

Monitoring report of voluntary efforts and competitive status

April to June 2025 period

(Tentative translation)

Wednesday, September 24, 2025



電力・ガス取引監視等委員会
Electricity and Gas Market Surveillance Commission

Overview of market trends in the April to June 2025 period (1/2)

1. In this period, the wholesale electricity market price continued to show higher prices in the east and lower prices in the west, as in the previous period. The average area prices were as follows: eastern area was 10.59 yen/kWh in April, 9.83 yen/kWh in May, and 11.13 yen/kWh in June; western area was 9.25 yen/kWh in April, 7.83 yen/kWh in May, and 10.06 yen/kWh in June.
2. Among these, the Tokyo area maintained the highest market prices throughout the period, with the average price in June reaching approximately 13 yen/kWh.
 - In April, the market splitting rate between areas in the eastern area, as well as for Tokyo-Chubu, was lower compared to May and June, resulting in the smallest price gap among the areas. In the western area, prices from the Chubu to Chugoku areas were almost in the same range (around 9 yen/kWh). However, because the market splitting rate for Chugoku–Shikoku and Chugoku–Kyushu increased slightly, price differences from the Shikoku and Kyushu areas emerged.
 - In May, although market prices in each area were at their lowest levels, the market splitting rate for Tokyo-Chubu increased, resulting in the largest price gap between the two. Meanwhile, from the Hokuriku to Kyushu areas, the market splitting rate decreased, leading to nearly the same price range (around 7 yen/kWh).
 - In June, temperatures rose to near heatwave levels in the latter half of the month, causing several spikes in area prices exceeding 30 yen/kWh (a total of four days), which led to an overall increase in market prices. In particular, the Chubu, Hokuriku, Kansai, and Kyushu areas saw price increases of around 2 to 3 yen compared with May.
 - See pp. 12-13 for changes in day-ahead market prices and pp. 24-25 for trends of day-ahead market prices (east-west comparison and comparison among areas).
3. In this period, the contracted volume in the day-ahead market was 64.0 billion kWh, 1.1 times that of the same period last year, and the contracted volume in the intraday market was 1.66 billion kWh, 0.9 times that of the same period last year. The day-ahead market remained in a net buying condition, with the contracted volume staying at roughly the same level from April through May. However, in June, the contracted selling volume from general electric utilities was 1.2 to 1.3 times higher than in April and May, while the contracted buying volume from new power suppliers and other operators increased by about 1.1 times compared with those months. This was likely due to temperatures rising to near heatwave levels in mid-June, which led to increased demand and a shift in the bid ratio by price range (higher bid prices compared with April and May), resulting in greater contracted volumes.
 - See pp. 6-11 for trends in the bidding volume and contracted volume in the day-ahead market and pp. 18-20 for trends in the contracted volume in the intraday market.

Overview of market trends in the April to June 2025 period (2/2)

3. Looking at the market splitting status, **average splitting rates during this period increased for 7 out of 10 interconnection lines compared to the same period last year.** In particular, in the eastern area, the three-month average splitting rates for Tokyo–Chubu (FC), Hokkaido–Tohoku, and Tohoku–Tokyo tended to be relatively high, at approximately 60%, 30%, and 30%, respectively. Among these, Tokyo–Chubu (FC) showed a splitting rate exceeding 50% in every month, and Hokkaido–Tohoku also exceeded 50% in June. Both are presumed to have been affected by reduced service capacity due to interconnection line work. In addition, Tohoku–Tokyo is presumed to have experienced an increase in the splitting rate to the 30% level due to changes made after April to the “service capacity limit factors” (such as thermal capacity and synchronous stability), which resulted in a reduction in service capacity. Chugoku–Shikoku and Kansai–Shikoku had maintained splitting rates of around 40–60% since last November, but in this period, the rates have declined to the 10% level. The likely factor is a decrease in low-priced selling volumes in the Shikoku area, which reduced the power flow from Shikoku to other regions and consequently lowered the splitting rate.*

* Transition of selling volumes below 15 yen in the Shikoku area (GWh):

2,413 in January, 2,073 in February, 1,689 in March, 1,492 in April, 1,527 in May, and 1,227 in June

Transition of selling volumes below 10 yen (GWh):

2,252 in January, 1,920 in February, 1,561 in March, 1,416 in April, 1,454 in May, and 1,151 in June

- See pp. 16-17 for changes in the market splitting status and scheduled power flow.

4. **The contracted volume in the futures market was 39.30 billion kWh, 4.5 times that of the same period last year.** At the European Energy Exchange (EEX), which accounts for most of the trading, the number of trading participants surpassed 100 companies in May of this year and continues to increase. According to market participants, with JERA's long-term PPA set to expire in March next year, hedging demand for FY2026 and FY2027 has grown, leading to active trading of seasonal contracts for those years. As a result, overall trading volumes are on an upward trend. *1: From 77 companies at the end of June 2024, to 105 at the end of June 2025

- See p. 23 for trends in the contracted volume in futures market transactions.

5. In the retail market, **the percentage of switching for low-voltage contracts from the regulated tariff menu of general electric utilities to voluntary rate menus and new entrants (based on the number of contracts) has, for the first time, exceeded 50% on a national average.**

- See p. 54 for trends in switching (low voltage).

【 Quarterly report 】

- **Wholesale electricity market**
 - JPEX market
 - Day-Ahead market
 - Intraday market
 - Forward transaction market
- **Voluntary efforts by general electric utilities, etc.**
 - Supply of surplus electricity to JEPX market
 - Trading status and sell bid withdrawal status in the intraday market
 - Status of block selling bidding
 - Supply of power source to the market for wholesale electricity utilities
 - Status of bidding, etc. for public hydroelectricity business
 - Status of OTC transactions

【Medium- to long-term trend report】

- **Wholesale electricity market**
 - JPEX market
 - Trends in contracted volume
 - Trends in contracted price
 - Trends in the market splitting occurrence rate
 - JEPX spot price and fuel cost
- **Retail market**
 - Trends in new entrants share by area
 - Market share by area
 - Trends in electricity unit price
 - Trends in switching
 - Average unit price of low-voltage rates
- **Gas market**
 - Status of OTC transactions of general gas utilities
 - Usage status of Start-up wholesale measure

Major indicators

- The major indicators for this period are as follows.

				April to June 2025	Same period last year (April to June 2024)	FY2024 (April 2024-March 2025)	FY2023 (April 2023-March 2024)
JEPX market	Percentage to electricity sales*3			36.4%	32.9%	33.5%	33.4%
	Day-Ahead market	Bidding	Sell volume compared to the same period last year	1.1×	1.1× (※1.2×)	1.1× (※1.1×)	1.0× (※1.1×)
			Buy volume compared to the same period last year	1.1×	1.1× (※1.2×)	1.1× (※1.1×)	0.9× (※1.0×)
		Contract	Contracted volume	64.0 billion kWh	57.2 billion kWh	265.7 billion kWh	261.5 billion kWh
			Contracted volume compared to the same period last year	1.1×	1.0× (※1.2×)	1.0× (※1.1×)	0.8× (※0.9×)
			Average contracted price (system price)	9.86yen/kWh	9.99yen/kWh	12.29yen/kWh	10.74yen/kWh
		Occurrence rate of market splitting between the east and west market			67.3%	42.8%	42.8%
	Intraday market	Contract	Contracted volume	1.66 billion kWh	1.95 billion kWh	7.39 billion kWh	6.17 billion kWh
			Average contracted price	10.63yen/kWh	10.47yen/kWh	13.03yen/kWh	11.70yen/kWh
	Forward market	Contract	Contracted volume	0kWh	0kWh	0kWh	0.003 billion kWh
Futures market*4			Contracted volume	39.3 billion kWh	13.04 billion kWh	94.66 billion kWh	30.47 billion kWh
OTC transactions			Supply to outside the group	15.14 billion kWh	13.35 billion kWh	66.13 billion kWh	38.62 billion kWh
Retail market (Reference)*1	Electricity sales			180.6 billion kWh※2	180.4 billion kWh※2	817.8 billion kWh	801.6 billion kWh
	New entrants	Electricity sales		37.2 billion kWh	32.1 billion kWh	159.9 billion kWh	133.8 billion kWh
		Electricity sales compared to the same period last year		1.2×	1.2×	1.2×	0.9×
		Share of new entrants		21.3%(as of June)	18.1%(as of June)	-	-

※1Source: Electricity Trading Report

※2 To avoid placing an excessive burden on businesses for tabulating data, the Electricity Trading Report allows businesses to report their electricity sales volume and sales amount recorded from the meter reading date of N – 1 month to the day before the meter reading date of N month as the data for N month. Since most companies report their results up to the meter reading date like this, these figures do not exactly match the actual results for the demand in N month.

※3 The percentage of electricity sales indicates the average value for the relevant period.

※4 Data added from the October-December 2023 reporting period. (Based on data published on the JPY and EEX websites)

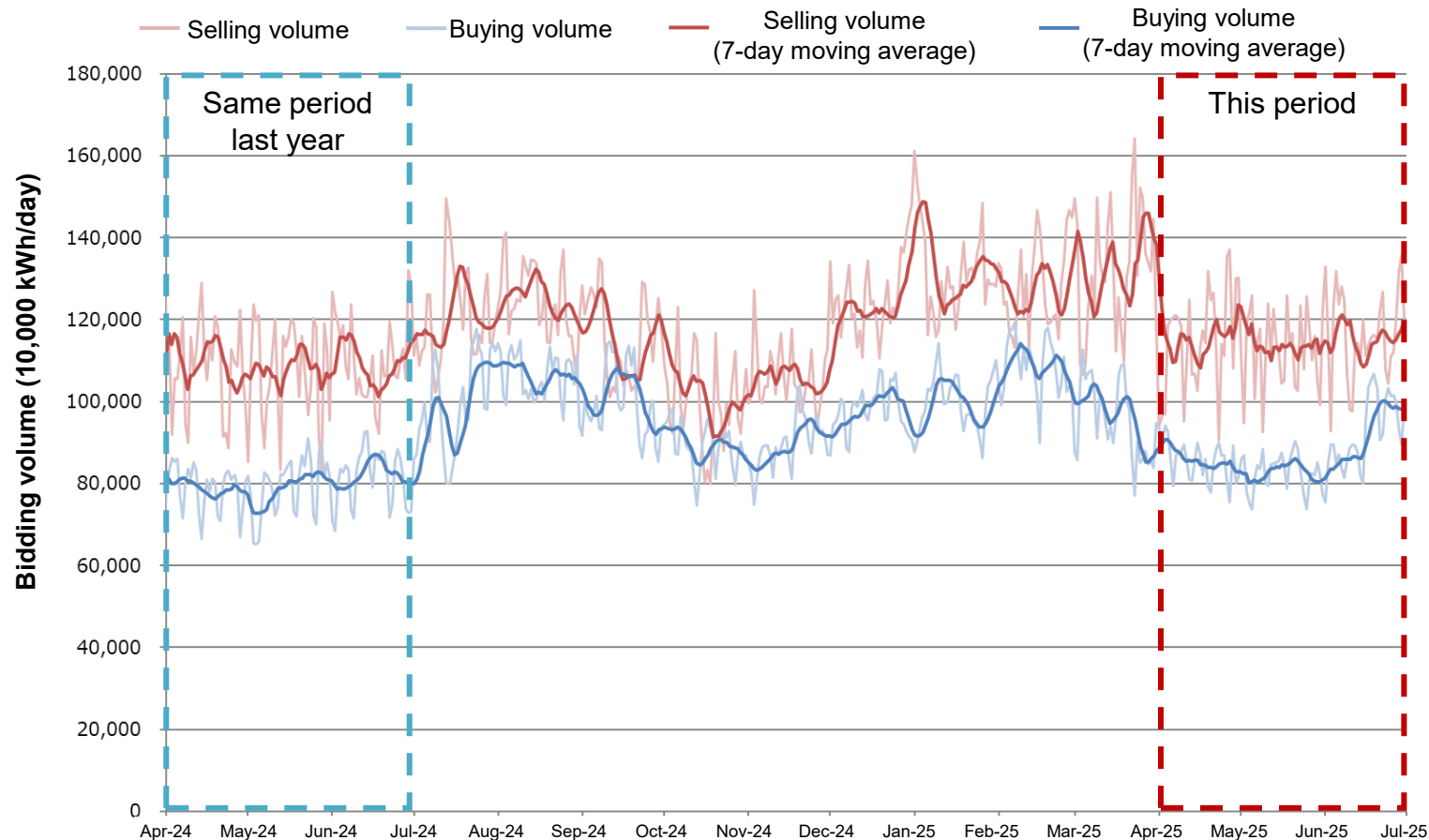
※5 The comparison is based on the volume obtained by deducting the gross bidding volume for internal demand from the bidding volume of general electric utilities in the same period last year. Gross bidding volumes are calculated from the questionnaire results on higher buy-back prices in gross bidding reported by general electric utilities.

(Where general electric utilities refer to Hokkaido Electric Power, Tohoku Electric Power, TEPCO Energy Partner, Chubu Electric Power, Hokuriku Electric Power, Kansai Electric Power, Chugoku Electric Power, Shikoku Electric Power, and Kyushu Electric Power.)

Bidding volume in the day-ahead market

- For this period, the bidding volume in the day-ahead market was 104.4 billion kWh for selling and 79.0 billion kWh for buying.
- In year-on-year comparison, the selling volume was 1.1 times that of the same period last year, and the buying volume was 1.1 times.

Day-Ahead market: Trends in bidding volume (April 1, 2024 to June 30, 2025)



Main data

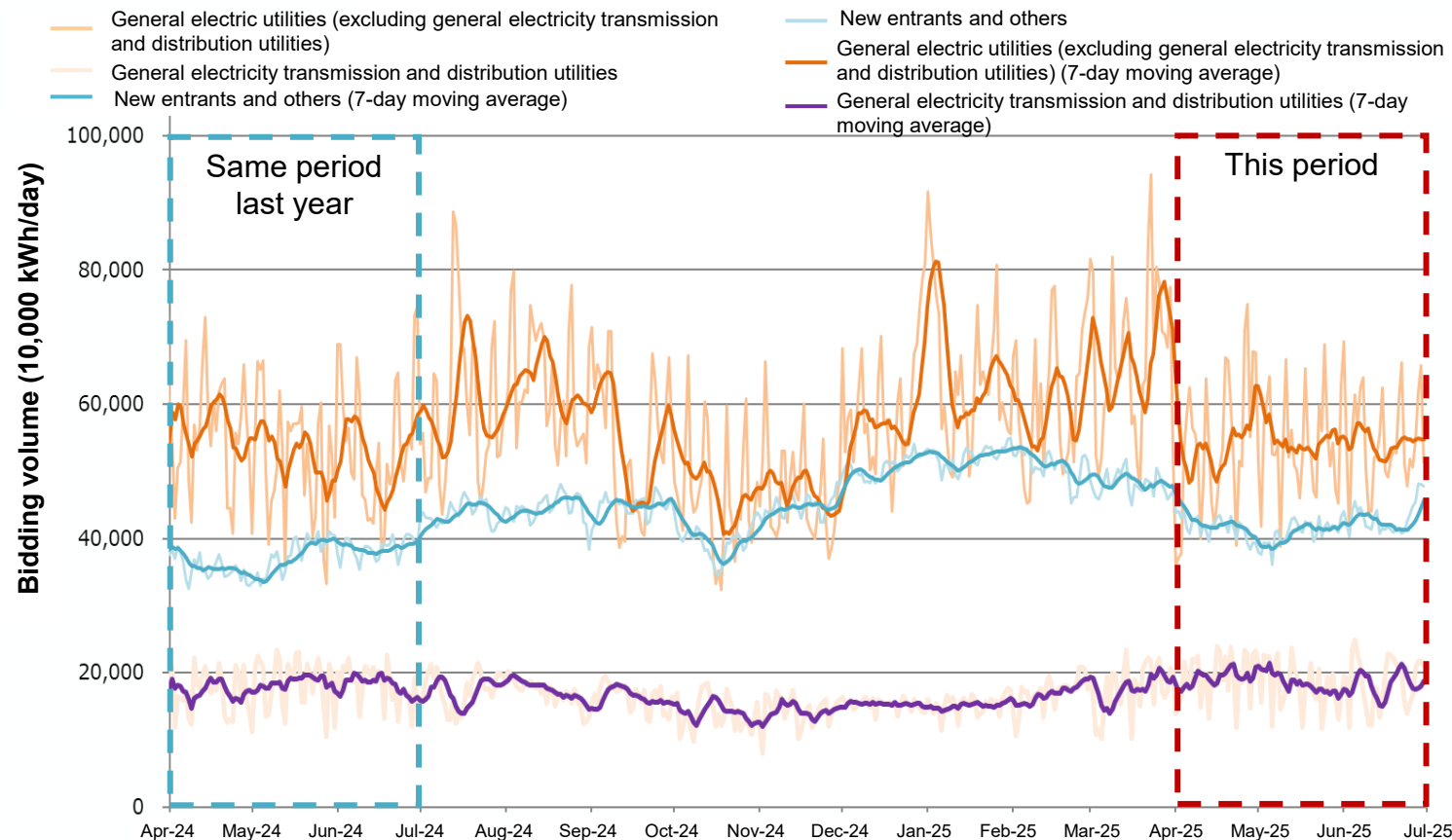
Selling volume (April to June 2025)
104.4 billion kWh
Comparison with the selling volume for the same period last year (vs. April to June 2024)
1.1 x
Buying volume (April to June 2025)
79.0 billion kWh
Comparison with the buying volume for the same period last year (vs. April to June 2024)
1.1 x

* Although gross bidding by general electric utilities has been suspended since October 1, 2023, its abolition was decided at the 10th Specialized Meeting for Policy Design and Monitoring held on June 27, 2025.

Selling volume in the day-ahead market by business operator category

- The selling volume in the day-ahead market for this period was 49.3 billion kWh for general electric utilities (excluding general electricity transmission and distribution utilities), 38.1 billion kWh for new entrants and other business operators, and 17.0 billion kWh for general electricity transmission and distribution utilities.
- In year-on-year comparison, the volume was 1.0 times that of the same period last year for general electric utilities, 1.1 times for new entrants and other business operators, and 1.0 times for general electricity transmission and distribution utilities.

