4,084.99	116.20	6.49	6.61	0	0
Total Quarter -I	April - June, 2022	11,371.14	129.22	7.87	6.38	8.86	0
Quarter -II	July, 2022	3,516.65	31.78	5.50	5.01	0	0
	August, 2022	3,528.70	10.12	5.26	6.42	0	0
	September, 2022						
Total Quarter -II	July - September, 2022	7,045.35	41.90	5.38	5.35	0.00	0.00
Total April, 2022 – March, 2023		18,416.49	171.12	6.92	6.13	8.86	0.00

Annexure-II**Final Scheduled Volume in Term Ahead Market (TAM) for the months of April, 2022 to March, 2023 of IEX, PXIL and HPX (Trade and Delivery date basis)**

Quarter	Months	Final Scheduled Volume (MU) on Trade Date Basis			
		IEX	PXIL	HPX	Total
Quarter -I	April, 2022	1,166.81	2,067.94	-	3,234.75
	May, 2022	901.76	738.08	-	1,639.84
	June, 2022	722.69	727.89	-	1,450.58
Total Quarter -I	April - June, 2022	2,791.26	3,533.91	-	6,325.17
Quarter-II	July, 2022	512.00	530.95	221.96	1,264.91
	August, 2022	776.40	500.81	259.85	1,537.06
	September, 2022				
Total Quarter -II	July-September, 2022	1288.4	1031.76	481.81	2,801.97
Total April, 2022 - March, 2023		4,079.66	4,565.67	481.81	9,127.14

Quarter	Months	Final Scheduled Volume (MU) on Delivery Date Basis			
		IEX	PXIL	HPX	Total
Quarter -I	April, 2022	1,171.50	1,746.85	-	2,918.35
	May, 2022	1,188.60	1,157.77	-	2,346.37
	June, 2022	759.03	759.58	-	1,518.61
Total Quarter -I	April - June, 2022	3,119.13	3,664.20	-	6,783.33
Quarter-II	July, 2022	439.81	531.89	221.96	1,193.66
	August, 2022	722.89	486.80	259.85	1,469.54
	September, 2022				
Total Quarter -II	July-September, 2022	1162.70	1018.69	481.81	2,663.20
Total April, 2022 - March, 2023		4,281.83	4,682.89	481.81	9,446.53

Top Five Entities (Buyers and Sellers) in Bilateral transactions in the month of August, 2022

(i) Top five Buyers in Bilateral transactions

Entity Name	Direct		Entity Name	Through Traders	
	(MU)	Percent		(MU)	Percent
PUNJAB	879.65	28.92%	PUNJAB	1262.34	26.19%
HARYANA	460.89	15.15%	DELHI	662.05	13.73%
MAHARASHTRA	422.00	13.87%	Odisha	550.49	11.42%
UTTAR PRADESH	295.34	9.71%	HARYANA	458.90	9.52%
TELANGANA	251.28	8.26%	UTTAR PRADESH	457.16	9.48%
Total Volume	2309.16	75.91%	Total Volume	3390.94	70.34%
Total Volume in Bilateral	3042.02		Total Volume in Bilateral	4820.83	

(ii) Top five Sellers in Bilateral transactions

Entity Name	Direct		Entity Name	Through Traders	
	(MU)	Percent		(MU)	Percent
MP	1206.31	35.30%	HIMACHAL	980.47	22.06%
MAHARASHTRA	232.51	6.80%	TEESTA III TUL	616.76	13.88%
SEILP2	231.31	6.77%	RPREL	261.06	5.87%
TAMILNADU	210.48	6.16%	KARNATAKA	174.85	3.93%
JK% LADAKH	198.28	5.80%	JITPL	165.85	3.73%
Total Volume	2078.88	60.83%	Total Volume	2198.99	49.47%
Total Volume in Bilateral	3417.75		Total Volume in Bilateral	4444.85	

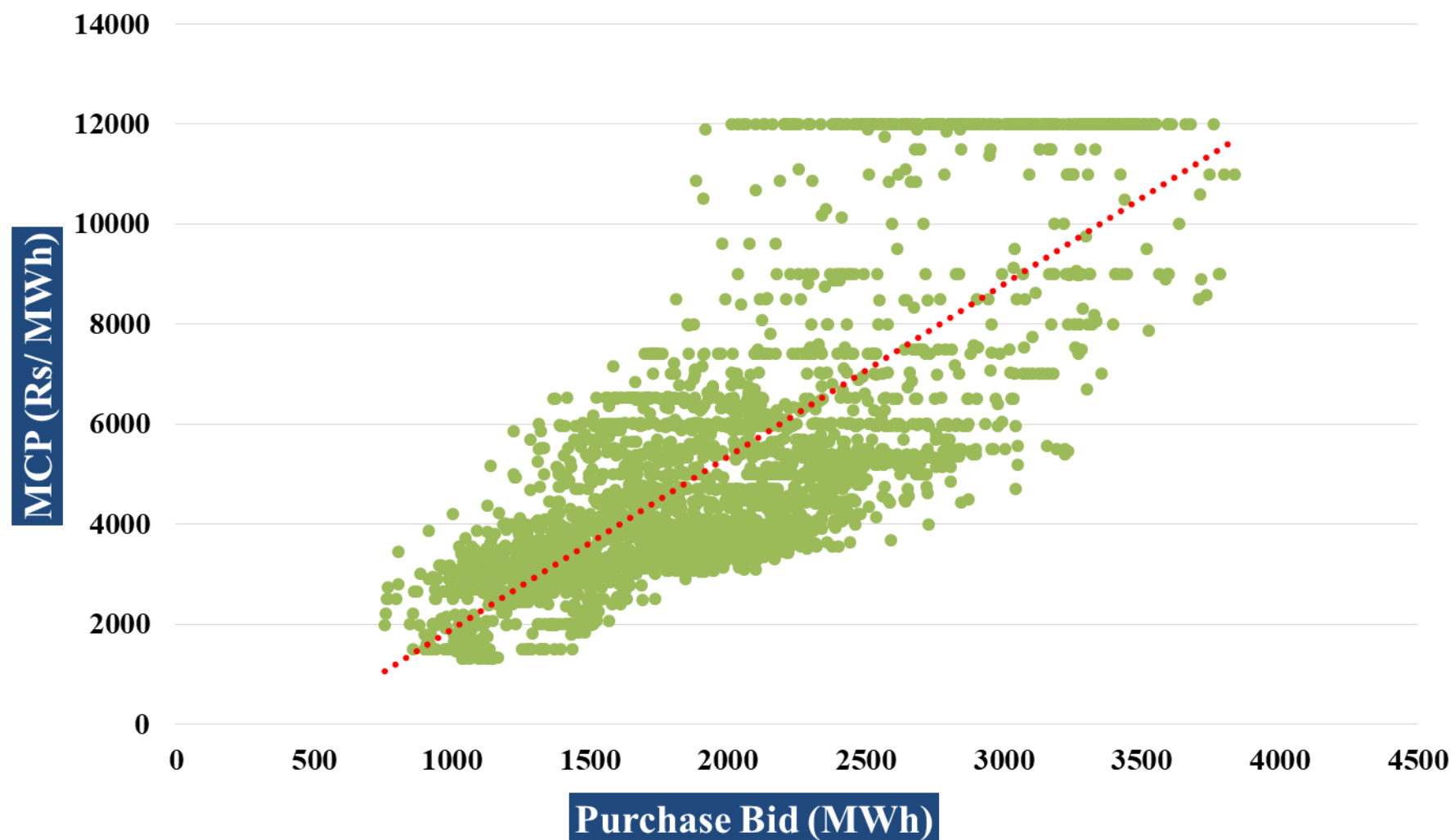
Annexure-IV**Evening, Day, Night, Morning, Maximum, Minimum, Average MCP (Rs/kWh) and Final Scheduled Volume (MU) in DAM**