**Day-Ahead market: Trends in selling volume
(April 1, 2024 to June 30, 2025)**



Main data

Selling volume by general electric utilities (excluding general electricity transmission and distribution utilities) (April to June 2025)
49.3 billion kWh

Comparison with the selling volume by general electric utilities (excluding general electricity transmission and distribution utilities) for the same period last year (vs. April to June 2024)
1.0 x

Selling volume by new entrants and other business operators (April to June 2025)
38.1 billion kWh

Comparison with the selling volume by new entrants and other business operators for the same period last year (vs. April to June 2024)
1.1 x

Selling volume by general electricity transmission and distribution utilities (April to June 2025)
17.0 billion kWh

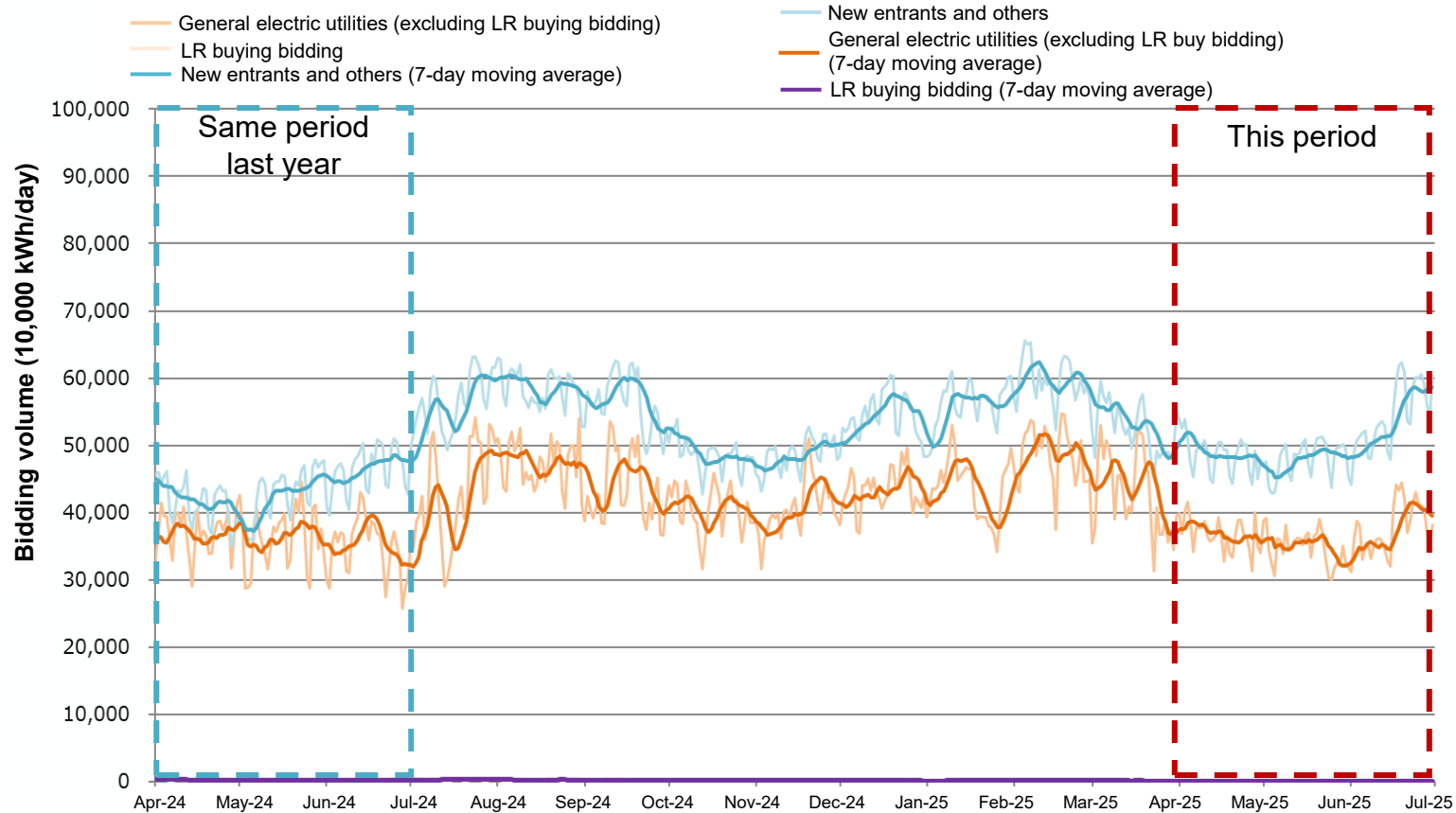
Comparison with the selling volume by general electricity transmission and distribution utilities for the same period last year (vs. April to June 2024)
1.0 x

* The FIT selling volume by general electricity transmission and distribution utilities has been excluded from the selling volume by general electric utilities, and a new line plotting the selling volume by general electricity transmission and distribution utilities has been added.
 * General electric utilities include Hokkaido Electric Power, Tohoku Electric Power, TEPCO Energy Partner, TEPCO Renewable Power, Chubu Electric Power Miraiz, Hokuriku Electric Power, Kansai Electric Power, Chugoku Electric Power, Shikoku Electric Power, Kyushu Electric Power, and JERA.
 * General electricity transmission and distribution utilities include Hokkaido Electric Power Network, Tohoku Electric Power Network, TEPCO Power Grid, Chubu Electric Power Grid, Hokuriku Electric Power Transmission and Distribution, Kansai Electric Power Transmission and Distribution, Chugoku Electric Power Network, Shikoku Electric Power Transmission and Distribution, and Kyushu Electric Power Transmission and Distribution.
 * Although gross bidding by general electric utilities has been suspended since October 1, 2023, its abolition was decided at the 10th System Design and Monitoring Expert Meeting held on June 27, 2025.

Buying volume in the day-ahead market by business operator category

- The buying volume in the day-ahead market for this period was 33.1 billion kWh for general electric utilities (excluding LR^{*1} buying bidding) and 45.8 billion kWh for new entrants and other business operators, and LR buying volume by general electricity transmission and distribution utilities was 0.1 billion kWh.
- In year-on-year comparison, the volume was 1.0 times that of the same period last year for general electric utilities (excluding LR buying bidding) and 1.2 times for new entrants and other business operators.

Day-Ahead market: Trends in buying volume
(April 1, 2024 to June 30, 2025)



Main data

Buying volume by general electric utilities
(excluding LR buying bidding)
(April to June 2025)

33.1 billion kWh

Comparison with the buying volume by general
electric utilities for the same period last year
(excluding LR buying bidding)
(vs. April to June 2024)

1.0 x

Buying volume by new entrants and other
business operators (April to June 2025)

45.8 billion kWh

Comparison with the buying volume by new
entrants and other business operators for the same
period last year
(vs. April to June 2024)

1.2 x

LR buying volume by general electricity
transmission and distribution utilities (April
to June 2025)

0.1 billion kWh

Comparison with the LR buying volume by general
electricity transmission and distribution utilities for
the same period last year
(vs. April to June 2024)

0.4 x

* General electric utilities include Hokkaido Electric Power, Tohoku Electric Power, TEPCO Energy Partner, TEPCO Renewable Power, Chubu Electric Power Miraiz, Hokuriku Electric Power, Kansai Electric Power, Chugoku Electric Power, Shikoku Electric Power, Kyushu Electric Power, JERA, and general electricity transmission and distribution utilities.

* General electricity transmission and distribution utilities include Hokkaido Electric Power Network, Tohoku Electric Power Network, TEPCO Power Grid, Chubu Electric Power Grid, Hokuriku Electric Power Transmission and Distribution, Kansai Electric Power Transmission and Distribution, Chugoku Electric Power Network, Shikoku Electric Power Transmission and Distribution, and Kyushu Electric Power Transmission and Distribution.

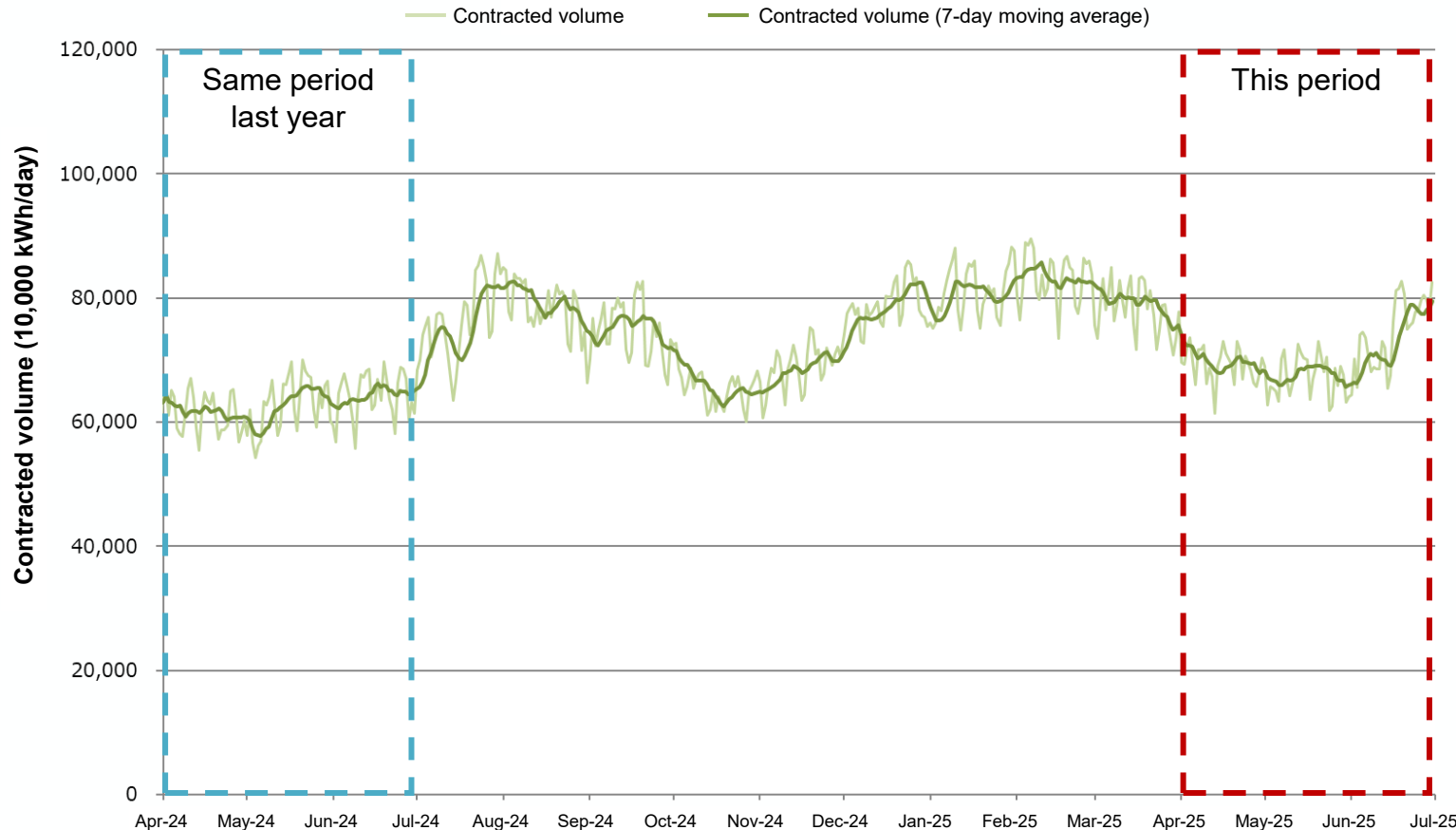
* Although gross bidding by general electric utilities has been suspended since October 1, 2023, its abolition was decided at the 10th Specialized Meeting for Policy Design and Monitoring held on June 27, 2025.

*1 This refers to the last resort supply. Local general electricity transmission and distribution utilities are obliged to supply electricity under the last resort supply agreement to ensure electricity consumers the final source of electricity supply in the event that they fail to conclude a supply contract with any of the electricity retailers.

Contracted volume in the day-ahead market

- The contracted volume in the day-ahead market for this period was 64.0 billion kWh.
- In year-on-year comparison, the volume was 1.1 times that of the same period last year.

Day-Ahead market: Trends in contracted volume
(April 1, 2024 to June 30, 2025)



Main data

Contracted volume (April to June 2025)

64.0 billion kWh

Comparison with the contracted volume for the same
period last year
(vs. April to June 2024)

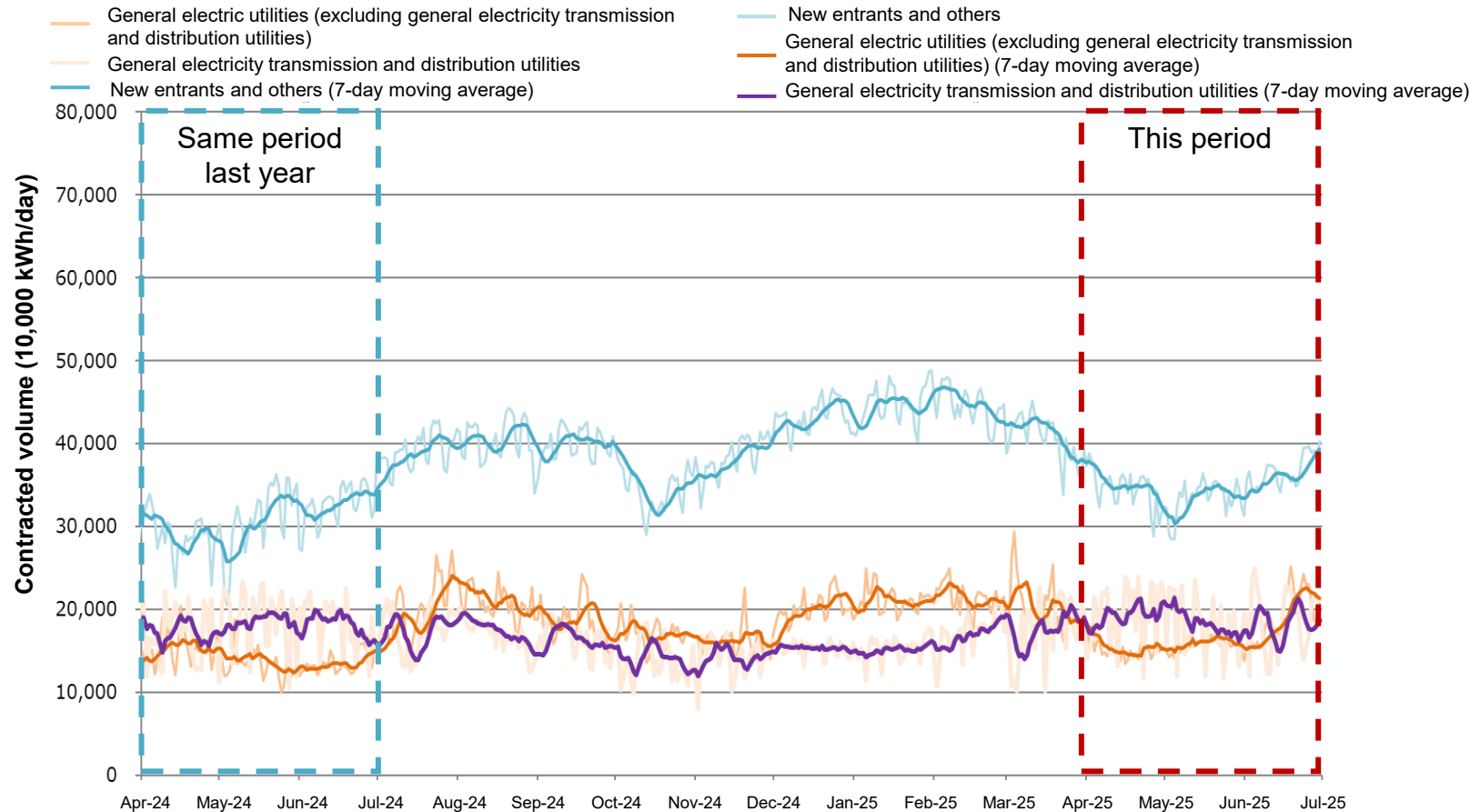
1.1 x

* Although gross bidding by general electric utilities has been suspended since October 1, 2023, its abolition was decided at the 10th Specialized Meeting for Policy Design and Monitoring held on June 27, 2025.

Contracted selling volume in the day-ahead market by business operator category

- The contracted selling volume in the day-ahead market for this period was 15.3 billion kWh for general electric utilities (excluding general electricity transmission and distribution utilities), 31.7 billion kWh for new entrants and other business operators, and 17.0 billion kWh for general electricity transmission and distribution utilities.
- In year-on-year comparison, the volume was 1.2 times that of the same period last year for general electric utilities, 1.1 times for new entrants and other business operators, and 1.0 times for general electricity transmission and distribution utilities.

**Day-Ahead market: Trends in contracted selling volume
(April 1, 2024 to June 30, 2025)**



Main data

Contracted selling volume by general electric utilities (excluding general electricity transmission and distribution utilities) (April to June 2025)	15.3 billion kWh
Comparison with the contracted selling volume by general electric utilities (excluding general electricity transmission and distribution utilities) for the same period last year (vs. April to June 2024)	1.2×
Contracted selling volume by new entrants and other business operators (April to June 2025)	31.7 billion kWh
Comparison with the contracted selling volume by new entrants and other business operators for the same period last year (vs. April to June 2024)	1.1×
Contracted selling volume by general electricity transmission and distribution utilities (April to June 2025)	17.0 billion kWh
Comparison with the contracted selling volume by general electricity transmission and distribution utilities for the same period last year (vs. April to June 2024)	1.0×

* The contracted FIT selling volume by general electricity transmission and distribution utilities has been excluded from the contracted selling volume by general electric utilities, and a new line plotting the contracted selling volume by general electricity transmission and distribution utilities has been added.

* General electric utilities include Hokkaido Electric Power, Tohoku Electric Power, TEPCO Energy Partner, TEPCO Renewable Power, Chubu Electric Power Miraiz, Hokuriku Electric Power, Kansai Electric Power, Chugoku Electric Power, Shikoku Electric Power, Kyushu Electric Power, and JERA.

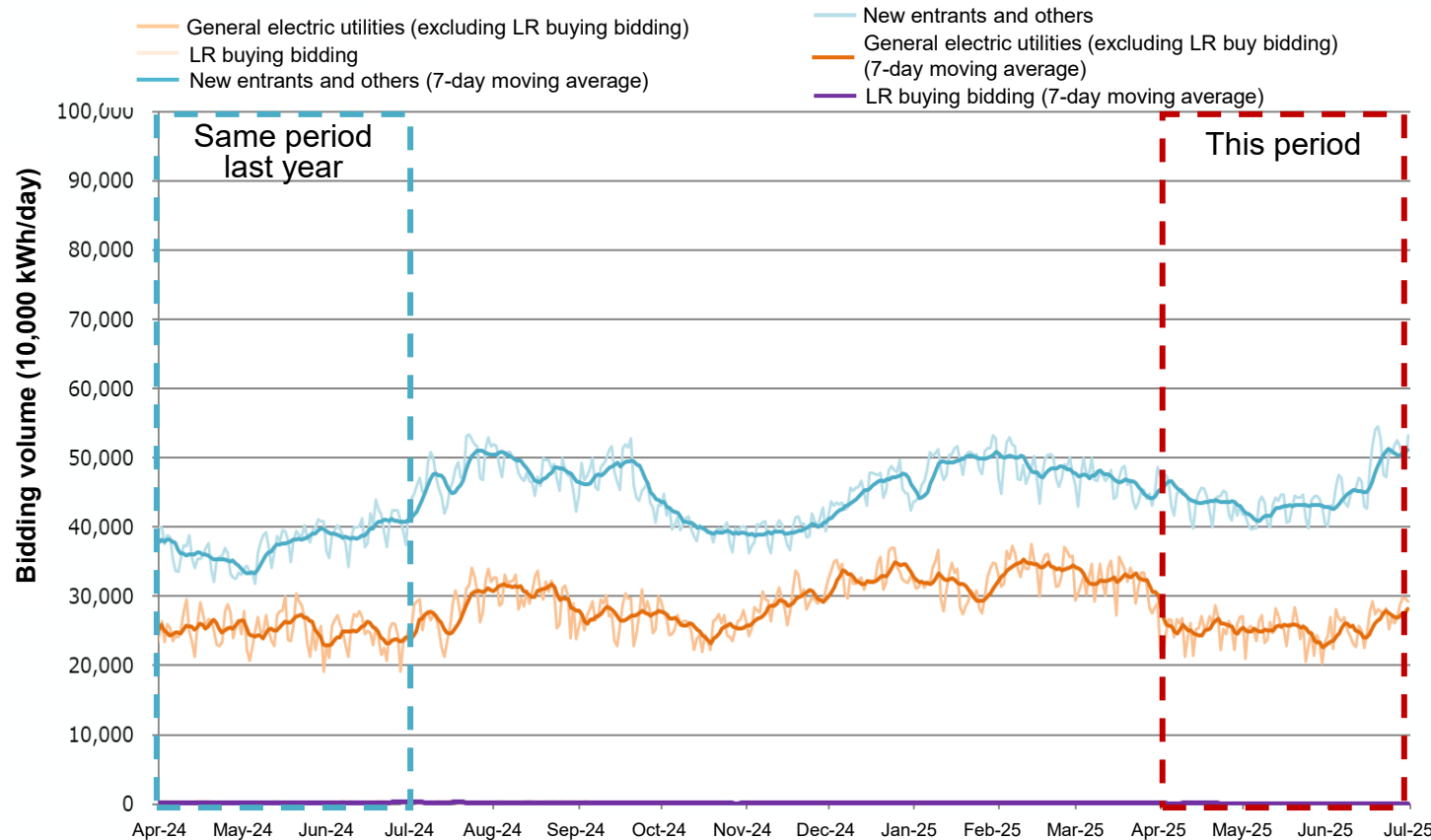
* General electricity transmission and distribution utilities include Hokkaido Electric Power Network, Tohoku Electric Power Network, TEPCO Power Grid, Chubu Electric Power Grid, Hokuriku Electric Power Transmission and Distribution, Kansai Electric Power Transmission and Distribution, Chugoku Electric Power Network, Shikoku Electric Power Transmission and Distribution, and Kyushu Electric Power Transmission and Distribution.

* Although gross bidding by general electric utilities has been suspended since October 1, 2023, its abolition was decided at the 10th Specialized Meeting for Policy Design and Monitoring held on June 27, 2025.

Contracted buying volume in the day-ahead market by business operator category

- The contracted buying volume in the day-ahead market for this period was 23.2 billion kWh for general electric utilities (excluding LR buying bidding) and 40.7 billion kWh for new entrants and other business operators, and the contracted LR buying volume by general electricity transmission and distribution utilities was 0.1 billion kWh.
- In year-on-year comparison, the volume was 1.0 times that of the same period last year for general electric utilities (excluding LR buying bidding) and 1.2 times for new entrants and other business operators.
- The market condition continues where the contracted buying volume by general electric utilities exceeds their contracted selling volume. Also for new entrants and other business operators, their contracted buying volume has remained above their contracted selling volume, since the January to March 2024 period.