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	Average MCP	Final Scheduled Volume (MU)
01-08-2022	4.44	3.54	9.13	4.05	12.00	3.11	5.24	136.05
02-08-2022	4.43	3.72	10.07	4.86	12.00	3.23	5.76	122.44
03-08-2022	5.04	3.95	9.65	5.29	12.00	3.25	5.95	129.44
04-08-2022	6.05	5.52	9.97	7.17	12.00	4.71	7.20	127.77
05-08-2022	5.38	4.69	10.45	6.34	12.00	3.80	6.73	118.04
06-08-2022	5.00	3.75	9.93	5.19	12.00	3.45	5.92	120.10
07-08-2022	3.61	2.15	5.40	4.77	6.85	1.56	3.97	95.91
08-08-2022	3.73	2.75	6.97	4.27	9.00	1.50	4.41	90.73
09-08-2022	3.56	2.26	5.62	3.54	7.21	1.50	3.69	88.97
10-08-2022	3.31	2.21	5.79	3.80	7.40	1.50	3.75	95.73
11-08-2022	3.19	1.60	5.10	3.52	6.53	1.50	3.30	87.60
12-08-2022	3.12	1.99	5.52	2.94	7.40	1.50	3.34	102.95
13-08-2022	3.92	2.26	5.56	3.49	7.00	1.84	3.72	101.89
14-08-2022	4.09	2.08	4.96	3.86	6.40	1.31	3.66	101.91
15-08-2022	3.27	1.49	4.79	3.32	5.97	1.31	3.15	105.92
16-08-2022	4.39	3.31	10.39	3.74	12.00	2.11	5.39	116.82
17-08-2022	4.81	3.33	9.14	4.23	12.00	2.72	5.29	114.81
18-08-2022	4.49	2.83	9.18	3.50	12.00	2.18	4.89	120.76
19-08-2022	3.70	3.75	5.89	4.93	7.40	3.45	4.62	67.25
20-08-2022	3.99	3.52	9.32	5.52	12.00	3.16	5.63	88.89
21-08-2022	3.66	2.21	4.77	3.25	6.50	1.50	3.40	92.76
22-08-2022	4.71	3.70	6.59	3.80	10.86	3.00	4.62	92.90
23-08-2022	4.48	3.32	5.65	4.42	8.50	3.05	4.42	120.88
24-08-2022	4.48	3.40	5.71	3.88	9.00	3.08	4.30	122.14
25-08-2022	5.11	4.31	8.72	4.66	12.00	3.36	5.64	138.00
26-08-2022	6.64	4.66	10.43	5.34	12.00	3.53	6.63	132.94
27-08-2022	7.57	4.87	10.63	6.94	12.00	3.60	7.37	133.25
28-08-2022	6.29	3.54	8.11	6.66	12.00	3.05	6.05	127.12
29-08-2022	7.61	5.02	10.90	6.57	12.00	3.64	7.37	129.97
30-08-2022	6.96	5.10	10.69	7.03	12.00	4.02	7.37	147.49
31-08-2022	6.59	4.88	10.72	7.55	12.00	3.86	7.40	157.30
Maximum	7.61	5.52	10.90	7.55	12.00	4.71	7.40	157.30
Minimum	3.12	1.49	4.77	2.94	5.97	1.31	3.15	67.25
Average	4.76	3.41	7.93	4.79	10.00	2.72	5.17	113.83

MCP: Market Clearing Price (Rs/kWh)

FSV: Final Scheduled Volume (MU)

Comparison of MCP w.r.t. Purchase Bid for 2,976 Time Blocks during the month of August, 2022 in DAM



Time Blocks during the Month [96 time blocks in a day x 31 days = 2,976]