**Day-Ahead Market: Trends in contracted buying volume
(April 1, 2024 to June 30, 2025)**



Main data

Contracted buying volume by general electric utilities (excluding LR buying bidding) (April to June 2025)
23.2 billion kWh

Comparison with the contracted buying volume by general electric utilities for the same period last year (excluding LR buy bidding) (vs. April to June 2024)
1.0 x

Contracted buying volume by new entrants and other business operators (April to June 2025)
40.7 billion kWh

Comparison with the contracted buying volume by new entrants and other business operators for the same period last year (vs. April to June 2024)
1.2 x

Contracted LR buying volume by general electricity transmission and distribution utilities (April to June 2025)
0.1 billion kWh

Comparison with the contracted LR buying volume by general electricity transmission and distribution utilities for the same period last year (vs. April to June 2024)
0.3 x

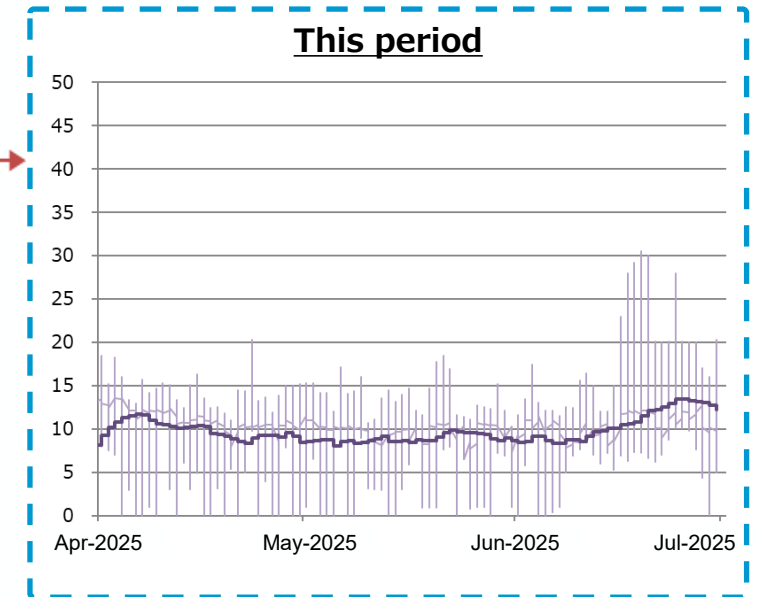
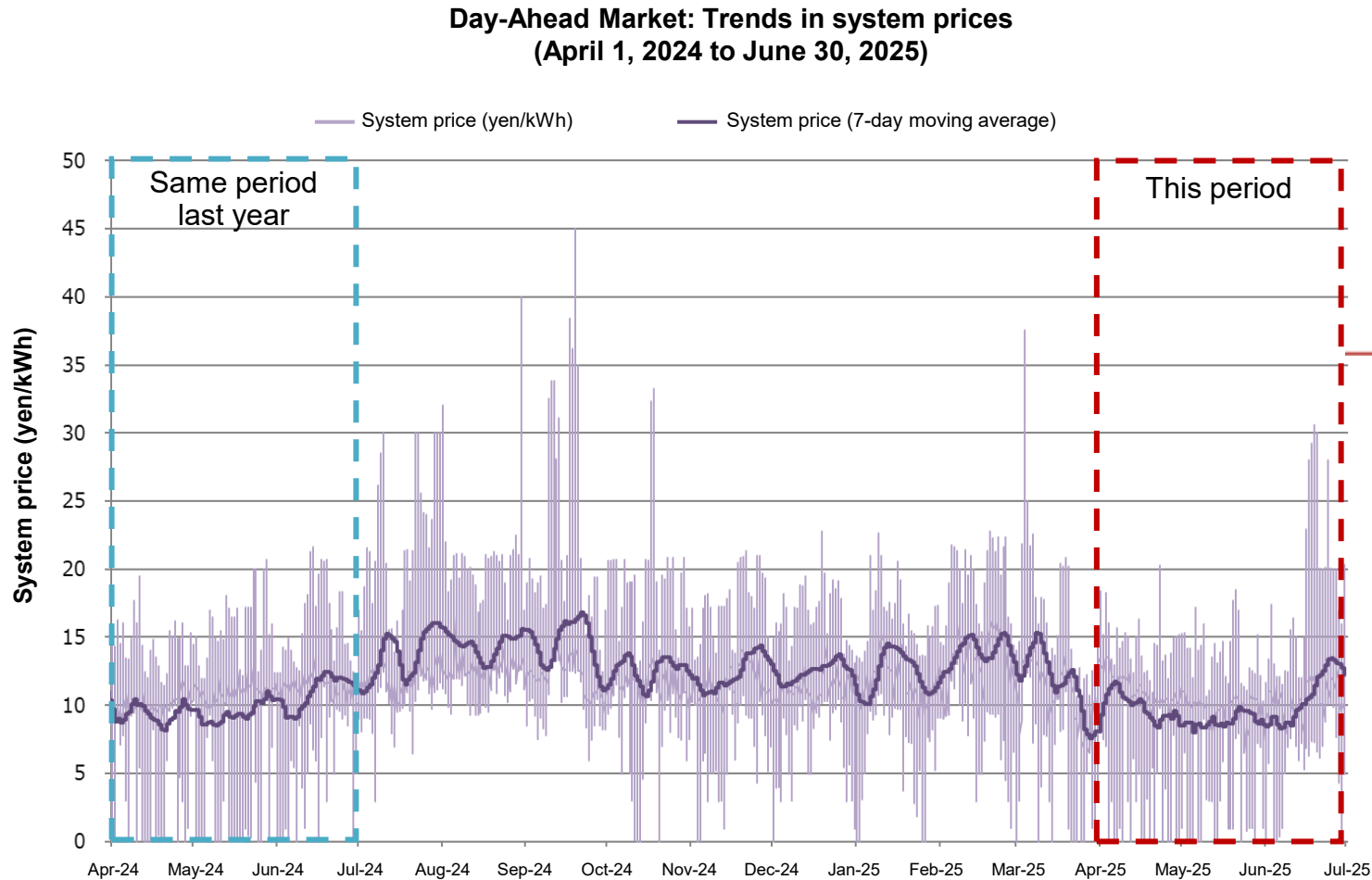
* General electric utilities include Hokkaido Electric Power, Tohoku Electric Power, TEPCO Energy Partner, TEPCO Renewable Power, Chubu Electric Power Miraiz, Hokuriku Electric Power, Kansai Electric Power, Chugoku Electric Power, Shikoku Electric Power, Kyushu Electric Power, JERA, and general electricity transmission and distribution utilities.

* General electricity transmission and distribution utilities include Hokkaido Electric Power Network, Tohoku Electric Power Network, TEPCO Power Grid, Chubu Electric Power Grid, Hokuriku Electric Power Transmission and Distribution, Kansai Electric Power Transmission and Distribution, Chugoku Electric Power Network, Shikoku Electric Power Transmission and Distribution, and Kyushu Electric Power Transmission and Distribution.

* Although gross bidding by general electric utilities has been suspended since October 1, 2023, its abolition was decided at the 10th Specialized Meeting for Policy Design and Monitoring held on June 27, 2025.

System price in the day-ahead market

- The average system price in the day-ahead market for this period was 9.86 yen/kWh. In June, prices rose in the latter half of the month, reaching a peak of 30.56 yen/kWh (from 6:00 p.m. to 7:00 p.m.) on June 19. This increase is believed to have been influenced by unusually hot weather for June, which led to higher demand.
- This was a 0.13 yen/kWh decrease compared to the average of 9.99 yen/kWh for the same period last year.
(LNG spot price increased from an average of \$11.2/MMBtu for the same period last year to an average of \$12.3/MMBtu for this period. The yen also appreciated, with the exchange rate shifting from an average of 155.8 yen per dollar for the same period last year to an average of 144.6 yen per dollar for this period.)



Main data

Unit: yen/kWh

	This period	Same period last year	Difference
Average system price	9.86	9.99	-0.13
Highest price	30.56	21.66	+8.90
Lowest price	0.01	0.01	+0.00

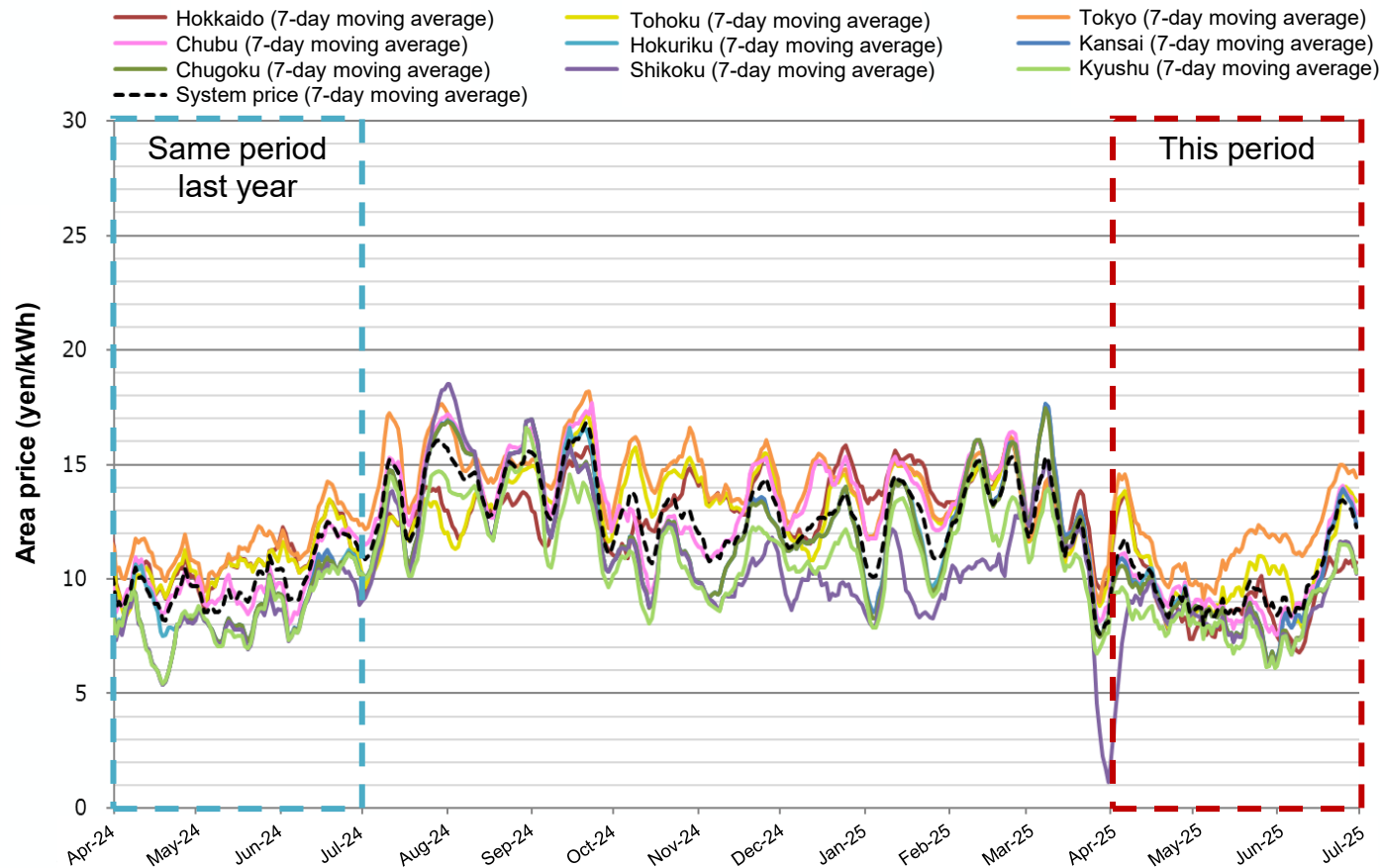
*1 Highest price for this period: 1 day, 2 frame in total

*2 Lowest price for this period: 22 days, 189 frames in total

Area price in the day-ahead market

- The average area prices in the day-ahead market for this period rose due to the extremely hot temperatures from mid-June onward, with price surges exceeding 30 yen/kWh occurring several times (a total of four days). Nevertheless, the overall price level remained almost the same as that of the same period last year.
- In the eastern area, the market splitting rate remained relatively high during this period, resulting in larger price differences between areas compared with the western area. In addition, in the western area, a price gap occurred for Kansai-Chugoku, with the average prices during the period being in the 9-yen and 8-yen ranges, respectively. The cause was the increase in the market splitting rate for Kansai-Chugoku in June, which resulted from service capacity constraints due to interconnection line work.

Day-Ahead Market: Trends in area price
(April 1, 2024 to June 30, 2025)



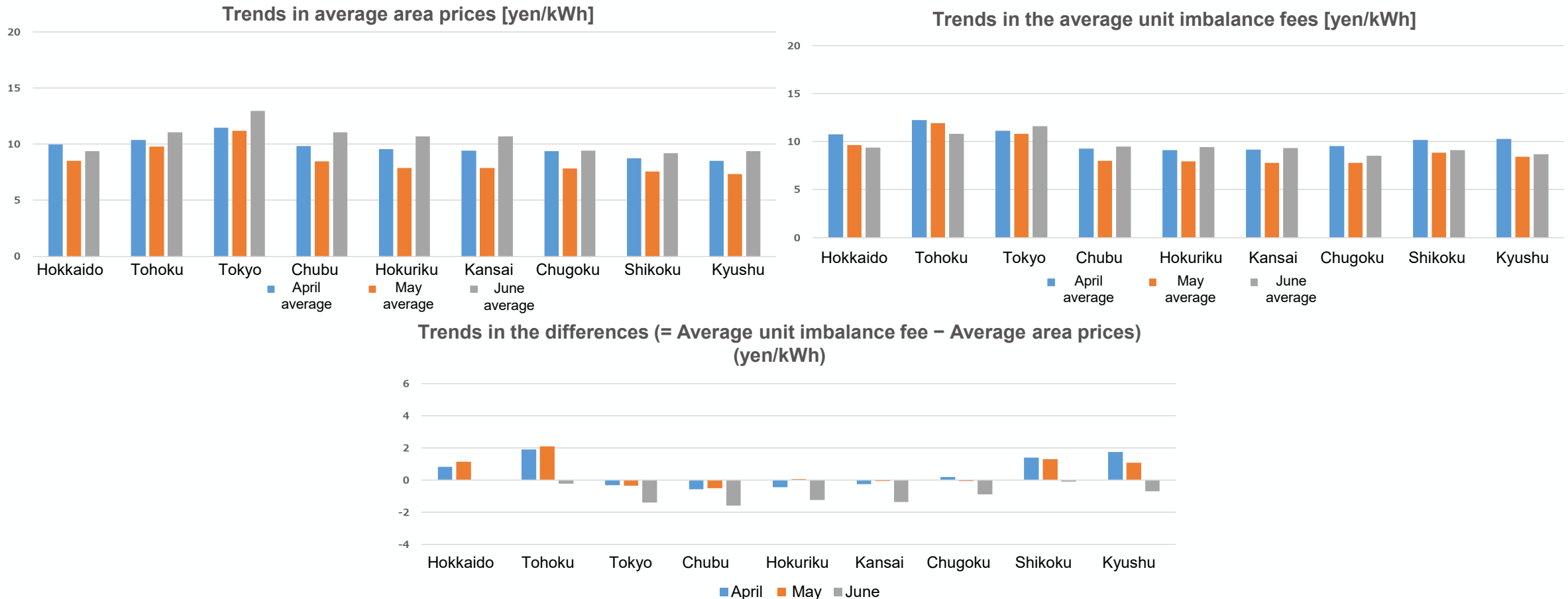
Average price during the period

Unit: yen/kWh

	This period	Same period last year	Difference
System price	9.86	9.99	- 0.13
Hokkaido	9.27	10.71	-1.44
Tohoku	10.40	10.66	- 0.26
Tokyo	11.86	11.51	0.35
Chubu	9.77	9.97	- 0.20
Hokuriku	9.35	9.00	0.36
Kansai	9.31	8.62	0.69
Chugoku	8.86	8.60	0.27
Shikoku	8.50	8.32	0.18
Kyushu	8.39	8.48	- 0.09

Unit imbalance fees and area prices

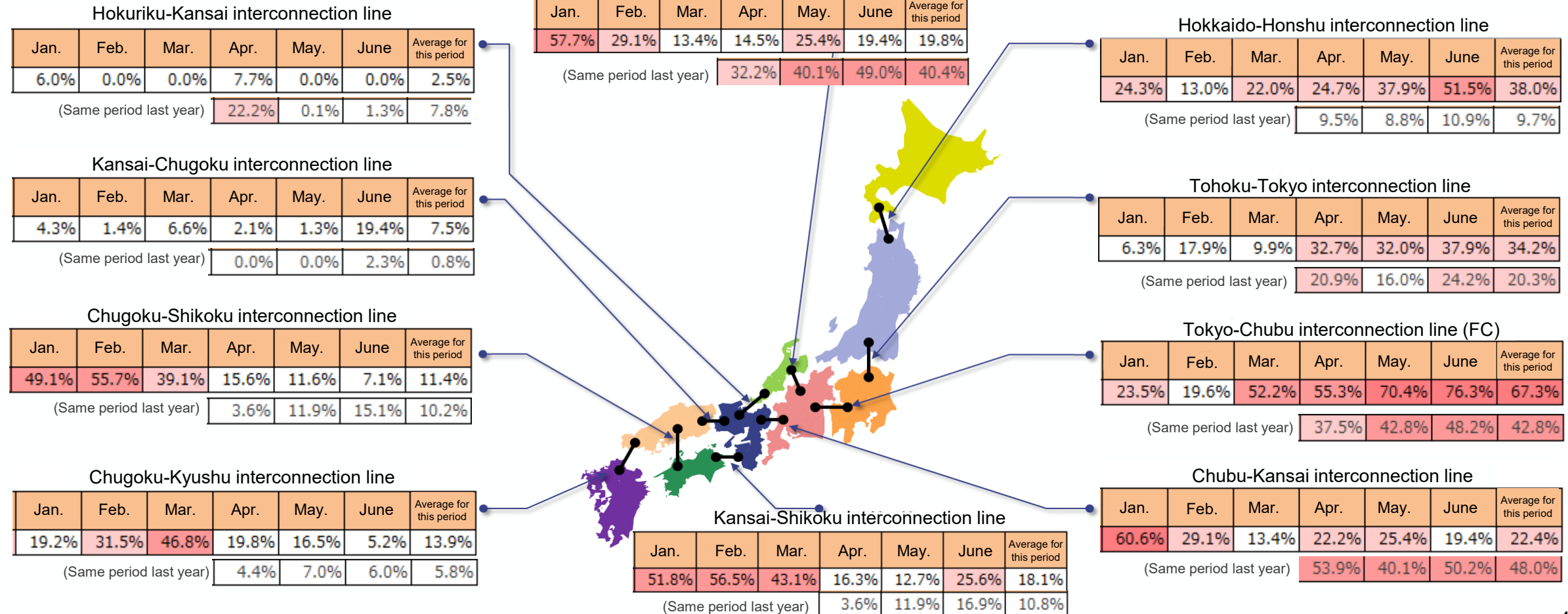
- A comparison of trends in the unit imbalance fees and area prices in each area (monthly averages) indicates a discrepancy of about 1 to 2 yen for Hokkaido, Tohoku, Shikoku, and Kyushu areas, where the unit imbalance fees exceeded the area prices, in January and February, and for Tokyo, Chubu, Hokuriku, Kansai, Chugoku, and Kyushu areas, where the area prices exceeded the unit imbalance fees, in March.
- The differences between the two values were 2.11 yen/kWh at the maximum, 0.04 yen/kWh at the minimum, and 0.81 yen/kWh on average.



Day-Ahead market splitting status between areas

- Regarding the average market splitting occurrence rate during this period, the three-month average splitting rates for Tokyo–Chubu (FC), Hokkaido–Tohoku, and Tohoku–Tokyo tended to be relatively high, at approximately 60%, 30%, and 30%, respectively. Among these, Tokyo–Chubu (FC) showed a splitting rate exceeding 50% in every month, and Hokkaido–Honshu also exceeded 50% in June. Both are presumed to have been affected by reduced service capacity due to interconnection line work. In addition, Tohoku–Tokyo is presumed to have experienced an increase in the splitting rate to the 30% level due to changes made after April to the “service capacity limit factors” (such as thermal capacity and synchronous stability), which resulted in a reduction in service capacity.
- Chugoku–Shikoku and Kansai–Shikoku had maintained splitting rates of around 40–60% since last November, but in this period, the rates have declined to the 10% level. The likely factor is a decrease in low-priced selling volumes in the Shikoku area, which reduced the power flow from Shikoku to other regions and consequently lowered the splitting rate.

Monthly splitting occurrence rate for interconnection lines between each area

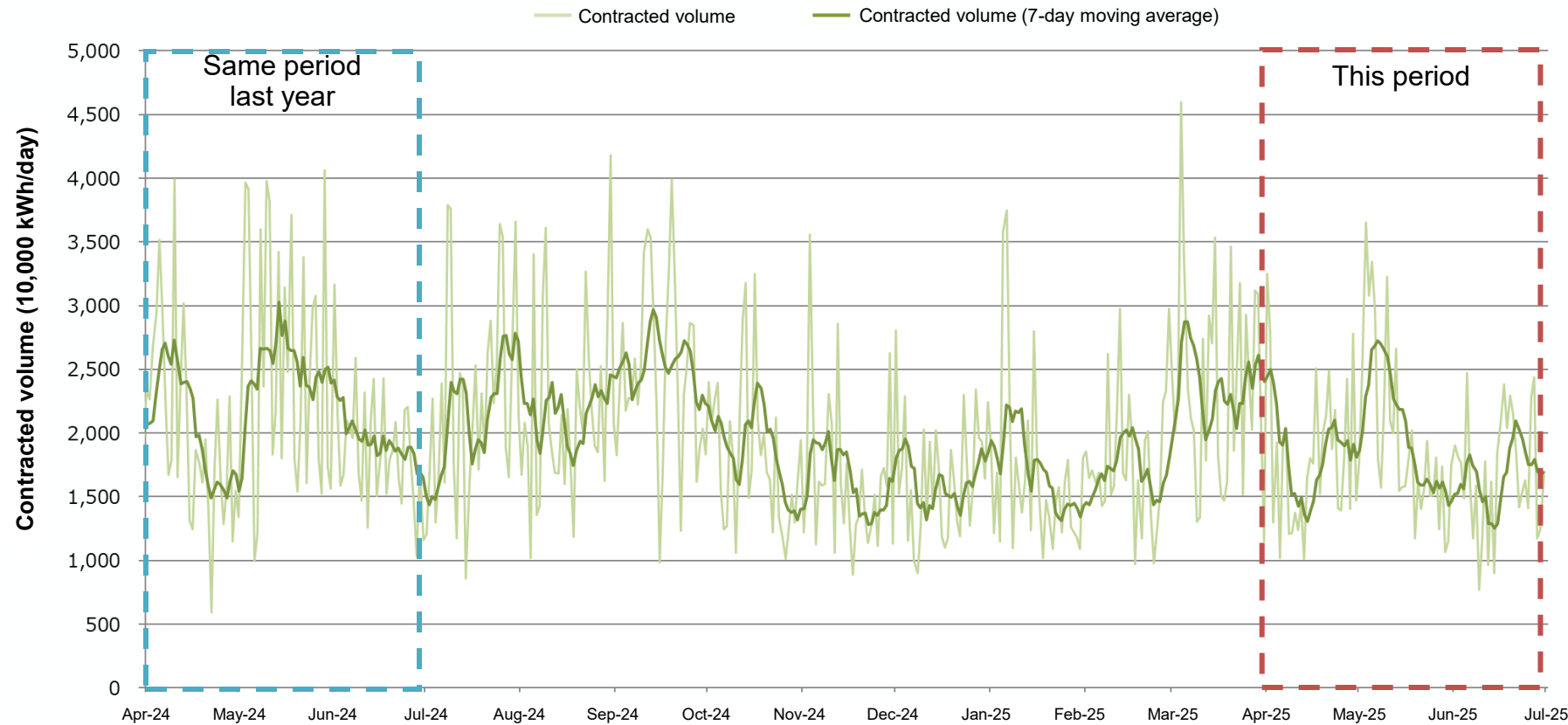


* The numbers (percentages) in the tables show the market splitting occurrence rate in each interconnection line, which is the number of products in which market splitting occurred as a percentage of the number of products handled in each month (48 frames per day every 30-minutes x number of days).
 * Occurrences of market splitting include those caused by interconnection line work.

Contracted volume in the intraday market

- The contracted volume in the intraday market for this period was 1.66 billion kWh.
- In year-on-year comparison, the volume was 0.9 times that of the same period last year.

Intraday market: Trends in contracted volume
(April 1, 2024 to June 30, 2025)



Main data

Contracted volume
(April to June 2025)

1.66 billion kWh

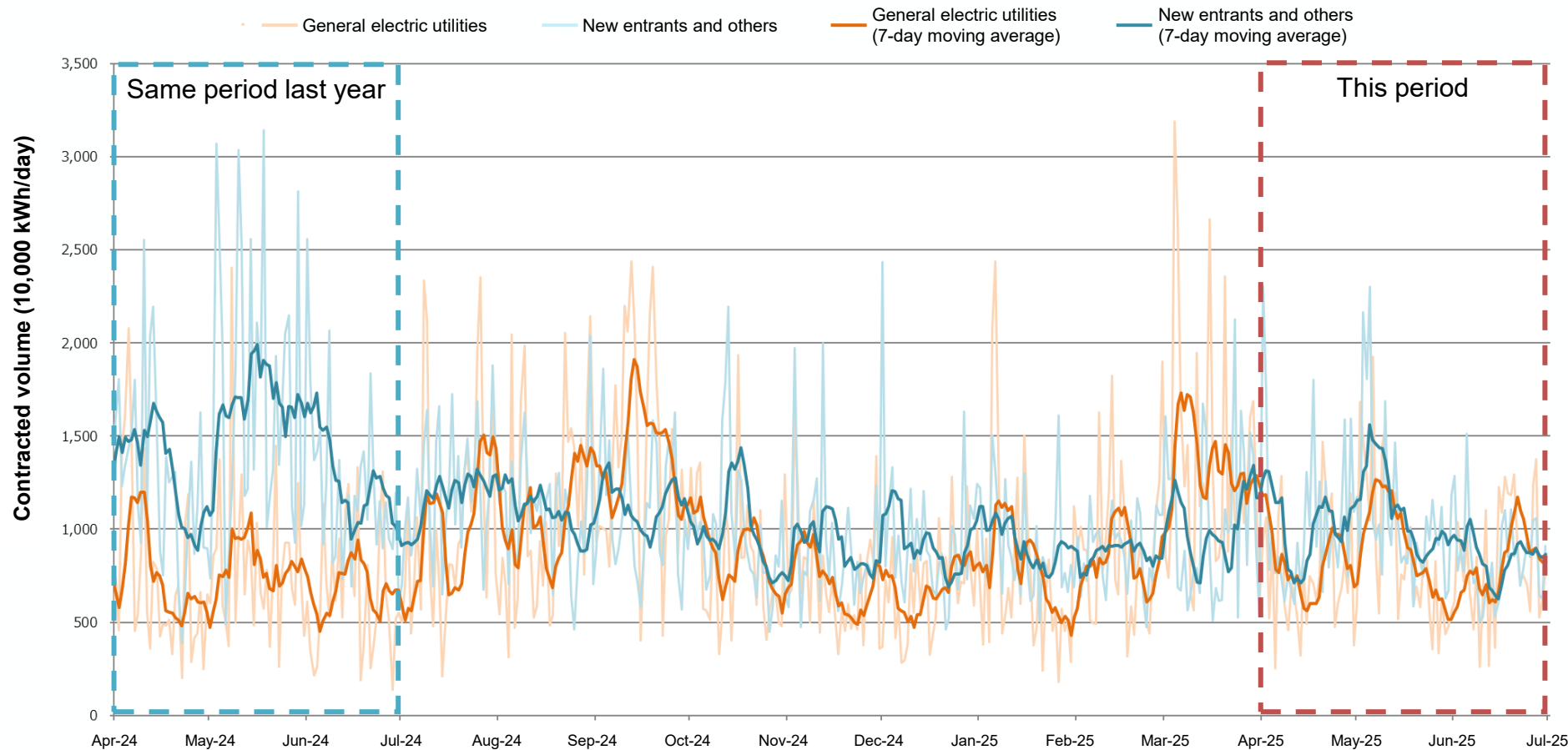
Comparison with the contracted volume for the same
period last year
(vs. April to June 2024)

0.9 x

Contracted selling volume in the intraday market by business operator category

- The contracted selling volume in the intraday market for this period was 0.76 billion kWh for general electric utilities and 0.90 billion kWh for new entrants and other business operators.
- In year-on-year comparison, the volume was 1.1 times that of the same period last year for general electric utilities, and 0.7 times for new entrants and other business operators.

**Intraday market: Trends in contracted selling volume
(April 1, 2024 to June 30, 2025)**



Main data

Contracted selling volume by general electric utilities
(From April 2025 to June 2025)

7.6 billion kWh

Comparison with the contracted selling volume by general electric utilities for the same period last year
(vs. April 2024 to June 2024)

1.1 x

Contracted selling volume by new entrants and other business operators
(From April 2025 to June 2025)

0.90 billion kWh

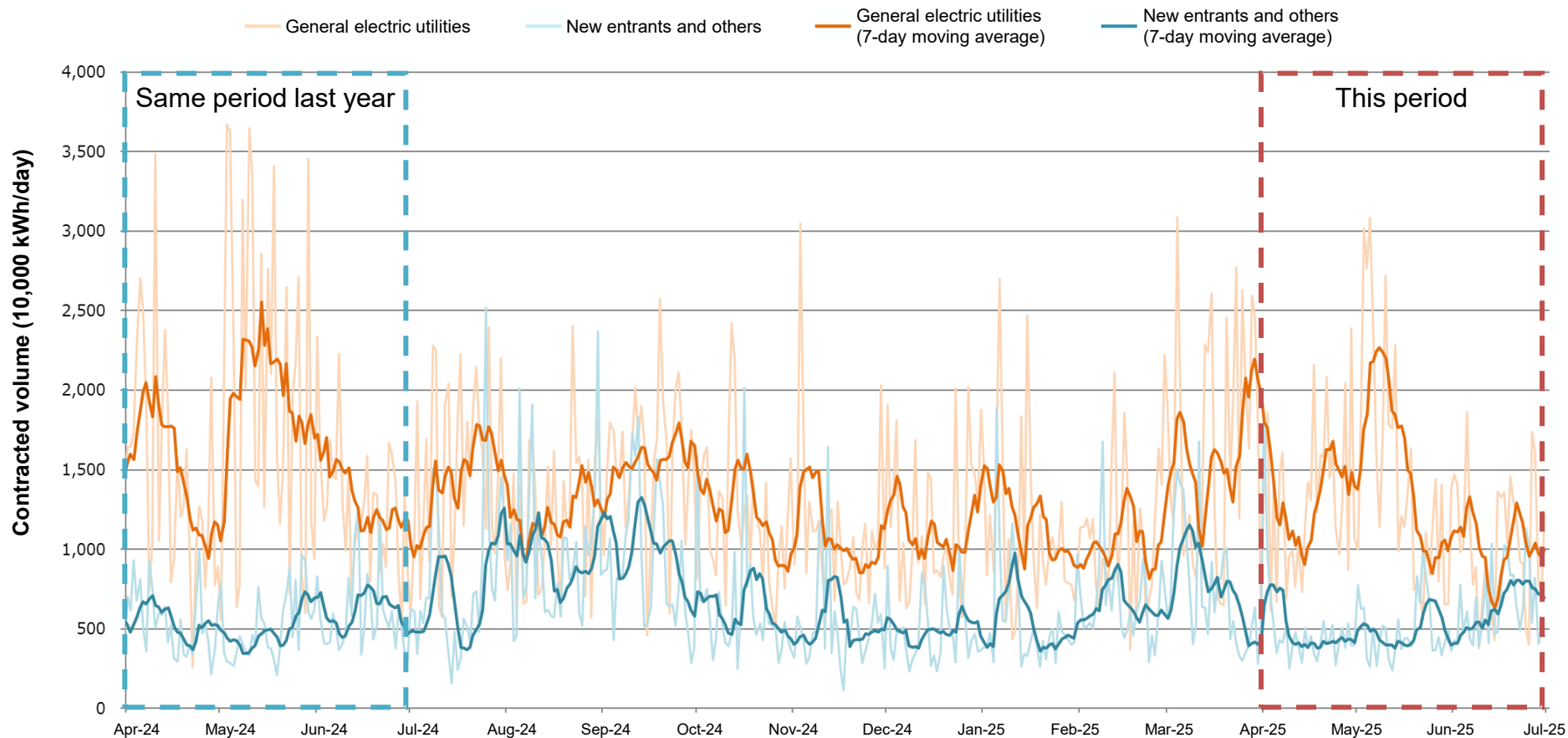
Comparison with the contracted selling volume by new entrants and other business operators for the same period last year
(vs. April 2024 to June 2024)

0.7 x

Contracted buying volume in the intraday market by business operator category

- The contracted buying volume in the intraday market for this period was 1.16 billion kWh for general electric utilities and 0.49 billion kWh for new entrants and other business operators.
- In year-on-year comparison, the volume was 0.8 times that of the same period last year for general electric utilities, and 1.0 times for new entrants and other business operators.
- The contracted buying volume by general electric utilities exceeded their contracted selling volume, and the contracted selling volume by the new entrants and other business operators exceeded their contracted buying volume.

**Intraday market: Trends in contracted buying volume
(April 1, 2024 to June 30, 2025)**



Main data

Contracted buying volume by general electric utilities
(April to June 2025)

1.16 billion kWh

Comparison with the contracted buying volume by general electric utilities for the same period last year (vs. April to June 2024)

0.8 x

Contracted buying volume by new entrants and other business operators
(April to June 2025)

0.49 billion kWh

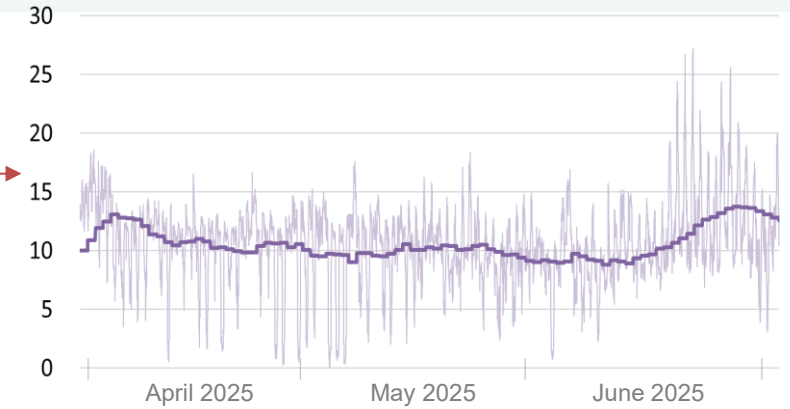
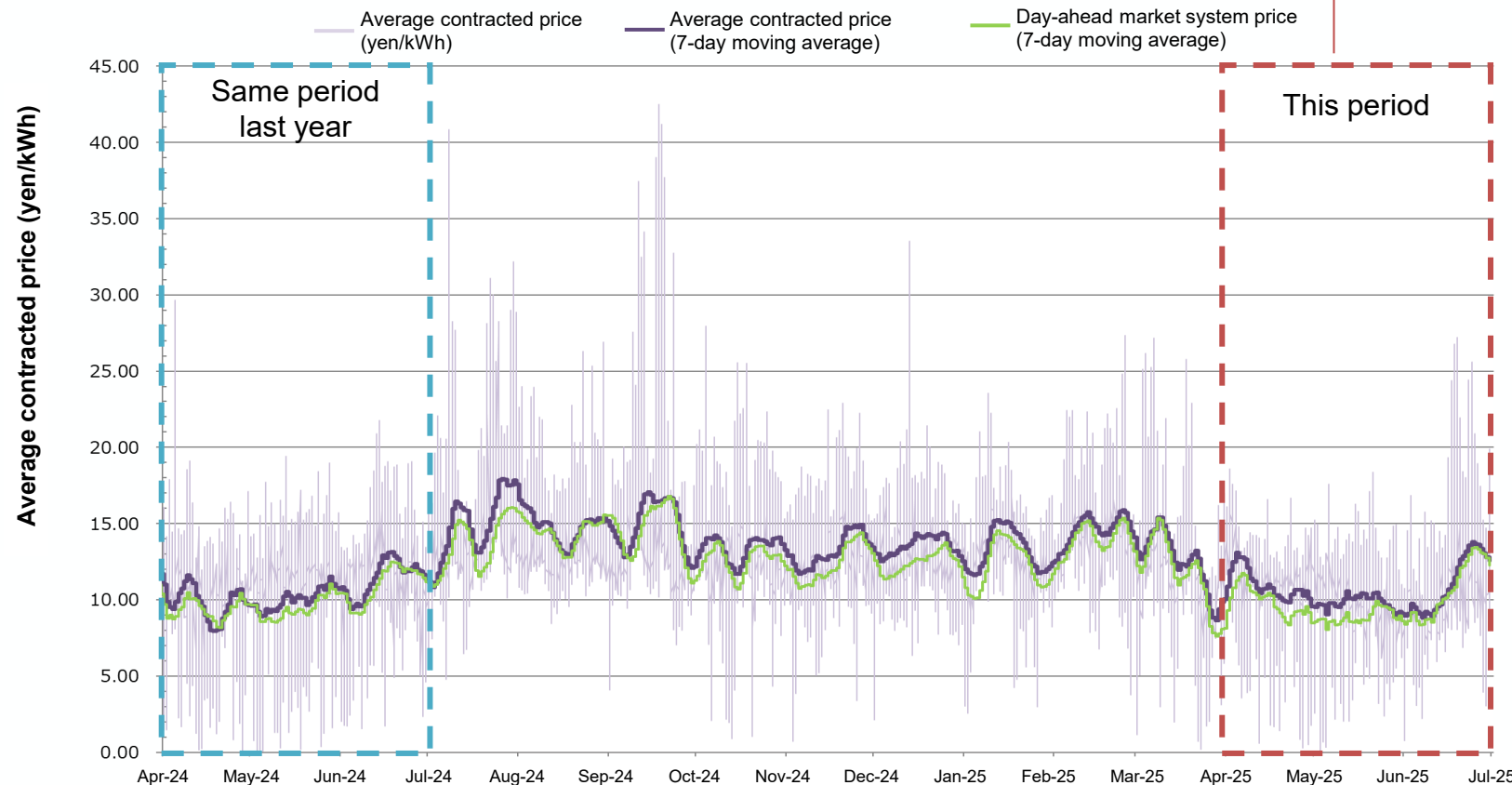
Comparison with the contracted buying volume by new entrants and other business operators for the same period last year (vs. April to June 2024)

1.0 x

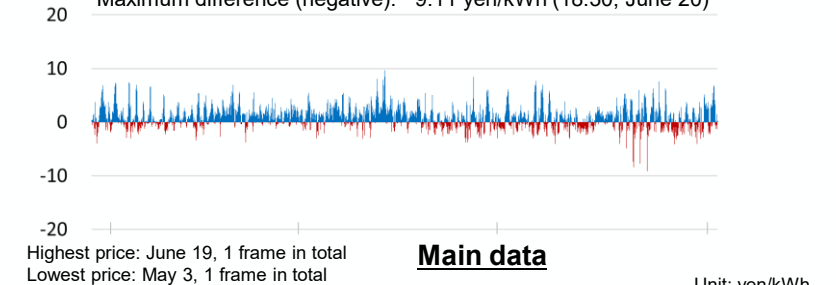
Average contracted price in the intraday market

- The average contracted price in the intraday market for this period was 10.63 yen/kWh. This was an approximate 1.02% increase compared to the average of 10.47 yen/kWh for the same period last year. On June 19, when the system price reached its highest level (30.6 yen/kWh), the total contracted volume in the intraday market was approximately 23 million kWh, and the highest average contracted price among the frames was 27.20 yen/kWh (the highest value during the same period, also recorded on June 19).
- The average contracted price in the intraday market for this period was lower than the average system price (12.51 yen/kWh).