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

Date	Max. FSV (MU)		Max. MCP (Rs/kWh)		Min FSV (MU)		Min. MCP (Rs/kWh)	
	Time Block	Value	Time Block	Value	Time Block	Value	Time Block	Value
01-08-2022	07:30 - 07:45	2.30	18:45 - 19:00	12.00	03:15 - 03:30	0.93	13:00 - 13:15	3.11
02-08-2022	07:00 - 07:15	1.89	18:45 - 19:00	12.00	02:30 - 02:45	0.77	13:00 - 13:15	3.23
03-08-2022	06:30 - 06:45	1.67	19:15 - 19:30	12.00	03:45 - 04:00	0.88	13:00 - 13:15	3.25
04-08-2022	00:15 - 00:30	1.69	19:00 - 19:15	12.00	18:00 - 18:15	0.87	13:00 - 13:15	4.71
05-08-2022	07:15 - 07:30	1.71	18:45 - 19:00	12.00	03:45 - 04:00	0.90	13:00 - 13:15	3.80
06-08-2022	23:00 - 23:15	1.77	19:00 - 19:15	12.00	17:30 - 17:45	0.92	13:00 - 13:15	3.45
07-08-2022	23:00 - 23:15	1.43	20:15 - 20:30	6.85	17:30 - 17:45	0.68	13:00 - 13:15	1.56
08-08-2022	22:15 - 22:30	1.56	19:45 - 20:00	9.00	16:00 - 16:15	0.61	13:00 - 13:15	1.50
09-08-2022	22:45 - 23:00	1.16	20:00 - 20:15	7.21	18:15 - 18:30	0.72	13:00 - 13:15	1.50
10-08-2022	22:30 - 22:45	1.32	22:45 - 23:00	7.40	18:15 - 18:30	0.69	14:00 - 14:15	1.50
11-08-2022	06:30 - 06:45	1.10	19:45 - 20:00	6.53	18:00 - 18:15	0.65	13:30 - 13:45	1.50
12-08-2022	07:30 - 07:45	1.56	19:00 - 19:15	7.40	05:15 - 05:30	0.78	14:00 - 14:15	1.50
13-08-2022	07:15 - 07:30	1.57	19:00 - 19:15	7.00	05:15 - 05:30	0.75	13:00 - 13:15	1.84
14-08-2022	07:00 - 07:15	1.44	19:30 - 19:45	6.40	15:15 - 15:30	0.78	14:00 - 14:15	1.31
15-08-2022	22:30 - 22:45	1.52	21:45 - 22:00	5.97	09:45 - 10:00	0.86	10:30 - 10:45	1.31
16-08-2022	07:15 - 07:30	1.65	18:30 - 18:45	12.00	10:00 - 10:15	0.79	03:00 - 03:15	2.11
17-08-2022	07:15 - 07:30	1.88	18:45 - 19:00	12.00	15:00 - 15:15	0.83	13:00 - 13:15	2.72
18-08-2022	07:15 - 07:30	2.13	18:30 - 18:45	12.00	04:15 - 04:30	0.95	13:00 - 13:15	2.18
19-08-2022	21:00 - 21:15	0.96	22:15 - 22:30	7.40	17:00 - 17:15	0.49	13:00 - 13:15	3.45
20-08-2022	07:15 - 07:30	1.56	19:00 - 19:15	12.00	02:45 - 03:00	0.68	09:00 - 09:15	3.16
21-08-2022	07:15 - 07:30	1.89	19:45 - 20:00	6.50	17:15 - 17:30	0.70	13:30 - 13:45	1.50
22-08-2022	07:15 - 07:30	1.68	19:15 - 19:30	10.86	11:15 - 11:30	0.61	13:00 - 13:15	3.00
23-08-2022	07:00 - 07:15	2.20	19:30 - 19:45	8.50	03:30 - 03:45	0.75	13:30 - 13:45	3.05
24-08-2022	06:45 - 07:00	1.90	19:45 - 20:00	9.00	18:00 - 18:15	0.86	14:00 - 14:15	3.08
25-08-2022	06:45 - 07:00	2.05	19:00 - 19:15	12.00	09:45 - 10:00	1.07	04:00 - 04:15	3.36
26-08-2022	06:30 - 06:45	1.87	18:30 - 18:45	12.00	13:00 - 13:15	1.07	13:15 - 13:30	3.53
27-08-2022	06:45 - 07:00	2.14	18:30 - 18:45	12.00	19:15 - 19:30	1.06	13:15 - 13:30	3.60
28-08-2022	23:15 - 23:30	1.80	18:45 - 19:00	12.00	09:45 - 10:00	0.92	13:00 - 13:15	3.05
29-08-2022	06:45 - 07:00	1.66	05:45 - 06:00	12.00	19:00 - 19:15	1.01	04:00 - 04:15	3.64
30-08-2022	00:30 - 00:45	2.05	18:30 - 18:45	12.00	19:00 - 19:15	1.13	13:00 - 13:15	4.02
31-08-2022	00:00 - 00:15	2.15	18:30 - 18:45	12.00	19:15 - 19:30	1.10	13:00 - 13:15	3.86

MCP: Market Clearing Price (Rs/kWh)

FSV: Final Scheduled Volume (MU)

Annexure-VII**Sellers and Buyers in Day Ahead Market (DAM) in the month of August, 2022**

S. No.	Entity Name	Sell		Entity Name	Purchase	
		(MU)	Percent (%)		(MU)	Percent (%)
1.	Telangana	311.40	8.80%	Gujarat	409.05	11.56%
2.	Kerala	276.36	7.81%	Maharashtra	404.69	11.44%
3.	NVVN (SNA) - NEA	239.12	6.76%	Uttar Pradesh	315.40	8.91%
4.	Karnataka	216.26	6.11%	Andhra Pradesh	290.51	8.21%
5.	Madhya Pradesh	211.87	5.99%	West Bengal	243.92	6.89%
6.	Uttar Pradesh	181.88	5.14%	Telangana	241.92	6.84%
7.	Himachal Pradesh	175.60	4.96%	Tamilnadu	217.08	6.13%
8.	Kameng HEP	147.48	4.17%	Haryana	215.14	6.08%
9.	Rajasthan	136.54	3.86%	Orissa	188.76	5.33%
10.	Sembcorp Gayatri	125.72	3.55%	Assam	172.17	4.87%
11.	Bihar	122.68	3.47%	ArcelorMittal Nippon	153.33	4.33%
12.	Delhi	104.31	2.95%	Daman & Diu - Dadra	123.02	3.48%
13.	Teesta -3	102.67	2.90%	Madhya Pradesh	112.99	3.19%
14.	JITPL	102.60	2.90%	Rajasthan	73.79	2.09%
15.	Punjab	79.54	2.25%	Punjab	65.42	1.85%
16.	Raipur Energen	75.49	2.13%	Jharkhand	55.34	1.56%
17.	Jaypee Nigrie	68.72	1.94%	Chhattisgarh	50.54	1.43%
18.	DB Power	64.53	1.82%	Delhi	42.89	1.21%
19.	Tamilnadu	55.32	1.56%	Karnataka	40.20	1.14%
20.	Jindal Power Ltd. Stg-II	44.68	1.26%	Railways	33.94	0.96%
21.	Uttarakhand	39.17	1.11%	Bihar	17.87	0.51%
22.	AD Hydro	38.09	1.08%	DVC	14.34	0.41%
23.	Andhra Pradesh	36.19	1.02%	NEA-NR	10.57	0.30%
24.	MB Power	36.01	1.02%	Goa WR	8.68	0.25%
25.	Sainj HEP	35.76	1.01%	Kerala	8.51	0.24%
26.	Jindal Power	33.60	0.95%	Uttarakhand	6.47	0.18%
27.	J&K	29.56	0.84%	Meghalaya	6.45	0.18%
28.	Mizoram	28.52	0.81%	BALCO 2	6.24	0.18%
29.	Sembcorp Energy India Ltd.	27.59	0.78%	Tripura	4.75	0.13%
30.	West Bengal	25.07	0.71%	Goa SR	2.94	0.08%
31.	Karcham Wangtoo	23.49	0.66%	Chandigarh	0.81	0.02%
32.	Jharkhand	23.41	0.66%	Manipur	0.63	0.02%
33.	Orissa	23.33	0.66%	Himachal Pradesh	0.46	0.01%
34.	Goa WR	22.89	0.65%			
35.	Chhattisgarh	22.76	0.64%			
36.	Essar Power MP Ltd	21.93	0.62%			
37.	Chandigarh	21.35	0.60%			
38.	Haryana	14.29	0.40%			
39.	Adhunik Power	14.22	0.40%			
40.	SKS Power	13.15	0.37%			
41.	Maharashtra	13.03	0.37%			
42.	Coastal Guirat Power Limited	12.68	0.36%			
43.	Arunachal Pradesh	12.44	0.35%			
44.	Assam	11.71	0.33%			

45.	Chuzachen	11.22	0.32%			
46.	Palatana	11.15	0.32%			
47.	Sikkim	10.81	0.31%			
48.	Adani Green Energy Nineteen	9.90	0.28%			
49.	RKM Power	8.09	0.23%			
50.	NLC TPS-II	6.77	0.19%			
51.	Lanco Budhil	6.52	0.18%			
52.	Renew Surya Ravi Private	6.36	0.18%			
53.	Gujarat	5.49	0.16%			
54.	Singoli Bhagwati	4.92	0.14%			
55.	IGSTPS JHAJJAR	4.04	0.11%			
56.	Nagaland	3.48	0.10%			
57.	Dikchu	3.39	0.10%			
58.	GMR Warora	3.02	0.09%			
59.	Shree Cement	2.97	0.08%			
60.	GMR Kamalanga	2.92	0.08%			
61.	Adani Power STG3	2.77	0.08%			
62.	NLC TPS-II Stg-2	2.19	0.06%			
63.	Tashiding HEP	1.97	0.06%			
64.	Jorethang	1.80	0.05%			
65.	DVC	1.49	0.04%			
66.	IL&FS	1.24	0.04%			
67.	Bongaigaon	0.66	0.02%			
68.	Meghalaya	0.64	0.02%			
69.	Raigarh Energy Ltd.	0.57	0.02%			
70.	Ramagundam Stg-3	0.32	0.01%			
71.	Adani Wind Energy Kutchh	0.29	0.01%			
72.	NLC TPS-II Expn	0.22	0.01%			
73.	Sorang HEP, (Himachal	0.21	0.01%			
74.	Ramagundam Stg-1	0.13	0.00%			
75.	Dhariwal	0.10	0.00%			
76.	Ostro Energy Private Limited	0.08	0.00%			
77.	Adani Hybrid Energy	0.05	0.00%			
78.	Adani Hybrid Energy	0.02	0.00%			
79.	Adani Hybrid Energy	0.01	0.00%			
Total Volume of top 10		2,022.23	57.14%	Total Volume of top 10	2698.65	76.26%
Total Volume in PXs		3,538.82		Total Volume in PXs	3,538.82	