Intraday market: Trends in the average contracted price
(April 1, 2024 to June 30, 2025)



Price difference
(Average intraday market price - System price)
Maximum difference (positive): +9.73 yen/kWh (14:30, May 13)
Maximum difference (negative): -9.11 yen/kWh (18:30, June 20)



	This period	Same period last year	Difference
Intraday market Average contracted price	10.63	10.47	+0.16
(Reference) Day-ahead market average system price	12.51	10.06	+2.45
Highest price	27.20	29.64	-2.44
Lowest price	0.07	0.01	+0.06

Overview of contracted volume and bidding volume in the forward market transactions

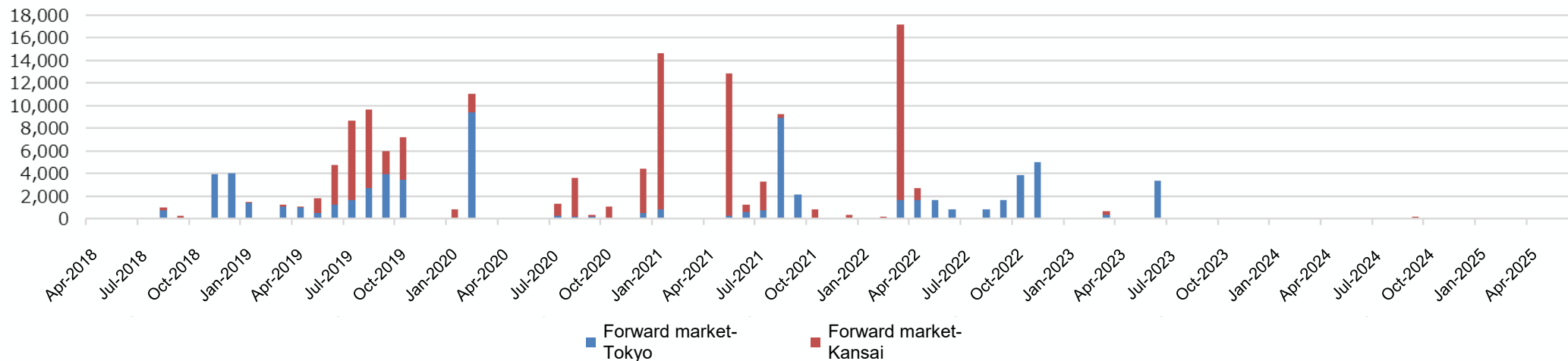
- There was no contracted volume in the forward market for this period.

Contracted volume/bidding volume during the period*1

(Unit: MWh)

Item	Area	Total (This period)	Daytime: Weekly	Daytime: Monthly	24-hour: Weekly	24-hour: Monthly	24-hour: Yearly	(Reference) Total (Same period last year)
Contracted volume	Total	0	0	0	0	0	0	0
	Tokyo	0	0	0	0	0	0	0
	Kansai	0	0	0	0	0	0	0
Selling volume	Total	539,124	27,216	504,408	7,500	0	0	848,768
	Tokyo	539,124	27,216	504,408	7,500	0	0	253,428
	Kansai	0	0	0	0	0	0	595,340
Buying volume	Total	28,258	22,008	0	6,250	0	0	5,581,424
	Tokyo	28,258	22,008	0	6,250	0	0	383,814
	Kansai	0	0	0	0	0	0	5,197,610

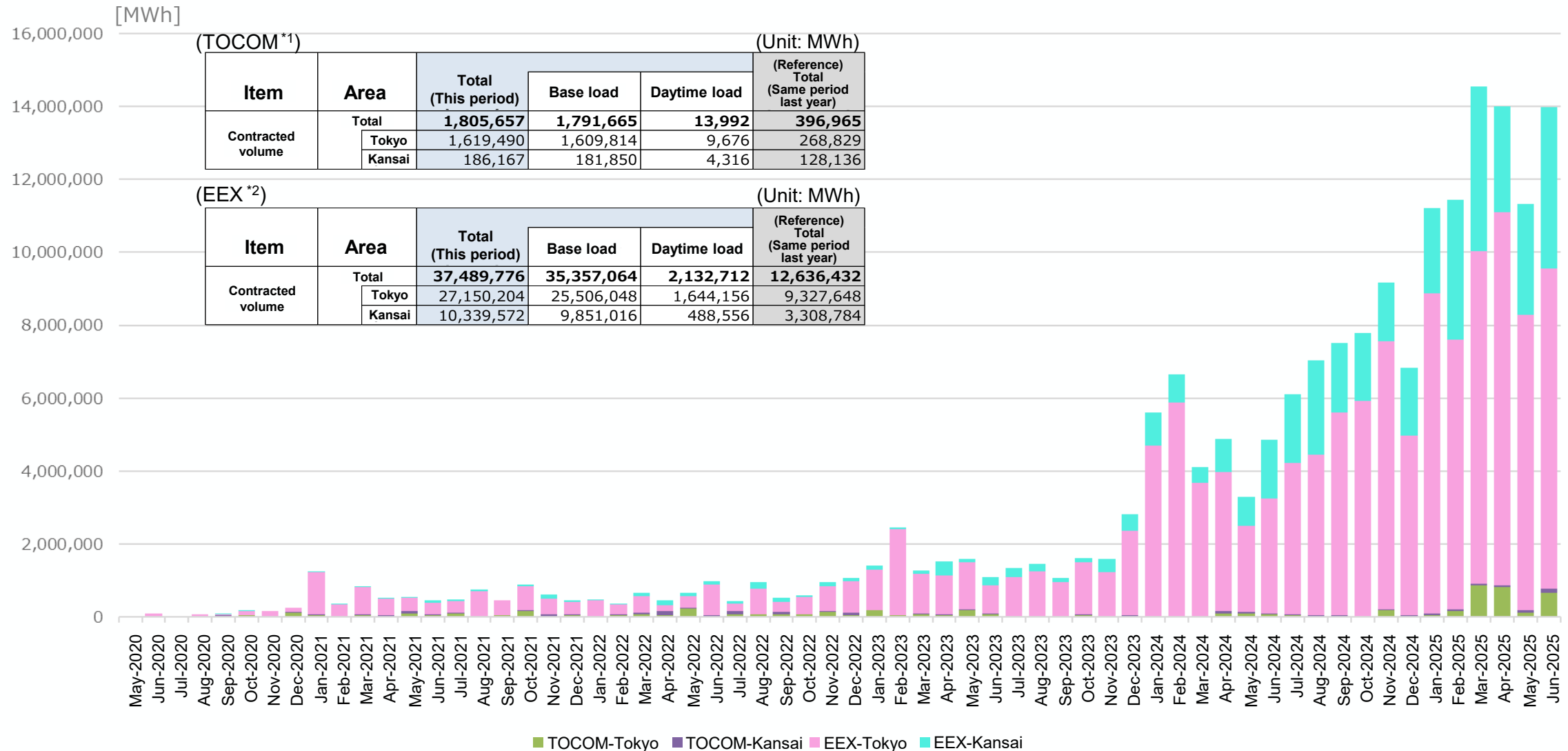
Contracted volume in forward market transactions [MWh]



*1 Forward market data was obtained by converting the contracted volume of each product into kWh (for 24-hour products, total number of days including holidays × 24 hours; for daytime products, number of days excluding holidays × 10 hours) and aggregating the results by contracted month.

Overview of contracted volume in the futures market transactions

- Electricity futures trading contracted for this period was approximately 1.81 billion kWh (4.5 times that of the same period last year) for TOCOM and approximately 37.49 billion kWh (3.0 times that of the same period last year) for EEX.

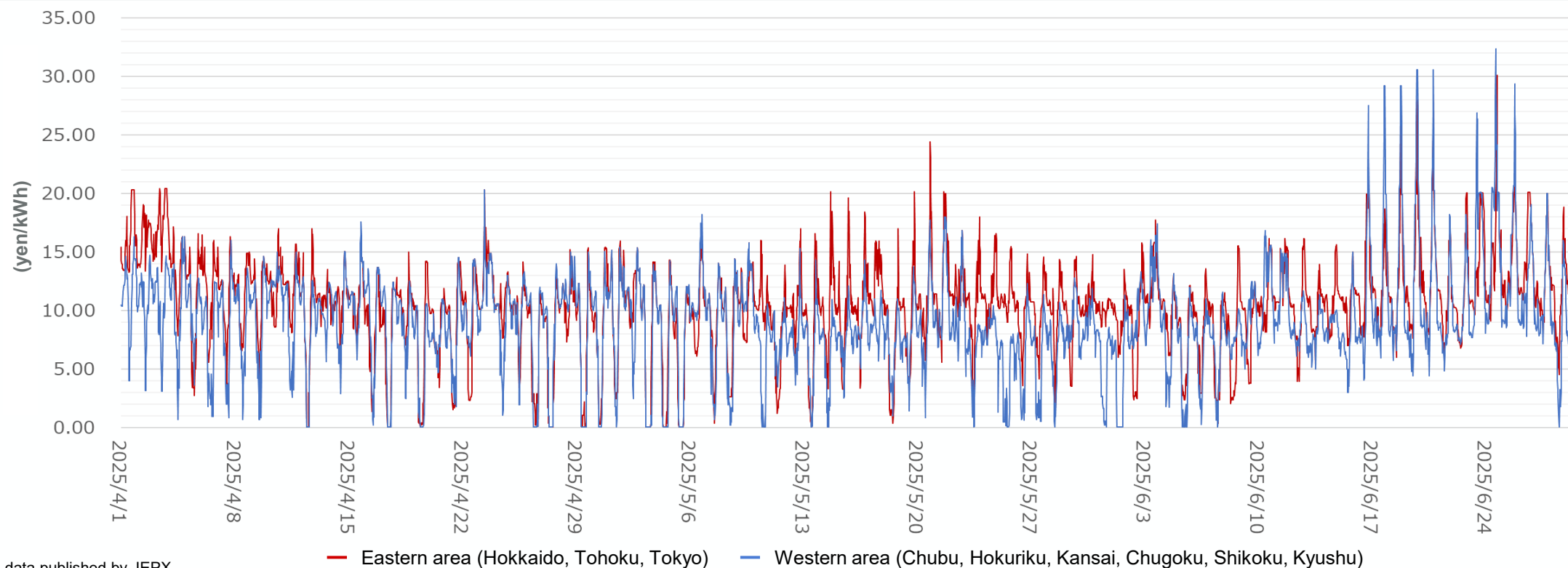


*1 Aggregated based on data published by JPX. The data aggregation method has been changed, effective from the April to June 2024 period.

*2 Aggregated based on data published by EEX.

Trends of day-ahead market prices in the April to June 2025 period (east-west comparison) (1/2)

- In comparing area prices between east and west, prices continued to follow the same pattern as in the previous period, remaining higher in the east and lower in the west. The average area prices were as follows:
- eastern area was 10.59 yen/kWh in April, 9.83 yen/kWh in May, and 11.13 yen/kWh in June; western area was 9.25 yen/kWh in April, 7.83 yen/kWh in May, and 10.06 yen/kWh in June.
- In particular, in May, the proportion of competitively priced sell bids increased, resulting in prices in the western area falling to the 7-yen range. In addition, the Tokyo area maintained the highest market prices throughout the period, with the average price in June reaching approximately 13 yen/kWh.
- Daily day-ahead market prices exceeded 30 yen/kWh 4 times in total in June (1 time in all area, 2 times in western area, and 1 time in Chubu, Hokuriku, and Kansai areas; 1 time in the same period last year). This was likely caused by the rise in temperature to levels comparable to extreme heat.



Trends of day-ahead market prices in the April to June 2025 period (comparison among areas) (2/2)

- Looking at each area on a monthly basis:
 - In April, the market splitting rate between areas in the eastern area, as well as for Tokyo-Chubu, was lower compared to May and June, resulting in the smallest overall price gap among the areas. Among them, in the western area, prices from the Chubu to Chugoku areas were almost in the same range (around 9 yen/kWh). However, because the market splitting rate for Chugoku–Shikoku and Chugoku–Kyushu increased slightly, price differences from the Shikoku and Kyushu areas emerged.
 - In May, although market prices in each area were at their lowest levels, the splitting rate for Tokyo-Chubu increased, resulting in the largest price gap between the two. Meanwhile, from the Hokuriku to Kyushu areas, the splitting rate decreased, leading to nearly the same price range (around 7 yen/kWh).
 - In June, temperatures rose to near heatwave levels in the latter half of the month, causing several price spikes in area prices exceeding 30 yen/kWh (a total of four days), which led to an overall increase in market prices. In particular, the Chubu, Hokuriku, Kansai, and Kyushu areas saw price increases of around 2 to 3 yen compared with May.

Price trends and connection line splitting rates by area for April–June 2025 (Between Hokkaido-Chubu)

Year	Month	System price (yen/kWh)	Hokkaido AP (yen/kWh)	Hokkaido-Tohoku splitting rate (%)	Tohoku AP (yen/kWh)	Tohoku-Tokyo splitting rate (%)	Tokyo AP (yen/kWh)	Tokyo-Chubu splitting rate (%)	Chubu AP (yen/kWh)
2025	April	9.82	9.95	24.7	10.36	32.7	11.45	55.3	9.83
2025	May	8.92	8.49	37.9	9.80	32.0	11.19	70.4	8.48
2025	June	10.87	9.37	51.5	11.05	37.9	12.96	76.3	11.04
3 months average		9.86	9.27	38.0	10.40	34.2	11.86	67.3	9.77

Price trends and connection line splitting rates by area for April–June 2026 (Between Chubu-Kyushu)

Year	Month	System price (yen/kWh)	Chubu AP (yen/kWh)	Chubu-Hokuriku splitting rate (%)	Chubu-Kansai splitting rate (%)	Hokuriku AP (yen/kWh)	Hokuriku-Kansai splitting rate (%)	Kansai AP (yen/kWh)	Kansai-Chugoku splitting rate (%)	Chugoku AP (yen/kWh)	Chugoku-Shikoku splitting rate (%)	Chugoku-Kyushu splitting rate (%)	Shikoku AP (yen/kWh)	Kyushu AP (yen/kWh)
2025	April	9.82	9.83	14.5	22.2	9.57	7.7	9.44	2.1	9.37	15.6	19.8	8.76	8.52
2025	May	8.92	8.48	25.4	25.4	7.86	0.0	7.86	1.3	7.84	11.6	16.5	7.55	7.33
2025	June	10.87	11.04	19.4	19.4	10.68	0.0	10.68	19.4	9.41	7.1	5.2	9.20	9.37
3 months average		9.86	9.77	19.8	22.4	9.35	2.5	9.31		8.86	11.4	13.9	8.50	8.39

【 Quarterly report 】

- **Wholesale electricity market**
 - JPEX market
 - Day-Ahead market
 - Intraday market
 - Forward transaction market
- **Voluntary efforts by general electric utilities, etc.**
 - Supply of surplus electricity to JEPX market
 - Trading status and sell bid withdrawal status in the intraday market
 - Status of block selling bidding
 - Supply of power source to the market for wholesale electricity utilities
 - Status of bidding, etc. for public hydroelectricity business
 - Status of OTC transactions

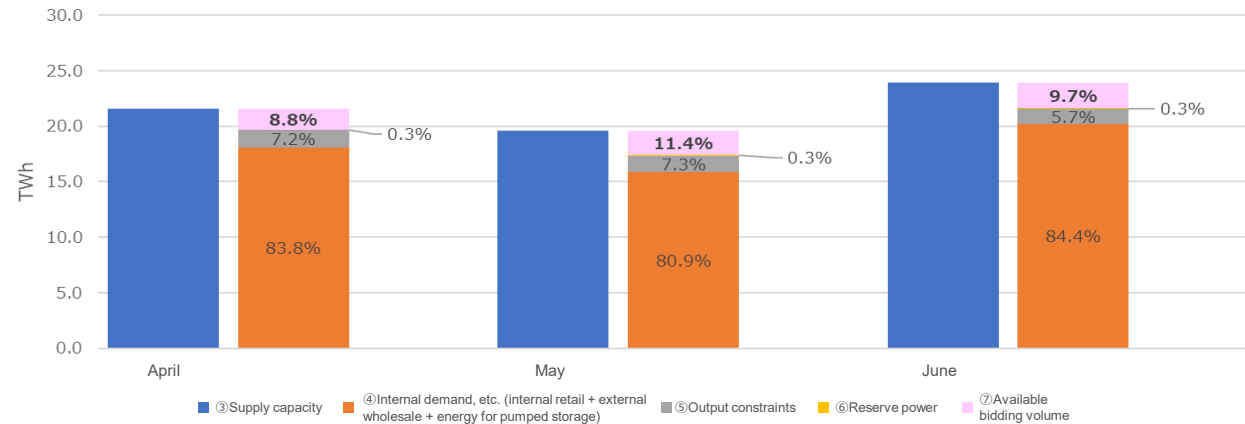
【Medium- to long-term trend report】

- **Wholesale electricity market**
 - JPEX market
 - Trends in contracted volume
 - Trends in contracted price
 - Trends in the market splitting occurrence rate
 - JEPX spot price and fuel cost
- **Retail market**
 - Trends in new entrants share by area
 - Market share by area
 - Trends in electricity unit price
 - Trends in switching
 - Average unit price of low-voltage rates
- **Gas market**
 - Status of OTC transactions of general gas utilities
 - Usage status of Start-up wholesale measure

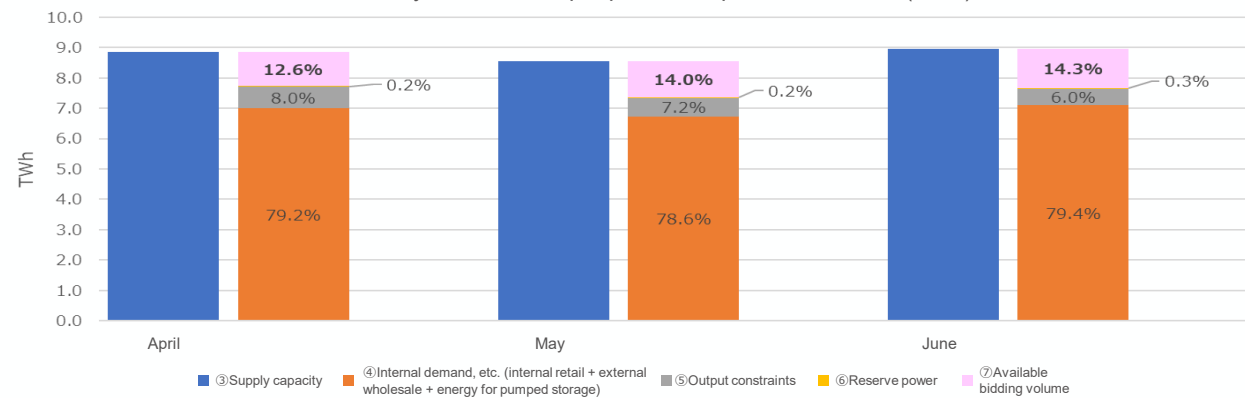
Supply of surplus electricity to JEPX market: Status of available bidding volume for supply capacity

- The total available bidding volume (data aggregated over applicable days each month) was obtained for a total of 21 days with higher spot prices and 9 days with lower spot prices. The former consisted of a total of 4 days with soaring spot and other prices (0 day in April, 0 day in May, 4 days in June) plus 17 days with relatively higher spot prices, while the latter was 3 days each month. As a result, the figures were at the levels of 8-11% (8.8% in April, 11.4% in May, 9.7% in June) of the internal supply capacity on days with higher prices, and at 10% levels (12.6% in April, 14.0% in May, 14.3% in June) on days with lower prices.

On 21 days with soaring spot and other prices in April to June 2025 (TWh)



On 9 days with lower spot prices in April to June 2025 (TWh)



[Date for aggregation of available bidding volume]

◆ For the three months, the secretariat designated sampling dates, which consisted of 21 days with the highest spot and other prices, and 9 days with the lowest spot and other prices. Evaluations were performed on data provided by general electric utilities and JERA.

Sampling dates for April consist of the day with soaring spot and other prices (none), weekdays with the highest daily average SP (April 1, 2, 3, 4, 10, 23 and 28), and 3 weekdays with the highest SP (April 17, 18, and 24).

Sampling dates for May consist of the day with soaring spot and other prices (none), weekdays with the highest frame SP (May 1, 2, 9, 20, 21, 22, and 29), and 3 weekdays with the lowest daily average SP (May 8, 13, and 26).

Sampling dates for June consist of days with soaring spot and other prices (June 19, 20, 23, and 24), weekdays with the highest daily average SP (June 18, 25, and 26), and 3 weekdays with the lowest daily average SP (June 4, 5, and 6).

◆ The data was collected in the specified data submission format for days when the price rose to 30 yen/kWh or more in the day-ahead market and the intraday market.

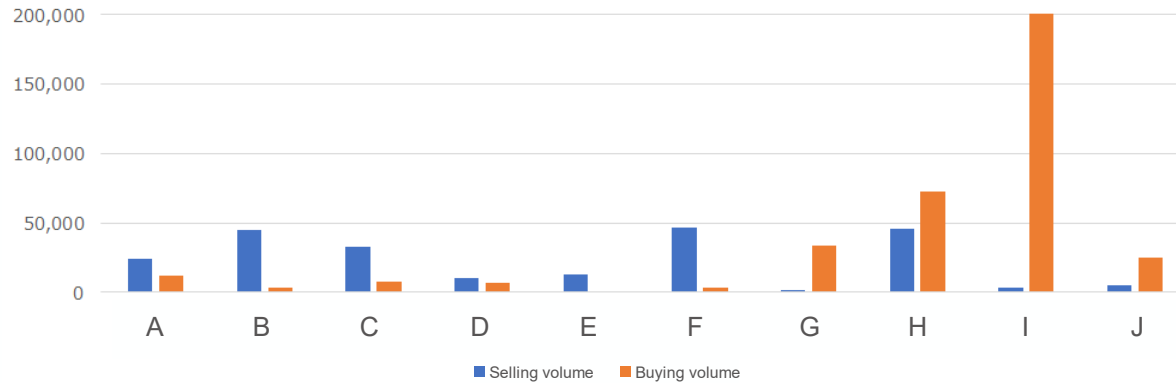
* SP: system price

◆ The supply capacity in the graph represents the cumulative total for the target days of each month.