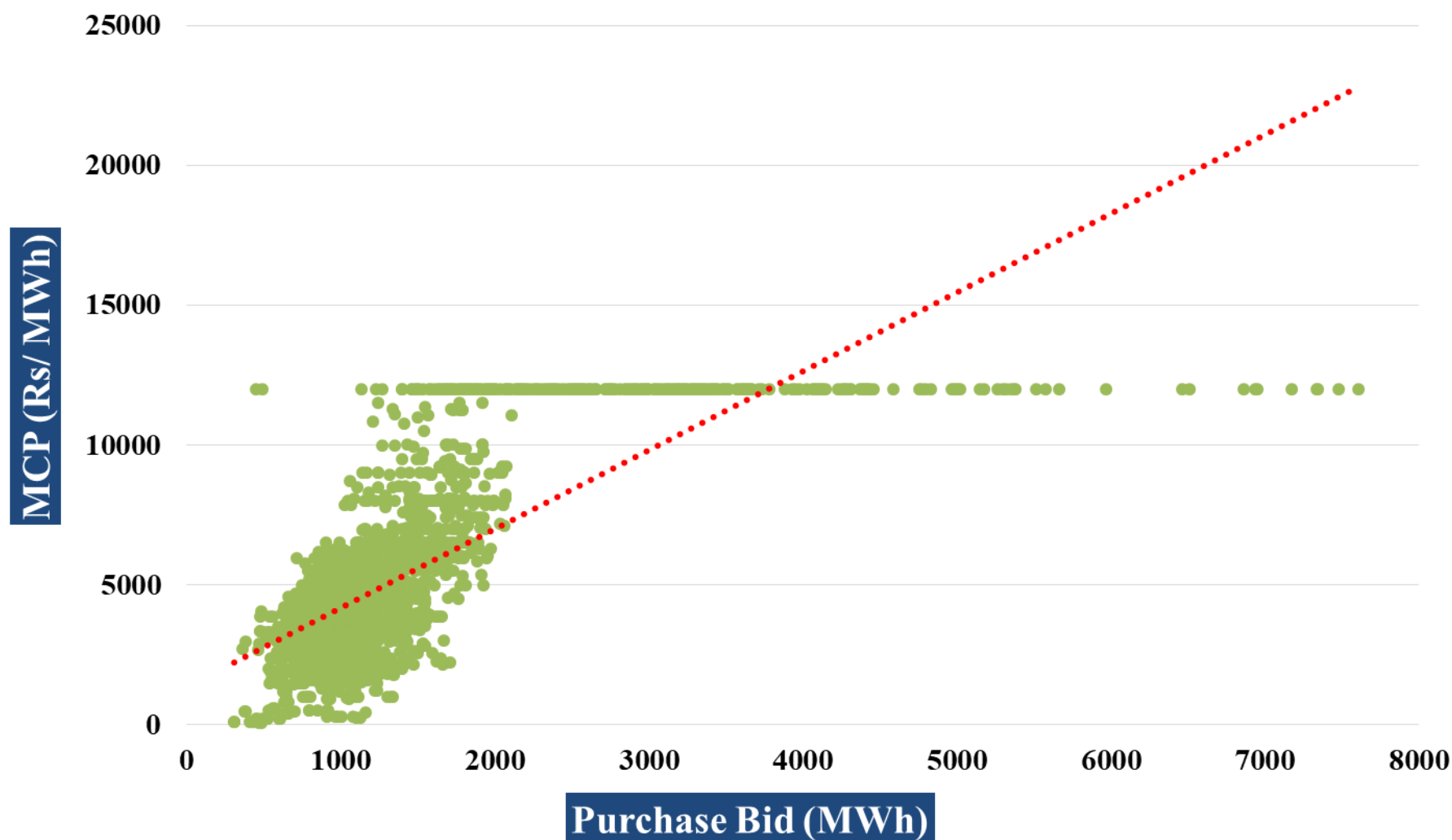
Annexure-VIII**Evening, Day, Night, Morning, Maximum, Minimum, Average MCP (Rs/kWh) and Final Scheduled Volume (MU) in RTM**

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	Average MCP	Final Scheduled Volume (MU)
01-08-2022	3.65	3.22	5.56	3.11	6.00	1.96	3.68	66.75
02-08-2022	4.68	4.06	9.77	5.23	10.13	1.00	4.24	65.87
03-08-2022	5.54	5.03	9.99	7.30	6.17	1.49	3.64	59.81
04-08-2022	5.44	4.60	9.65	5.74	12.00	2.25	5.60	61.00
05-08-2022	5.07	3.92	6.01	4.24	12.00	2.21	6.65	83.19
06-08-2022	3.86	2.72	7.67	4.20	12.00	2.15	6.63	61.79
07-08-2022	3.70	1.20	3.66	4.74	12.00	2.47	6.78	77.10
08-08-2022	3.82	2.50	5.36	3.41	8.99	3.00	5.32	84.61
09-08-2022	2.94	2.01	5.82	3.87	6.50	1.49	3.55	66.07
10-08-2022	3.47	2.19	4.82	3.85	6.27	0.55	2.97	65.37
11-08-2022	2.98	1.22	3.38	3.09	12.00	1.66	4.20	62.71
12-08-2022	3.30	3.31	5.96	3.08	7.00	1.62	3.72	66.92
13-08-2022	3.43	2.69	6.53	4.25	9.85	1.50	4.11	68.58
14-08-2022	2.87	2.12	3.70	3.28	8.00	1.83	3.76	68.06
15-08-2022	2.81	0.50	4.66	2.94	12.00	1.83	4.15	65.30
16-08-2022	3.17	2.33	7.96	3.34	12.00	2.06	4.72	57.32
17-08-2022	4.25	3.25	7.06	3.69	8.01	1.68	3.91	59.78
18-08-2022	4.35	4.36	9.85	4.28	12.00	2.30	5.75	61.84
19-08-2022	5.03	3.82	4.32	7.39	12.00	2.00	6.47	71.85
20-08-2022	3.69	3.26	4.70	4.12	12.00	2.13	5.85	89.17
21-08-2022	3.27	2.33	3.38	4.03	5.50	1.96	2.71	78.28
22-08-2022	3.11	3.20	5.23	3.70	8.50	2.80	4.24	65.27
23-08-2022	3.94	2.91	5.89	4.51	5.50	1.61	3.49	53.64
24-08-2022	5.08	4.52	8.58	4.53	5.50	1.50	3.20	54.12
25-08-2022	4.80	4.29	10.59	5.65	12.00	1.80	4.11	64.98
26-08-2022	7.70	5.91	11.10	7.77	12.00	2.50	5.54	85.29
27-08-2022	7.79	4.55	10.41	8.54	12.00	2.90	6.19	75.41
28-08-2022	4.13	3.56	7.60	6.55	12.00	3.19	6.24	64.26
29-08-2022	5.97	5.92	11.22	5.88	12.00	2.37	6.69	82.83
30-08-2022	5.70	5.39	11.29	7.49	7.40	2.16	4.32	61.35
31-08-2022	8.13	5.58	11.38	9.27	5.80	1.40	3.09	82.45
Maximum	8.13	5.92	11.38	9.27	12.00	3.19	6.78	89.17
Minimum	2.81	0.50	3.38	2.94	5.50	0.55	2.71	53.64
Average	4.44	3.43	7.20	4.94	9.52	1.98	4.69	68.74