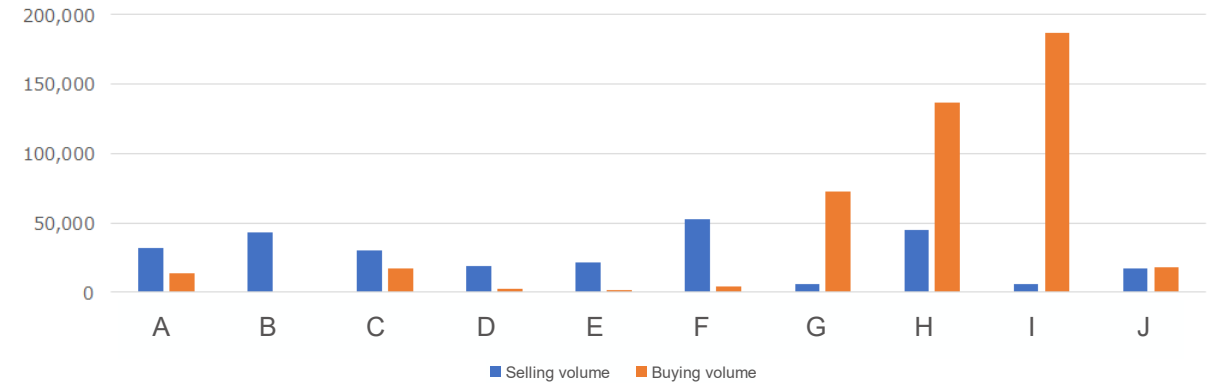
Intraday market for general electric utilities: Contract status by buyer and by seller

- Regarding the contracted volume in the intraday market for general electric utilities and JERA, electric companies A, B, C, D, E, and F were net sellers, while electric companies G, H, I and J were net buyers.

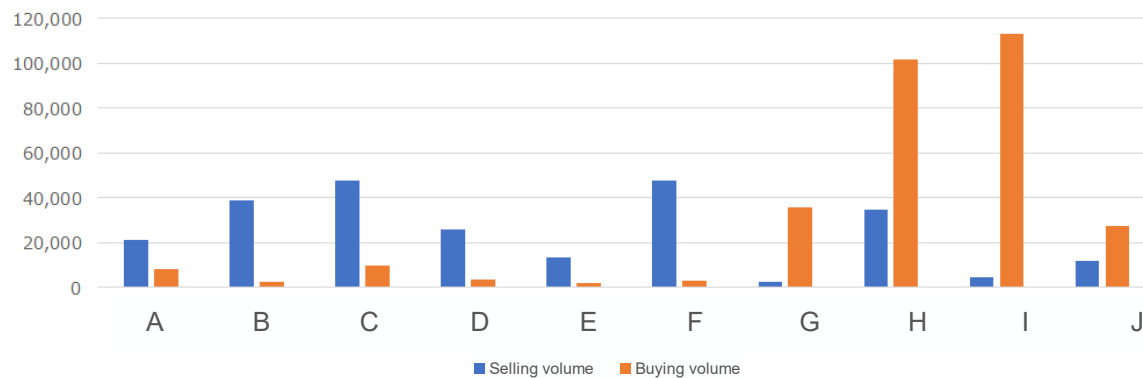
Contracted volume in the intraday market, April 2025 (Unit: MWh)



Contracted volume in the intraday market, May 2025 (Unit: MWh)



Contracted volume in the intraday market, June 2025 (Unit: MWh)

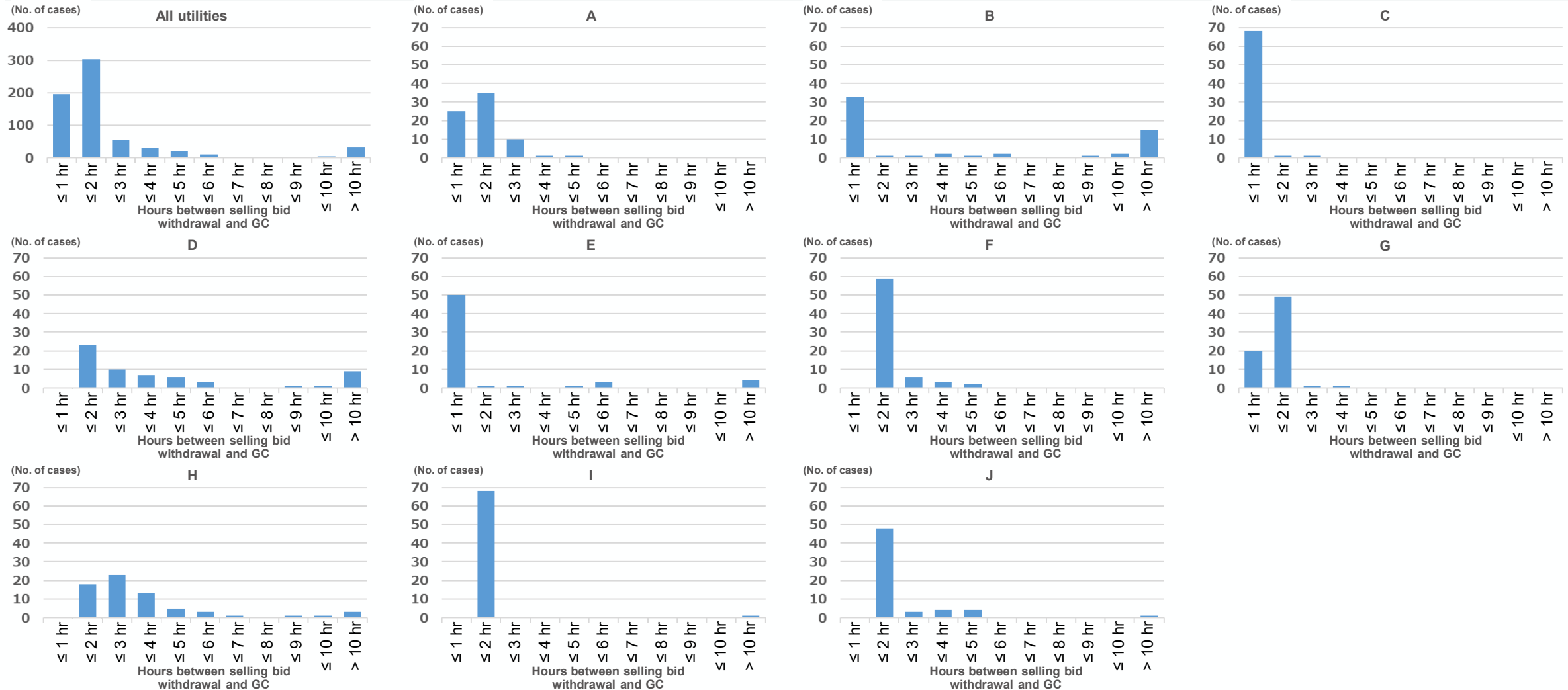


* Aggregated from JEPX data (undisclosed)

* Calculated for general electric utilities (excluding Okinawa Electric Power) and JERA

Status of withdrawal of selling bids by general electric utilities (distribution of number of cases by remaining time until GC)

- For the three sampling days (April 1, May 13, and June 19), the distribution of the number of utilities was checked to see how many hours before GC they withdrew their selling bids. It was found that the trend of the distribution concentrating in the period “more than one hour up to two hours before GC” has continued. The number of cases corresponding to “up to one hour” was 196 out of the total of 658, roughly the same level as in the previous quarter (191/625). No change was observed in the tendencies of individual companies.



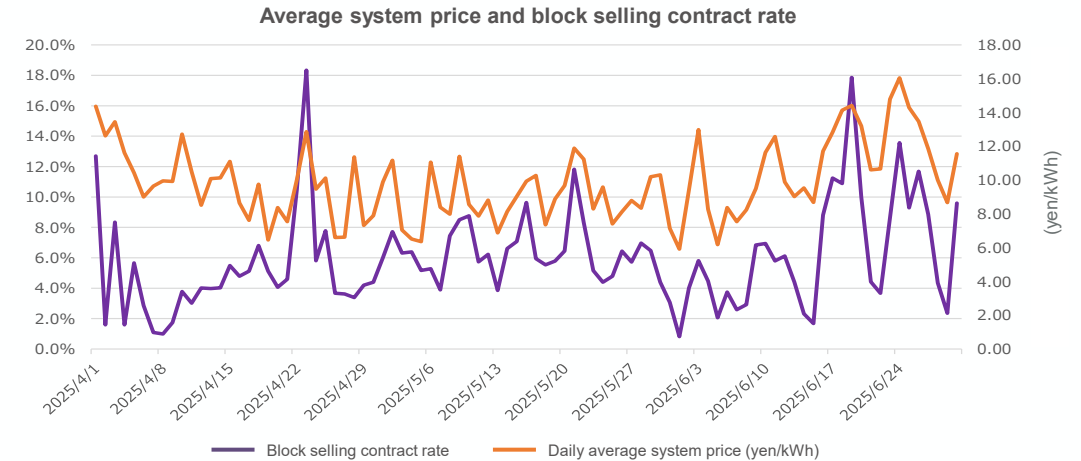
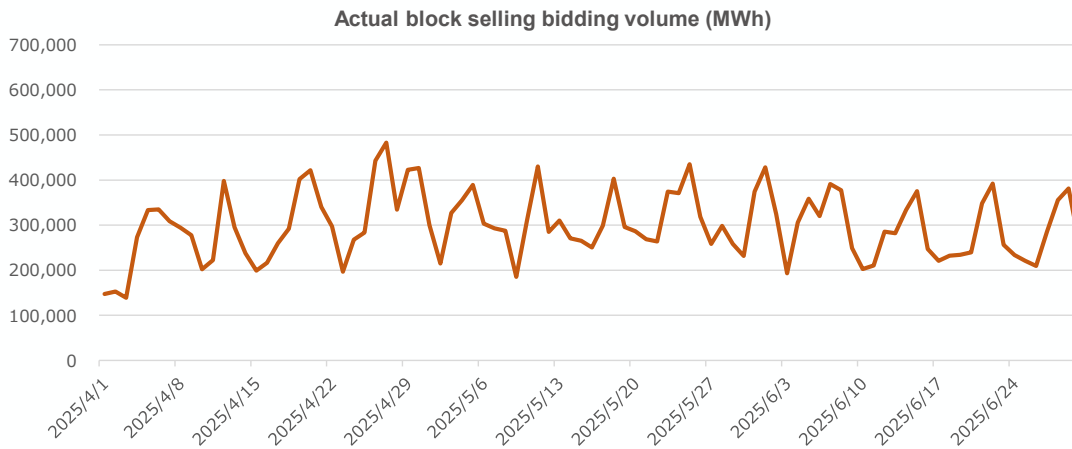
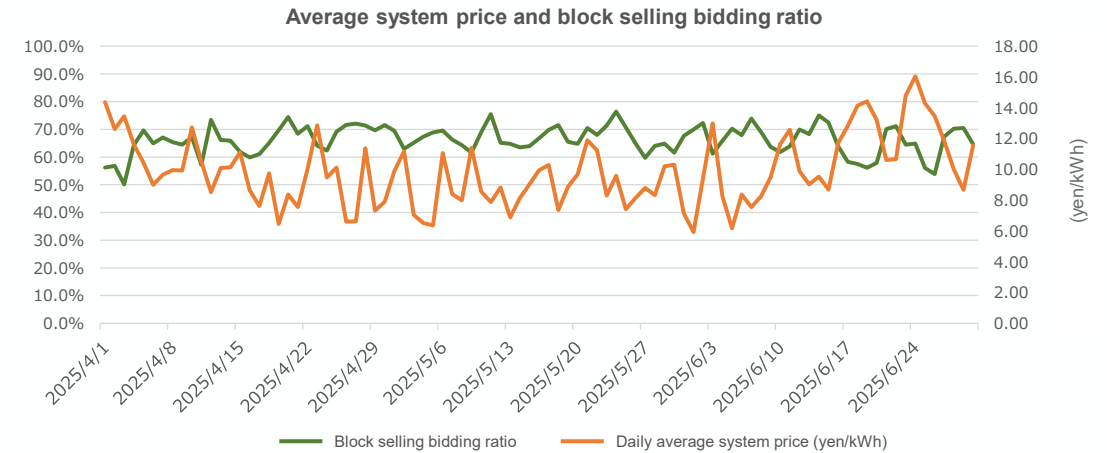
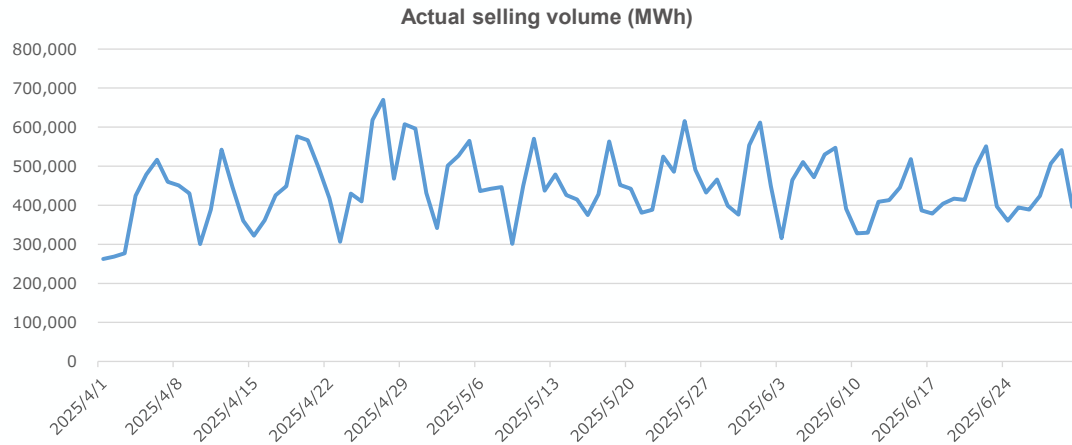
* The number of selling bids on the board was counted at 59 minutes and 59 seconds past every hour. The time until the GC was calculated with the time after which there were no selling bids on the board, was assumed as the withdrawal time.

* Only "00 minute" frames (e.g., 01:00) were counted, and "30 minute" frames (e.g., 01:30) were not counted. Frames with always 0 selling bids were excluded from the calculations.

* The secretariat sampled the characteristic day of each month: for April, the weekday with the highest daily average system price in April; for May, the weekday with the lowest daily average system price in May; for June, the weekday with the highest system price in the three months.

Status of block selling bidding

- The block selling bidding ratio continues to indicate a trend of being lower on days when the spot prices rise, and being higher on days when spot prices fall.
- The block selling contract rate continues to indicate a trend of being higher on days when spot prices rise and being lower on days when spot prices fall.
- When day-ahead market prices surge, the block selling bidding volume tends to decrease, while the contract rate tends to rise.



* Calculated based on data provided by general electric utilities (nine companies excluding Okinawa Electric Power) and JERA.

* The block bidding ratio is calculated as the ratio of the actual block bidding volume for which no buyer has been determined, (b), to the actual selling volume, (a).

(a) Actual selling volume = Total selling volume (for regular bids) – Gross bidding high price buying-back volume – Implicit auction selling volume

(b) Actual block bidding volume = Normal block bidding volume (excluding implicit auctions and gross bidding) + Gross bidding actual block selling volume*

(*) Gross bidding actual block selling volume = Gross bidding block selling volume – Gross bidding high price buying-back volume. If a negative value is obtained, it is counted as zero.

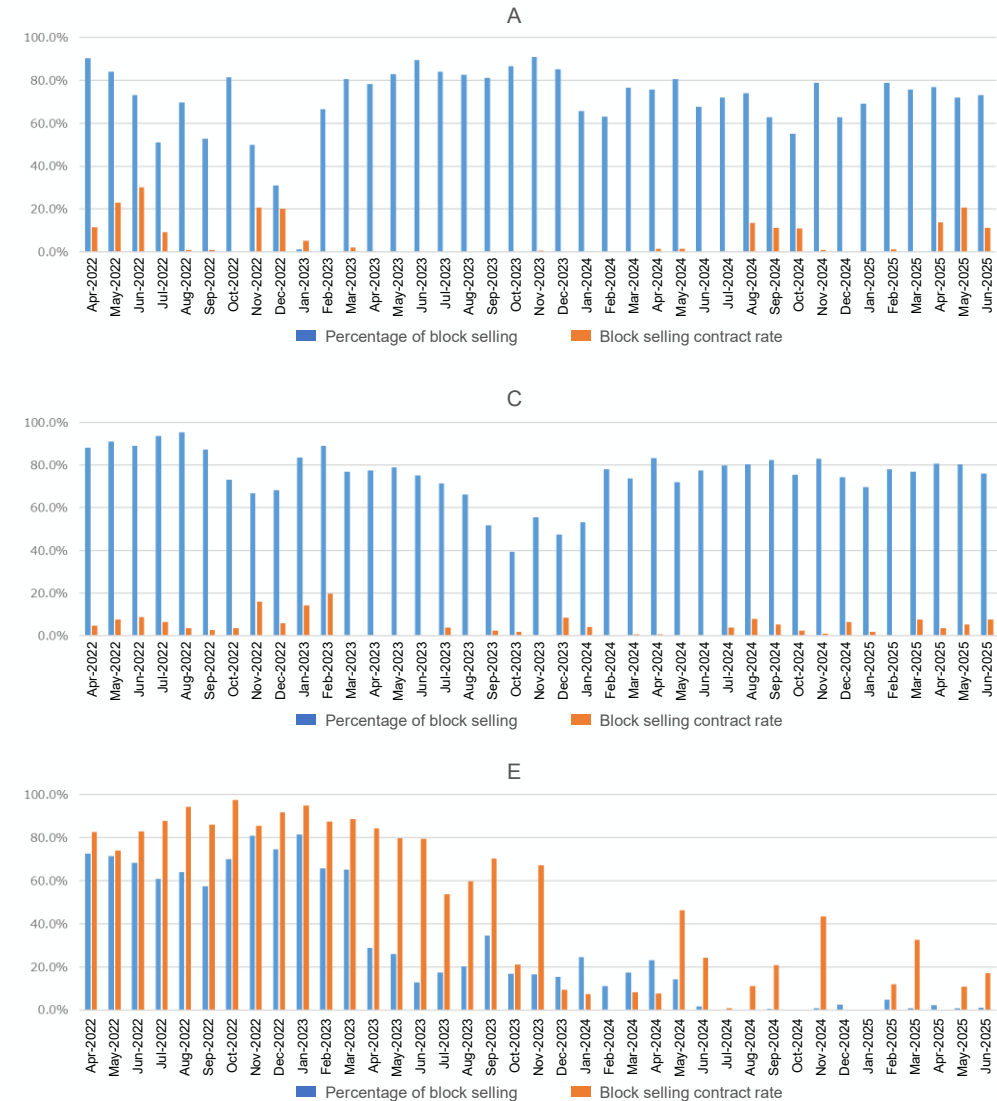
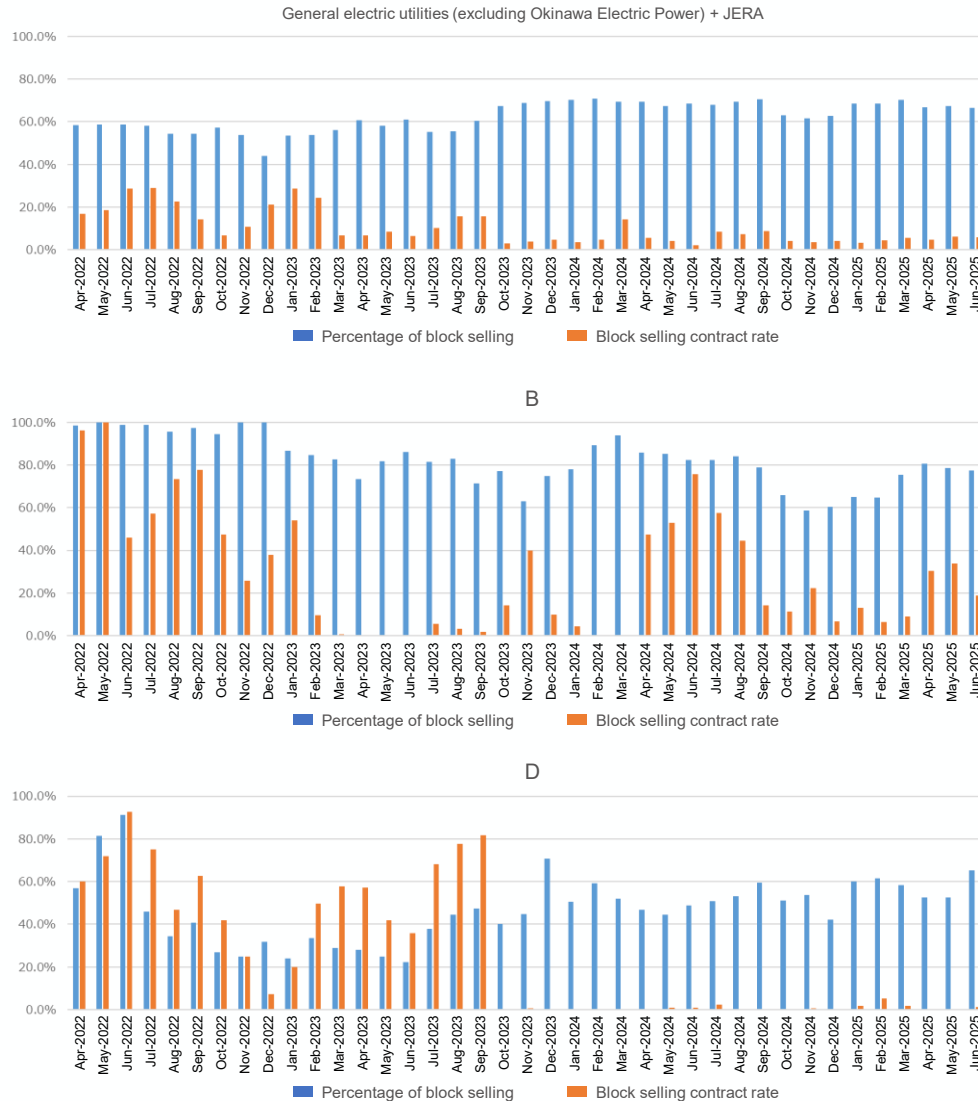
* The block selling contract rate is calculated as the ratio of actual contracted block volume, (c), to actual block bidding volume, (b).

(c) Actual contracted block volume = Normal contracted block volume (excluding implicit auctions and gross bidding) + Gross bidding actual contracted block selling volume**

(**) Gross bidding actual contracted block selling volume = Gross bidding contracted block selling volume – Gross bidding high price buying-back volume. If a negative value is obtained, it is counted as zero.

Monthly trends in block selling bidding ratio and contract rate by business operator (1/2)

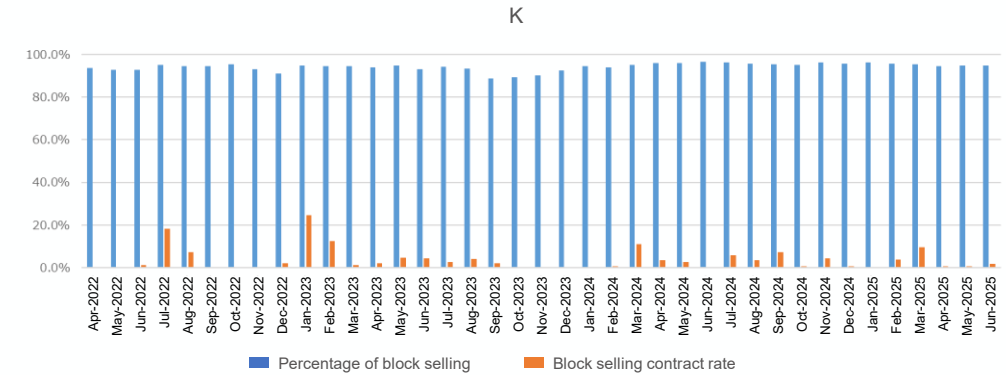
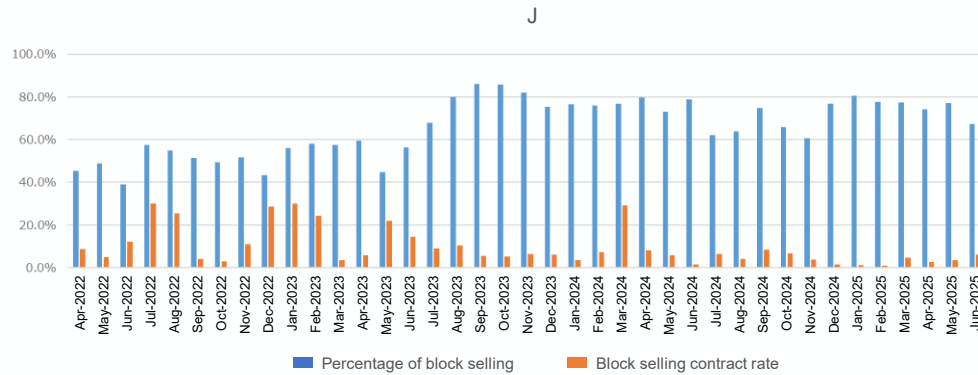
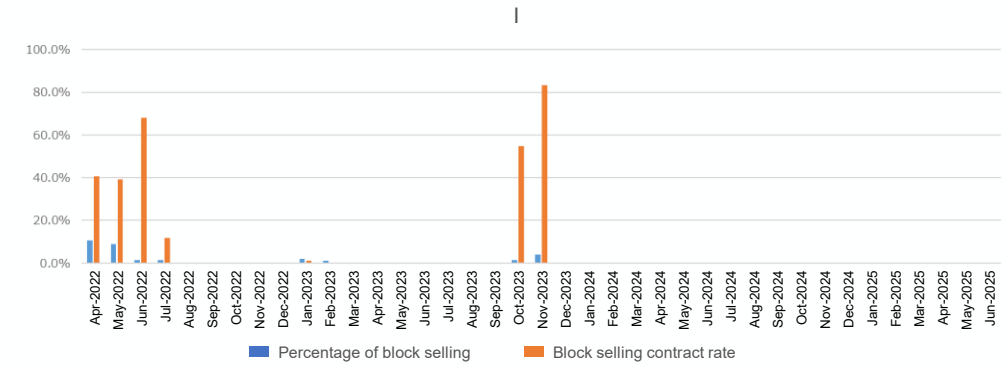
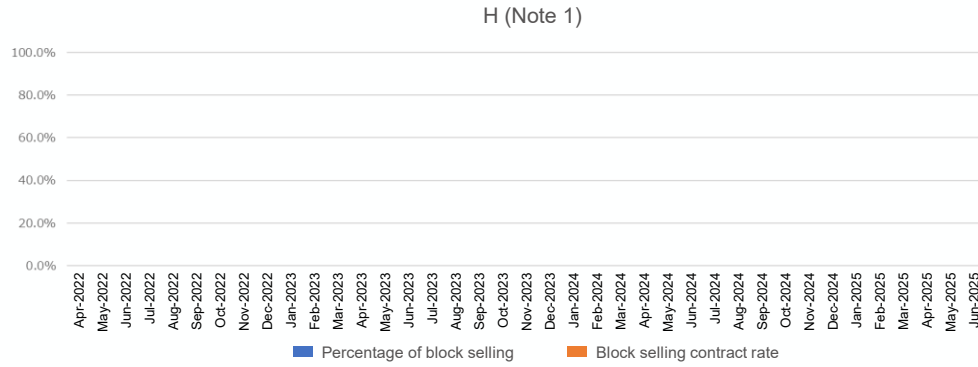
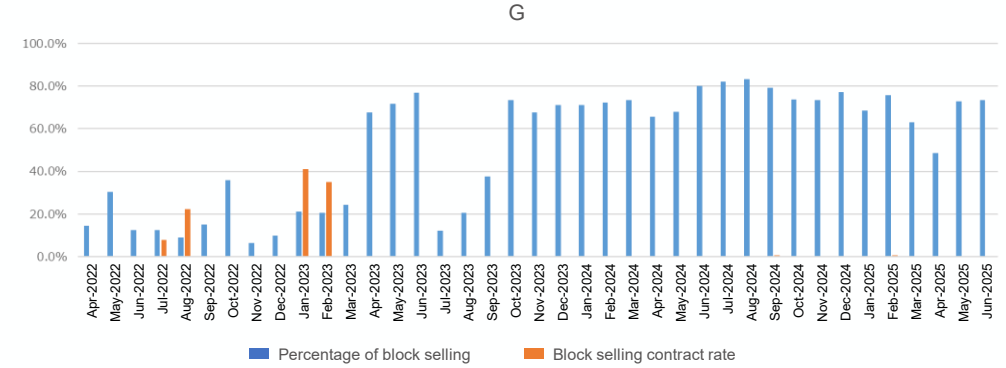
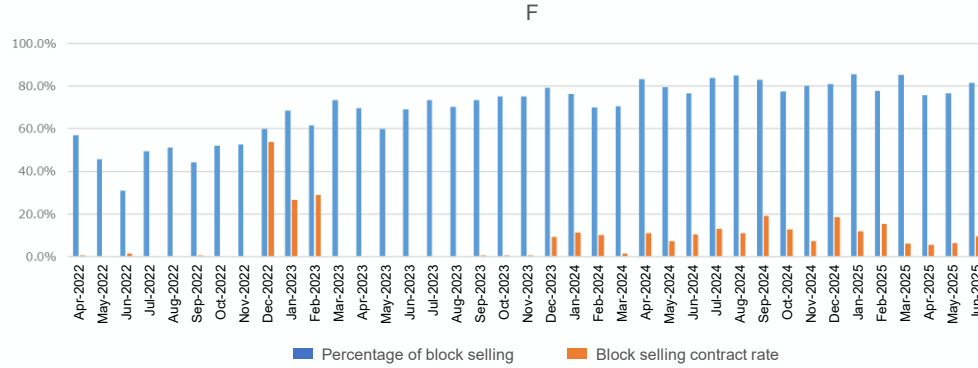
- Contract rates declined (especially for the electric company D) because, as a result of the suspension of gross bidding^(*), block selling bids for supplying some surplus electricity at 0.01 yen/kWh (for buying at marginal cost) were changed to supply it at marginal cost, as mentioned earlier.
- The block selling bidding ratio remained around 80% for electric companies B, C, and F, while it stayed relatively high at around 95% for electric company K.



* Calculated based on data provided by general electric utilities (nine companies excluding Okinawa Electric Power) and JERA.

(*)1: Although it has been suspended since October 1, 2023, its abolition was decided at the 10th Specialized Meeting for Policy Design and Monitoring held on June 27, 2025.

Monthly trends in block selling bidding ratio and contract rate by business operator (2/2)



Supply of power source to the market for wholesale electricity utilities (J-Power)

- To date, approximately 619,000 kW^{*5} (approximately 5%) of the total of 12 million kW^{*4} has been supplied. No progress has been seen compared to the same period last year.
- Further supply of power has not yet been decided for each company.

	Volume of supplied power	Discussion status, etc.
Hokkaido Electric Power	Approximately 200 million kWh ^{*3} supplied per year	Further supply of power is yet to be decided.
Tohoku Electric Power	50,000 kW ^{*2} already supplied	Further supply of power is yet to be decided.
TEPCO EP	30,000 kW ^{*1} already supplied	Further supply of power is yet to be decided.
Chubu Electric Power	18,000 kW ^{*1} already supplied	For the power sources subject to supply to the market, power supply contracts with J-POWER ended at the end of March 2021 (for the entire volume, including the volume already supplied). Further supply of power is yet to be decided.
Hokuriku Electric Power	10,000 kW ^{*1} already supplied	For the power sources subject to supply to the market, power supply contracts with J-POWER ended at the end of March 2021 (for the entire volume, including the volume already supplied). Further supply of power is yet to be decided.
Kansai Electric Power	35,000 kW ^{*2} already supplied	Further supply of power is yet to be decided.
Chugoku Electric Power	18,000 kW ^{*1} already supplied	Further supply of power is yet to be decided.
Shikoku Electric Power	30,000 kW ^{*1} already supplied	Further supply of power is yet to be decided.
Kyushu Electric Power	80,000 kW ^{*1} already supplied	Further supply of power is yet to be decided.
Okinawa Electric Power	10,000 kW ^{*1} already supplied	Further supply of power is yet to be decided.

Source: Information provided by general electric utilities

1: Sending end output, *2: Starting output, *3: Annual total power generation amount, *4: Total power output excluding approximately 5 million kW of pumped storage power plant output,

*5: For Hokkaido Electric Power, an estimation from the volume already supplied is indicated for convenience sake. The data does not include volumes newly supplied to deliver to the base load market.

Status of competitive bidding, etc., for public hydroelectric business

- Local governments manage hydroelectric power generation projects with a total installed capacity of approximately 2.31 million kW. Among them, 1.72 million kW (75%) have been contracted through general competitive bidding.
This represents an increase of approximately 0.31 million kW compared to the January to March 2025 period, which is mainly because local governments with long-term discretionary contracts ended in FY2024 shifted to general competitive bidding or other options in the April to June 2025 period.
- Of the remaining 0.59 million kW installations, 31% continue to be under long-term discretionary contracts with general electric utilities, and 69% consist of FIT power sources for sale and installations under modification to become eligible for FIT, etc.

Public hydroelectric power generation facilities (as of April 1, 2025)

- Number of power plants: 312
- Total output: Approx. 2.31 million kW

The table to the right shows examples of hydroelectric power sales contracts among 24 local governments in which power is being delivered to successful bidders determined through competitive bidding or public proposals (as of June 30, 2025)

Business entity	Number of hydroelectric power plants	Total maximum output(kW)	Contract type	Successful bidder
Hokkaido	5	50,500	General competitive bidding	SB Power
Iwate Prefecture	10	133,170	Public proposal	Tohoku Electric Power, Tohoku Electric Power Frontier
	1	1,400	Public proposal	Tohoku Automotive Industry Green Energy Promotion Association
	1	450	Public proposal	Kuji Regional Energy
	2 ^{*1}	3,500	Public proposal	Tohoku Electric Power Network => Kuji Regional Energy Co., Ltd.
	1 ^{*1}	61	Public proposal	Kuji Regional Energy
Akita Prefecture	12	92,900	Public proposal	Tohoku Electric Power, Tohoku Electric Power Frontier
	3 ^{*1}	9,250	Public proposal	Tohoku Network (=> Local Denki specified wholesale)
	1 ^{*1}	8,800	Public proposal	Tohoku Network (=> Kazuno Power specified wholesale)
Yamagata Prefecture	6	50,700	Public proposal	Tohoku Electric Power, Tohoku Electric Power Frontier
	2	8,700	Public proposal	Yamagata Power Supply
	4 ^{*1}	26,600	Public proposal	The Earth Club
	1 ^{*1}	420	Public proposal	Yamagata Power Supply
Tochigi Prefecture	6 ^{*4}	48,200	Public proposal	TEPCO Energy Partner
Gunma Prefecture	6 ⁵	43,490	Public proposal	Marubeni Power Retail
	5 ⁵	24,470	Public proposal	Octopus Energy
	15 ^{2,5}	119,872	General competitive bidding	KEPCO
Tokyo	3	36,500	Public proposal	Tokyo Gas
Kanagawa Prefecture	11 ⁵	347,589	Public proposal	SB Power
Yamanashi Prefecture	10 ⁵	74,960	Public proposal	TEPCO Energy Partner
	5 ⁵	42,500	General competitive bidding	Palsystem Power, The Earth Club, UPDATER
	1 ⁵	1,100	Public proposal	Visionary Power
	1 ²	380	Public proposal	Ennet
Toyama	11 ¹⁶	87,400	General competitive bidding	Hokuriku Electric Power Company
Nagano Prefecture	12 ³	69,080	Public proposal	Zero Watt Power
	1	1,500	Public proposal	Chubu Electric Power Miraiz Company
	13 ^{*1}	45,009	Public proposal	Zero Watt Power
Niigata Prefecture	7	100,200	General competitive bidding	SB Power
Kyoto Prefecture	1	11,000	General competitive bidding	Mitsuuroko Green Energy
Tottori Prefecture	1	1,100	General competitive bidding	Tottori Citizen's Electric Power
Okayama Prefecture	10 ⁵	54,680	General competitive bidding	Zero Watt Power
	1 ²	180	General competitive bidding	Zero Watt Power
Yamaguchi Prefecture	8 ⁵	50,550	Public proposal	Mitsuuroko Green Energy
	1 ²	260	Public proposal	Mitsuuroko Green Energy
Tokushima Prefecture	3 ⁶	85,000	Public proposal	Shikoku Electric Power Company
	1 ⁶	2,500	Public proposal	Tokushima Naka
Ehime Prefecture	8 ⁶	56,700	General competitive bidding	Shikoku Electric Power Company
Kochi Prefecture	3 ⁶	390,200	Public proposal	Shikoku Electric Power Company
Total		1,412,793		

Total number of power plants: 193

Total maximum output: 1,723,871 kW

[74.6% of total hydropower output]

Source: Information provided by local governments

^{*1} These numbers were revised because starting from the July to September 2021 report, FIT power sources that had shifted to public proposals or general competitive bidding, have been subjected to adjustment. In Iwate Prefecture, two plants shifted in the October to December 2024 period and one plant in the January to March 2025 period. In Akita Prefecture, one plant shifted in the October to December 2024 period. In Nagano Prefecture, three plants shifted in the April to June 2025 period.

^{*2} These power plants shifted to general competitive bidding or public proposals after their termination of FIT. In Gunma Prefecture, one plant shifted from FIT to Non-FIT in March 2025 through general competitive bidding.

^{*3} For Nagano Prefecture, among those subject to public proposals, one power plant was replaced to increase output, and was shifted to FIP in the October to December 2024 period.

^{*4} For Tochigi Prefecture, the number of power plants subject to public proposals was changed from eight to six in the January to March 2024 period, because two of them are currently being replaced to become FIT-eligible.

^{*5} The prefectures of Gunma, Kanagawa, Yamanashi, Okayama, and Yamaguchi shifted to general competitive bidding or public proposals in the April to June 2024 period, after the ending of their long-term discretionary contracts in FY2023.

^{*6} The prefectures of Toyama, Tokushima, Ehime, and Kochi shifted to general competitive bidding or public proposals in the April to June 2025 period, after the ending of their long-term discretionary contracts in FY2024.

Status of competitive bidding, etc., for public hydroelectric business

- According to questionnaire surveys of general electric utilities regarding the status of long-term discretionary contract cancellations, there were no requests to discuss, or consultations about premature termination from local governments during this period.

Compiled from responses from general electric utilities regarding cancellation and review of electricity sales contracts with local governments from April 2025 onwards

[Status of negotiations for premature cancellation of existing contracts]

During this period, local governments did not request or consult to cancel or review the long-term discretionary contract with general electric utilities.

On the other hand, requests were submitted to general electric utilities for the calculation of a penalty fee in the event of an early termination of a long-term discretionary contract for a power plant.

Reference: Compiled from responses to regular questionnaires on efforts related to power sales contracts by local governments since April 2025

■ Moves toward premature cancellation of existing contracts with general electric utilities

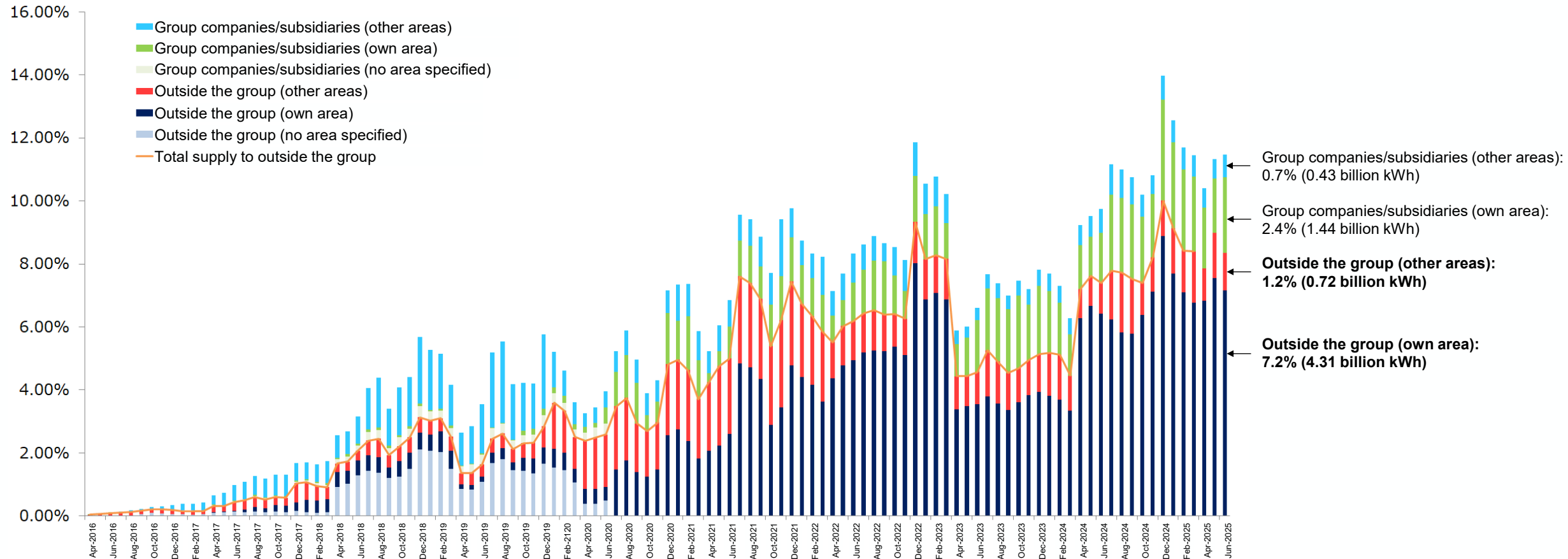
- Among the local governments whose long-term discretionary contracts with general electric utilities expired by FY2023 and who shifted to power sales contracts based on general competitive bidding or public proposals, those whose current contracts expired at the end of FY2024 have completed the same procedures and entered into new contract periods.
- All local governments whose long-term discretionary contracts with general electric utilities expired at the end of FY2024 have shifted to power sales contracts based on general competitive bidding or public proposals, and entered into new contract periods.
- Local governments with contracts continuing to the end of FY2025 generally maintain their long-term discretionary contracts until the expiration of the period, without prematurely terminating them. After the termination of long-term discretionary contracts, they plan to shift to general competitive bidding or public proposals.
- As of FY2026 and beyond, there remains one power plant that continues to have a long-term non-FIT discretionary contract with a general electric utility.