MCP: Market Clearing Price (Rs/kWh)

FSV: Final Scheduled Volume (MU)

Comparison of MCP w.r.t. Purchase Bid for 2,976 Time Blocks during the month of August, 2022 in RTM



Time Blocks during the Month [96 time blocks in a day x 31 days = 2,976]

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

Date	Max. FSV (MU)		Max. MCP (Rs/kWh)		Min FSV (MU)		Min. MCP (Rs/kWh)	
	Time Block	Value	Time Block	Value	Time Block	Value	Time Block	Value
01-08-2022	21:15 - 21:30	0.89	20:45 - 21:00	7.00	00:00 - 00:15	0.44	03:30 - 03:45	1.62
02-08-2022	23:45 - 24:00	1.04	19:00 - 19:15	12.00	05:45 - 06:00	0.31	12:00 - 12:15	3.00
03-08-2022	23:45 - 24:00	1.09	00:00 - 00:15	12.00	06:45 - 07:00	0.43	13:30 - 13:45	4.35
04-08-2022	22:00 - 22:15	1.31	19:00 - 19:15	12.00	09:15 - 09:30	0.21	13:15 - 13:30	3.45
05-08-2022	21:30 - 21:45	1.10	20:45 - 21:00	8.00	08:15 - 08:30	0.33	15:00 - 15:15	3.01
06-08-2022	22:45 - 23:00	0.93	21:00 - 21:15	12.00	18:45 - 19:00	0.36	13:00 - 13:15	1.83
07-08-2022	15:45 - 16:00	1.33	06:15 - 06:30	6.03	06:45 - 07:00	0.47	13:30 - 13:45	0.30
08-08-2022	15:00 - 15:15	0.94	19:15 - 19:30	9.00	07:30 - 07:45	0.25	13:00 - 13:15	1.40
09-08-2022	22:30 - 22:45	1.43	20:45 - 21:00	8.52	08:45 - 09:00	0.52	13:30 - 13:45	0.48
10-08-2022	14:30 - 14:45	1.34	19:00 - 19:15	8.00	01:00 - 01:15	0.67	13:00 - 13:15	1.20
11-08-2022	15:00 - 15:15	1.22	21:00 - 21:15	4.50	21:00 - 21:15	0.44	12:15 - 12:30	0.25
12-08-2022	14:15 - 14:30	1.05	21:15 - 21:30	10.00	02:00 - 02:15	0.48	01:15 - 01:30	1.00
13-08-2022	23:15 - 23:30	1.27	21:15 - 21:30	9.87	09:45 - 10:00	0.66	13:00 - 13:15	1.59
14-08-2022	14:00 - 14:15	1.09	19:30 - 19:45	5.50	01:45 - 02:00	0.39	12:00 - 12:15	1.30
15-08-2022	23:45 - 24:00	1.26	22:30 - 22:45	6.51	12:15 - 12:30	0.31	15:00 - 15:15	0.08
16-08-2022	16:30 - 16:45	1.67	19:00 - 19:15	12.00	20:30 - 20:45	0.66	13:45 - 14:00	1.24
17-08-2022	16:30 - 16:45	1.22	19:00 - 19:15	12.00	09:30 - 09:45	0.66	14:00 - 14:15	1.79
18-08-2022	21:30 - 21:45	1.19	19:00 - 19:15	12.00	16:45 - 17:00	0.46	03:30 - 03:45	2.09
19-08-2022	21:15 - 21:30	0.81	00:00 - 00:15	12.00	03:45 - 04:00	0.21	18:00 - 18:15	1.01
20-08-2022	13:30 - 13:45	0.98	19:30 - 19:45	6.25	19:15 - 19:30	0.48	13:00 - 13:15	1.50
21-08-2022	12:00 - 12:15	1.13	05:45 - 06:00	6.17	01:00 - 01:15	0.18	15:00 - 15:15	1.58
22-08-2022	23:45 - 24:00	1.45	19:30 - 19:45	6.10	02:15 - 02:30	0.61	13:00 - 13:15	1.63
23-08-2022	12:45 - 13:00	1.13	19:30 - 19:45	9.00	20:45 - 21:00	0.34	13:00 - 13:15	1.45
24-08-2022	23:45 - 24:00	1.10	19:15 - 19:30	12.00	03:30 - 03:45	0.37	03:45 - 04:00	3.00
25-08-2022	23:45 - 24:00	0.96	18:30 - 18:45	12.00	19:00 - 19:15	0.26	13:00 - 13:15	2.10
26-08-2022	16:00 - 16:15	1.09	00:00 - 00:15	12.00	19:30 - 19:45	0.16	13:00 - 13:15	3.04
27-08-2022	23:15 - 23:30	1.14	00:00 - 00:15	12.00	07:45 - 08:00	0.57	13:00 - 13:15	2.96
28-08-2022	06:15 - 06:30	1.07	03:00 - 03:15	12.00	03:00 - 03:15	0.37	13:45 - 14:00	2.46
29-08-2022	23:45 - 24:00	1.38	18:15 - 18:30	12.00	19:30 - 19:45	0.26	13:00 - 13:15	2.90
30-08-2022	17:15 - 17:30	1.14	18:15 - 18:30	12.00	19:15 - 19:30	0.24	13:00 - 13:15	2.18
31-08-2022	23:45 - 24:00	1.21	00:00 - 00:15	12.00	06:30 - 06:45	0.48	13:00 - 13:15	3.79

MCP: Market Clearing Price (Rs/kWh)

FSV: Final Scheduled Volume (MU)

Annexure-XI**Sellers and Buyers in Real Time Market (RTM) in the month of August, 2022**

S. No.	Entity Name	Sell		Entity Name	Purchase	
		(MU)	Percent (%)		(MU)	Percent (%)
1.	Madhya Pradesh	477.90	21.10%	Maharashtra	317.49	14.01%
2.	Kerala	156.48	6.91%	Telangana	241.03	10.64%
3.	Rajasthan	154.82	6.83%	Uttar Pradesh	207.64	9.17%
4.	Karnataka	144.09	6.36%	West Bengal	202.53	8.94%
5.	Bihar	135.01	5.96%	Punjab	181.37	8.01%
6.	Andhra Pradesh	102.21	4.51%	Rajasthan	169.90	7.50%
7.	Kameng HEP	96.22	4.25%	Orissa	132.17	5.83%
8.	J&K	93.62	4.13%	Haryana	130.27	5.75%
9.	Telangana	91.49	4.04%	Gujarat	96.43	4.26%
10.	Delhi	75.20	3.32%	Tamilnadu	93.56	4.13%
11.	Tamilnadu	74.14	3.27%	Andhra Pradesh	78.73	3.48%
12.	Orissa	71.92	3.17%	Delhi	65.77	2.90%
13.	West Bengal	66.33	2.93%	BALCO 2	41.35	1.83%
14.	Himachal Pradesh	58.06	2.56%	Daman & Diu - Dadra	39.89	1.76%
15.	Uttar Pradesh	50.05	2.21%	Assam	36.84	1.63%
16.	Assam	49.40	2.18%	ArcelorMittal Nippon	36.66	1.62%
17.	Punjab	40.33	1.78%	Bihar	34.00	1.50%
18.	Chhattisgarh	28.71	1.27%	Chhattisgarh	31.50	1.39%
19.	Jharkhand	26.80	1.18%	DVC	30.73	1.36%
20.	Sasan UMPP	23.72	1.05%	Himachal Pradesh	18.80	0.83%
21.	Jindal Power Ltd. Stg-	15.67	0.69%	Meghalaya	18.33	0.81%
22.	Palatana	15.35	0.68%	Madhya Pradesh	16.64	0.73%
23.	Neyveli New Thermal	13.31	0.59%	Karnataka	11.29	0.50%
24.	Sembcorp Gayatri	12.57	0.56%	Kerala	5.47	0.24%
25.	Raipur Energen	12.18	0.54%	Uttarakhand	5.22	0.23%
26.	DB Power	11.14	0.49%	Manipur	4.69	0.21%
27.	Tripura	10.00	0.44%	Jharkhand	4.40	0.19%
28.	RKM Power	9.61	0.42%	Tripura	3.86	0.17%
29.	NLC	9.04	0.40%	Goa WR	2.21	0.10%
30.	MB Power	8.34	0.37%	Railways	2.14	0.09%
31.	Haryana	8.29	0.37%	Goa SR	1.23	0.05%
32.	Maharashtra	8.23	0.36%	Sainj HEP	1.03	0.05%
33.	JITPL	6.97	0.31%	Karcham Wangtoo	0.84	0.04%
34.	NLC TPS-II Stg-2	6.90	0.30%	Arunachal Pradesh	0.76	0.03%
35.	Coastal Gujrat Power	6.55	0.29%	Sikkim	0.30	0.01%
36.	Manipur	6.26	0.28%	SKS Power	0.12	0.01%
37.	Gujarat	5.94	0.26%	Chandigarh	0.12	0.01%
38.	Sorang HEP,	5.93	0.26%	Singoli Bhagwati	0.08	0.00%
39.	Sikkim	5.70	0.25%	Lanco Budhil	0.02	0.00%
40.	Karcham Wangtoo	5.52	0.24%			
41.	Essar Power MP Ltd	5.27	0.23%			

42.	TRN Energy	5.23	0.23%			
43.	Sembcorp Energy India	4.90	0.22%			
44.	Arunachal Pradesh	4.17	0.18%			
45.	Chandigarh	4.10	0.18%			
46.	Teesta -3	3.86	0.17%			
47.	Adhunik Power	3.79	0.17%			
48.	Jindal Power	3.63	0.16%			
49.	AD Hydro	3.55	0.16%			
50.	SKS Power	3.50	0.15%			
51.	NLC TPS-II Expn	2.84	0.13%			
52.	Singoli Bhagwati	2.01	0.09%			
53.	Adani Power STG3	1.92	0.08%			
54.	DVC	1.74	0.08%			
55.	Uttarakhand	1.65	0.07%			
56.	NLC TPS-II	1.54	0.07%			
57.	GMR Kamalanga	1.43	0.06%			
58.	Nagaland	1.41	0.06%			
59.	Dikchu	1.09	0.05%			
60.	Shree Cement	1.04	0.05%			
61.	Meghalaya	1.03	0.05%			
62.	Goa WR	0.92	0.04%			
63.	Daman & Diu - Dadra	0.82	0.04%			
64.	AGBPP	0.71	0.03%			
65.	Ostro Energy Private	0.62	0.03%			
66.	IL&FS	0.46	0.02%			
67.	AGTPP	0.41	0.02%			
68.	Tashiding HEP	0.33	0.01%			
69.	Jorethang	0.30	0.01%			
70.	GMR Warora	0.26	0.01%			
71.	Raigarh Energy Ltd.	0.26	0.01%			
72.	Renew Surya Ravi	0.22	0.01%			
73.	Adani Wind Energy	0.19	0.01%			
74.	Jhabua Power	0.15	0.01%			
75.	Chuzachen	0.06	0.00%			
76.	Sainj HEP	0.03	0.00%			
77.	Lanco Budhil	0.01	0.00%			
Total Volume of top 10		1,527.05	67.41%	Total Volume of top 10	1,772.38	78.24%
Total Volume in PXs		2,265.41		Total Volume in PXs	2,265.41	

Annexure-XII**Cross Border Electricity Transactions in Day Ahead Market (DAM) in IEX with Nepal and Bhutan during the month of August, 2022**

S. No	Delivery Date	Buy Volume By Nepal (MU)	Sell Volume by Nepal (MU)
1	01-08-2022	0.00	8.73
2	02-08-2022	0.00	8.73
3	03-08-2022	0.00	8.73
4	04-08-2022	0.00	7.98
5	05-08-2022	0.00	7.68
6	06-08-2022	0.00	8.73
7	07-08-2022	0.35	7.68
8	08-08-2022	0.37	7.39
9	09-08-2022	0.41	7.34
10	10-08-2022	0.35	7.81
11	11-08-2022	0.44	7.02
12	12-08-2022	0.37	8.38
13	13-08-2022	0.38	8.38
14	14-08-2022	0.68	7.37
15	15-08-2022	0.46	7.81
16	16-08-2022	0.31	8.26
17	17-08-2022	0.57	7.24
18	18-08-2022	0.62	6.76
19	19-08-2022	0.71	6.76
20	20-08-2022	0.65	6.76
21	21-08-2022	0.75	6.76
22	22-08-2022	0.52	7.52
23	23-08-2022	0.57	7.52
24	24-08-2022	0.57	7.22
25	25-08-2022	0.53	7.16
26	26-08-2022	0.43	7.20
27	27-08-2022	0.26	8.37
28	28-08-2022	0.30	7.90
29	29-08-2022	0.00	8.36
30	30-08-2022	0.00	7.06
31	31-08-2022	0.00	8.50
Total		10.57	239.12
Grand Total		249.69	

-: No transaction happened.

Note: Cross Border Transactions of Electricity of 249.69 MU with Nepal happened during August, 2022 in IEX, which is included in DAM Volume of August, 2022 in IEX.

Appendix-I**Analysis for change in trend of Final Scheduled Volume in DAM on 2nd Monday, 3rd Sunday of August, 2022 (i.e. 8th August, 2022 & 21st August, 2022)**

Final Scheduled Volume (MU) and the Daily MCP (Rs/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, 2022, it is observed that on second Monday (8th August, 2022), FSV showed decreasing trend in comparison to First Sunday (7th August, 2022), on third Sunday (21st August, 2022), FSV showed increasing trend in comparison to third Saturday (20th August, 2022).

- (i) On Second Monday (8th August, 2022), although there was increase in purchase on power exchange by some of the States in comparison to First Sunday (7th August, 2022) by **19.70 MU** [i.e. Gujarat(6.72 MU), ArcelorMittal Nippon steel (ESIL) (3.79 MU), West Bengal(2.21 MU), Rajasthan(2.03 MU) and Assam(1.30 MU), etc.], there was also decrease in purchase on power exchange by some of the States by **24.70 MU** [i.e. Uttar Pradesh(7.39 MU), Chhattisgarh(3.11 MU), Maharashtra(2.65 MU), Telangana(2.38 MU) and Daman & Diu - Dadra & Nagar Haveli(2.26 MU), etc.]. This resulted in an overall decrease in FSV by **05.00 MU** on Monday (8th August, 2022) as compared to Sunday (7th August, 2022).
- (ii) On third Sunday (21st August, 2022), although there was decrease in purchase on power exchange by some of the States in comparison to third Saturday (20th August, 2022) by **16.71 MU** [i.e. Punjab(4.86 MU), West Bengal(4.16 MU), Orissa(1.97 MU), Uttar Pradesh(1.22 MU), and DVC(1.06 MU),, etc.], there was also increase in purchase on power exchange by some of the States by **20.56 MU** [i.e. Telangana(5.94 MU),Tamilnadu(4.84 MU),Gujarat(2.84 MU),Daman & Diu - Dadra & Nagar Haveli(2.83MU),Maharashtra(1.96 MU) ,etc.]. This resulted in an overall increase in FSV by **3.85 MU** on Sunday (21st August, 2022) as compared to Saturday (20th August, 2022).

Appendix-II**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.
13 Bid area 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. **Average MCP** is the average of daily 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 MCP** is the average of MCP of all 96 Time Blocks of the day during which transaction happened.
5. **Day-Ahead Market (DAM)** on the power exchanges are market for electricity where market participants purchase and sell electricity at financially binding day-ahead prices for the following day.
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 through Intra-Day Contracts, Day ahead contingency Contracts, Daily Contracts and Weekly Contracts for both solar and non-Solar Renewable Energy (RE) generation. GTAM is a market-based mechanism, where RE surplus and RE deficit States can trade RE Power and balance their RPO targets.
10. **Green Day Ahead Market (GDAM)** is based on the principles of current Term Ahead Market (TAM), where market participants purchase and sell electricity generated from renewable sources at financially binding day-ahead prices for the following day.
11. **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.

- 12. Real Time Market (RTM)** on the power exchanges is the market for electricity where market participants buy/ sell electricity on a half-hourly market and would commence with the end of the right to revision of schedule or declared capability and would end with gate closure. The auction sessions would be conducted every half an hour for the delivery of power for the duration of 30 minutes in two time blocks of 15 minutes each to commence from one hour after the closure of the RTM trading session.
- 13. Term Ahead Market (TAM)** on the power exchanges is the market for electricity where market participants buy/sell electricity on a term basis ranging from 3 hours before actual despatch (i.e. intra-day) and up to 11 days in advance. There are 4 types of contracts in TAM, namely; Intra-day, Day Ahead Contingency, Daily and Weekly