■ Unique efforts by local governments regarding power sales contracts

- Establishment of original electricity rate plans in current power sales contracts (e.g., a plan with added environmental value, a plan for investment promotion, a plan for local industry promotion, a discount plan for people relocated from other areas)
- Implementation of the following unique efforts aimed at local production for local consumption in contracts for which the successful bidder is determined through general competitive bidding, etc.
 - ✓ In calls for public proposals, division of electricity sales into a general quota and a quota of new regional entrants within the prefecture
 - ✓ Introduction of a local production for local consumption-type PPA (Gunma model), which matches electricity consumers with retailers
 - ✓ Supply to public facilities and public transportation systems operated by local governments
 - ✓ Conclusion of contracts on condition that the entire volume of electricity is supplied within the prefecture

Status of OTC transactions by general electric utilities

- As of June 2025, the ratio of supply from general electric utilities through OTC transactions to total demand was 11.5% (6.89 billion kWh, 1.2 times that of the same period last year)
- OTC wholesale supplies to external parties (8.4%, 5.02 billion kWh) accounted for 39.2% of the demand for electricity from new entrants (12.82 billion kWh).



Source: Information provided by general electric utilities (including JERA), etc.

* Group companies are defined as companies with a capital relationship of 20% or more.

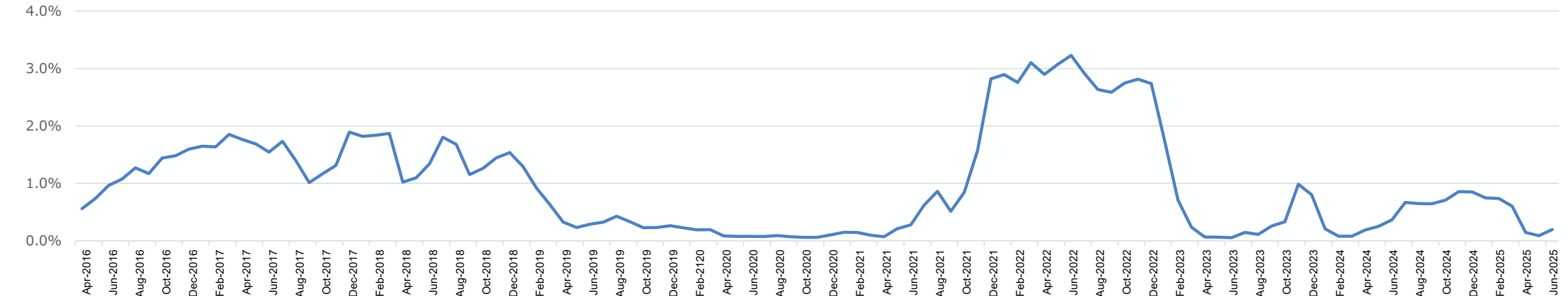
* Notes on the "area": Until June 2020, the companies' responses were mixed, with some answering about the "(1) power receiving area" and others about the "(2) usage area". Most responses answering about "(2) usage area" reported "no area specified". To understand the situation more accurately, we notified the utilities that their responses should always refer to the "(1) power receiving area", starting in the July-September 2020 period. The results reflect this change and as a result, the "no area specified" option was eliminated.

* For JERA, the calculation excluded the wholesale portion of TEPCO Energy Partner and Chubu Electric Power Miraiz.

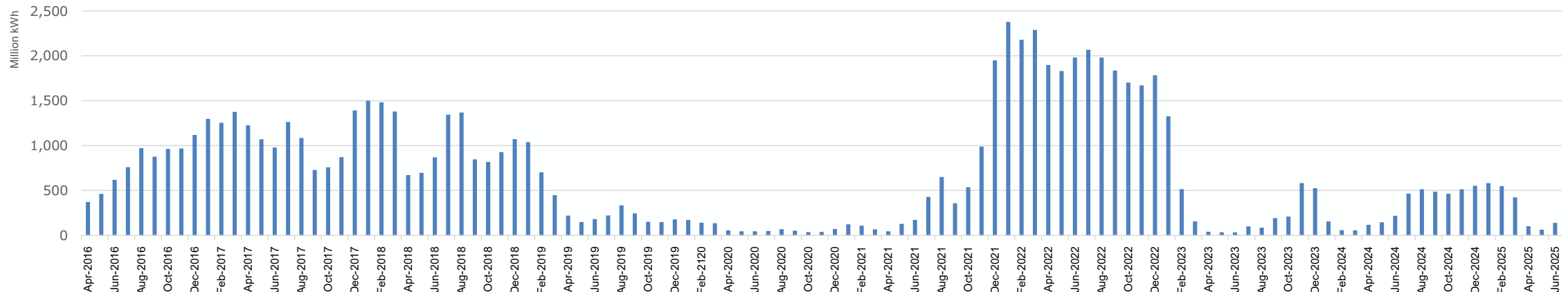
Trends in regular BU electricity sales

- As of June 2025, the ratio of regular BU electricity sales to total demand was 0.2% (138 million kWh). Note that in FY2025 (and from FY2024 in the Hokkaido and Okinawa areas), the Hokkaido, Hokuriku, Kansai, Chugoku, Kyushu, and Okinawa areas have not conducted regular BU.

10 utilities' regular BU electricity sales as a percentage of total demand (%)



Total regular BU electricity sales by 10 utilities (kWh)



【 Quarterly report 】

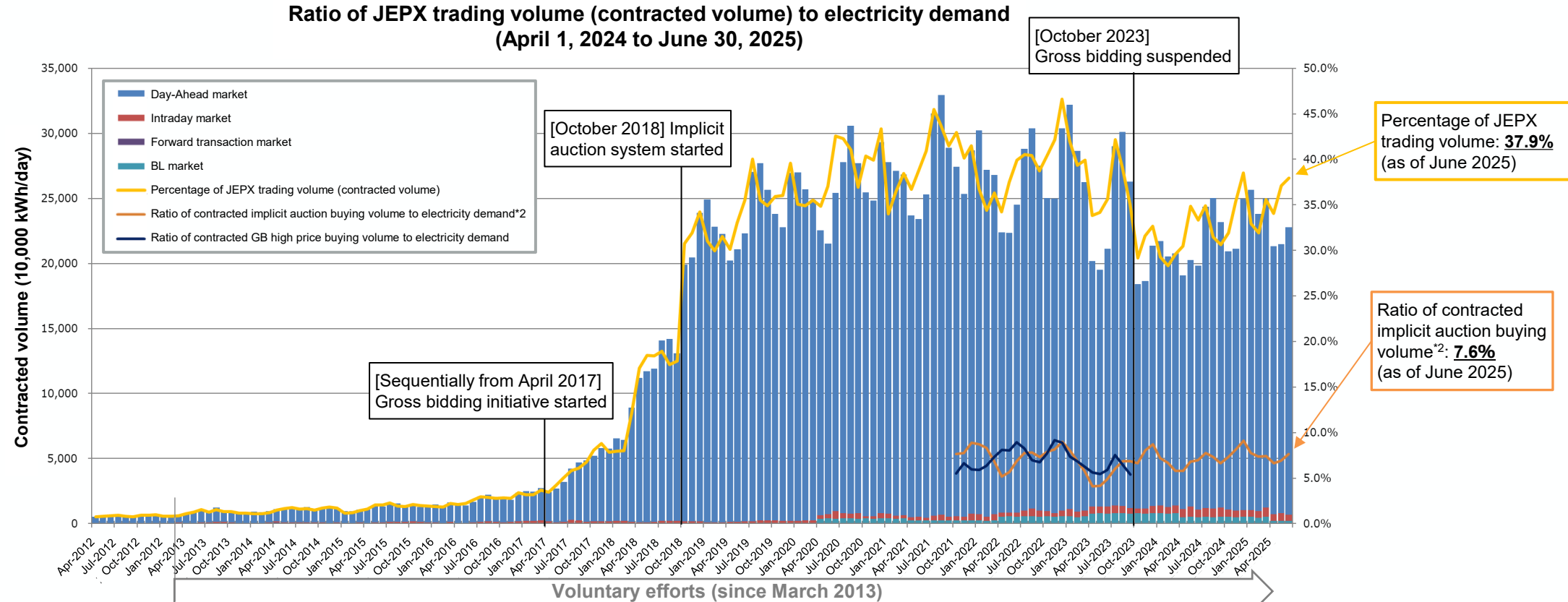
- **Wholesale electricity market**
 - JPEX market
 - Day-Ahead market
 - Intraday market
 - Forward transaction market
- **Voluntary efforts by general electric utilities, etc.**
 - Supply of surplus electricity to JEPX market
 - Trading status and sell bid withdrawal status in the intraday market
 - Status of block selling bidding
 - Supply of power source to the market for wholesale electricity utilities
 - Status of bidding, etc. for public hydroelectricity business
 - Status of OTC transactions

【Medium- to long-term trend report】

- **Wholesale electricity market**
 - JPEX market
 - Trends in contracted volume
 - Trends in contracted price
 - Trends in the market splitting occurrence rate
 - JEPX spot price and fuel cost
- **Retail market**
 - Trends in new entrants share by area
 - Market share by area
 - Trends in electricity unit price
 - Trends in switching
 - Average unit price of low-voltage rates
- **Gas market**
 - Status of OTC transactions of general gas utilities
 - Usage status of Start-up wholesale measure

Trends in the ratio of JEPX trading volume (contracted volume) to electricity demand

- As of June 2025, the ratio of JEPX trading volume (contracted volume*¹) to Japan's electricity demand was 37.9%.
- The ratio of contracted implicit auction buying volume*² to electricity demand was 7.6%.



	2012/04	2013/04	2014/04	2015/04	2016/04	2017/04	2018/04	2019/04	2020/04	2021/04	2022/04	2023/04	2024/04	2025/04	2025/06
Percentage of JEPX trading volume	0.7%	1.1%	1.5%	1.6%	2.1%	3.5%	17.1%	30.1%	34.8%	36.7%	34.2%	33.8%	30.5%	34.1%	37.9%
(Percentage of day-ahead market)	0.7%	1.0%	1.4%	1.5%	2.1%	3.2%	16.9%	29.9%	33.8%	36.0%	32.9%	31.6%	28.7%	32.9%	36.8%
(Percentage of intraday market)	0.001%	0.1%	0.1%	0.1%	0.004%	0.3%	0.2%	0.2%	0.4%	0.4%	0.5%	0.9%	1.0%	0.9%	0.8%
(Percentage of BL market)	—	—	—	—	—	—	—	—	0.6%	0.4%	0.8%	1.3%	0.8%	0.3%	0.3%

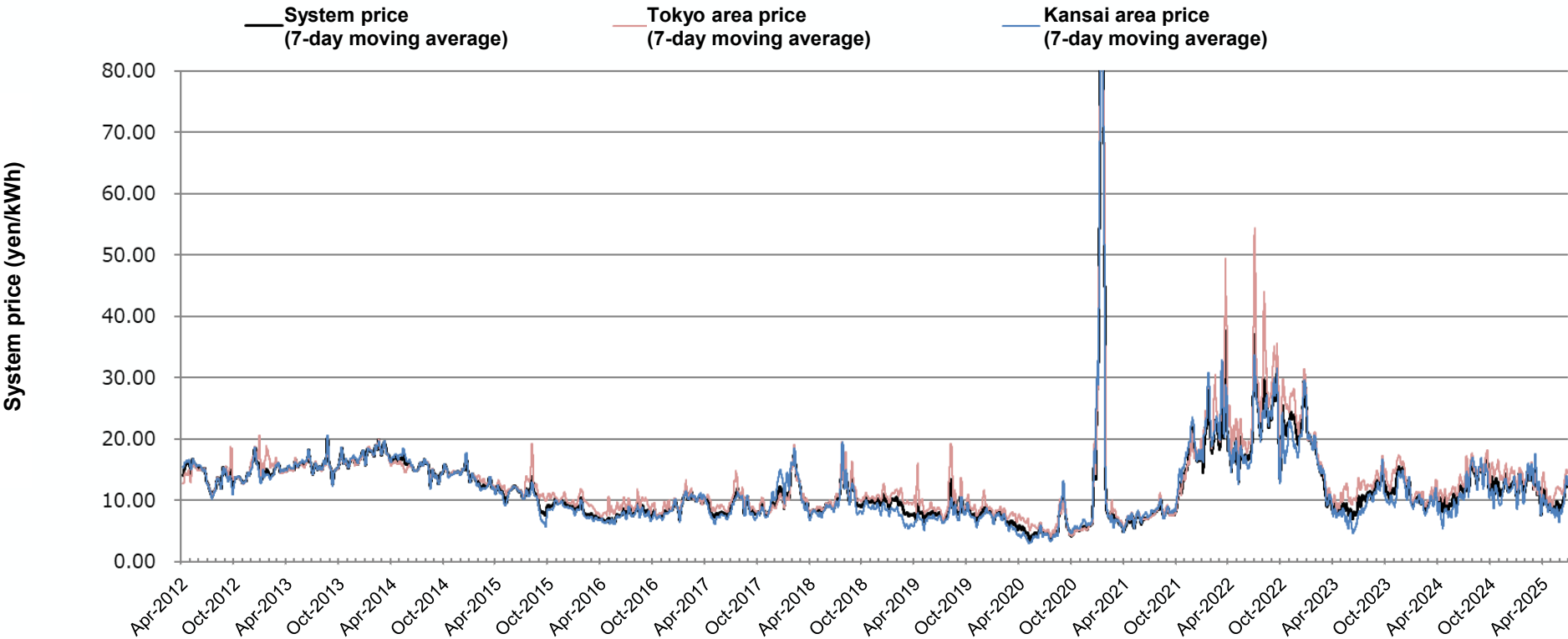
*1 Total of contracted buying volume of each business operator and each frame (including contracted buying volume when the same business operator has contracted for both buying and selling in the same frame, such as through its own implicit auctions).

*2 The contracted implicit auction buying volume is the sum of the contracted volumes of accounts that are determined to be implicit auctions, based on their attributes in the JEPX user account data.

Price trends in the day-ahead market

- Since April 2023, the daily average system price has generally fluctuated between 8 yen/kWh and 18 yen/kWh, with the most recent quarterly average at 9.86 yen/kWh.
- In FY2024, the price gap between east and west was around 2 yen/kWh, approximately 0.5 yen/kWh smaller than in FY2023.

Day-Ahead Market: Trends in system prices
(April 1, 2012 to June 30, 2025)

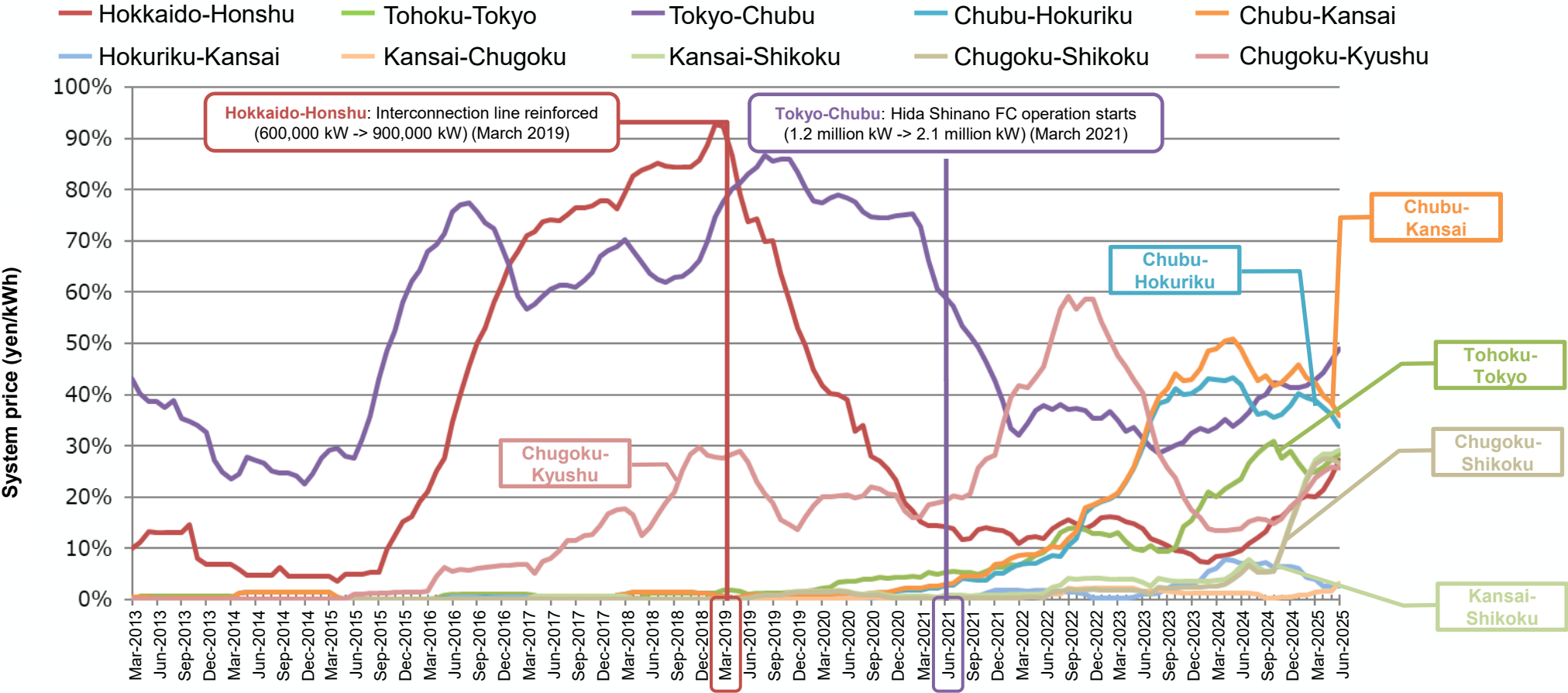


(yen/kWh)	FY2012 average	FY2013 average	FY2014 average	FY2015 average	FY2016 average	FY2017 average	FY2018 average	FY2019 average	FY2020 average	FY2021 average	FY2022 average	FY2023 average	FY2024 average	Current quarter average
System price	14.43	16.51	14.67	9.78	8.46	9.72	9.76	7.93	11.21	13.46	20.41	10.74	12.29	9.86
Tokyo area price	14.75	16.44	14.63	10.99	9.32	10.15	10.68	9.12	12.02	14.27	23.50	12.20	13.66	11.86
Kansai area price	14.32	16.62	14.71	9.37	8.29	9.81	8.88	7.18	11.06	14.05	19.54	9.74	11.70	9.31

Trends in the occurrence rate of market splitting between each area

- For Tokyo-Chubu, the splitting rate has remained high since March 2025.
- For Chubu-Hokuriku and Chubu-Kansai, the splitting occurrence rate is hovering around 40%.
- For Kansai-Shikoku and Chugoku-Shikoku, the splitting occurrence rate has been rising significantly since November 2024.
- For Hokkaido-Honshu and Chugoku-Kyushu, the splitting occurrence rate is on an upward trend.

Day-Ahead market: Trends in monthly splitting occurrence rate (12-month moving average)
(April 2013 to June 2025)



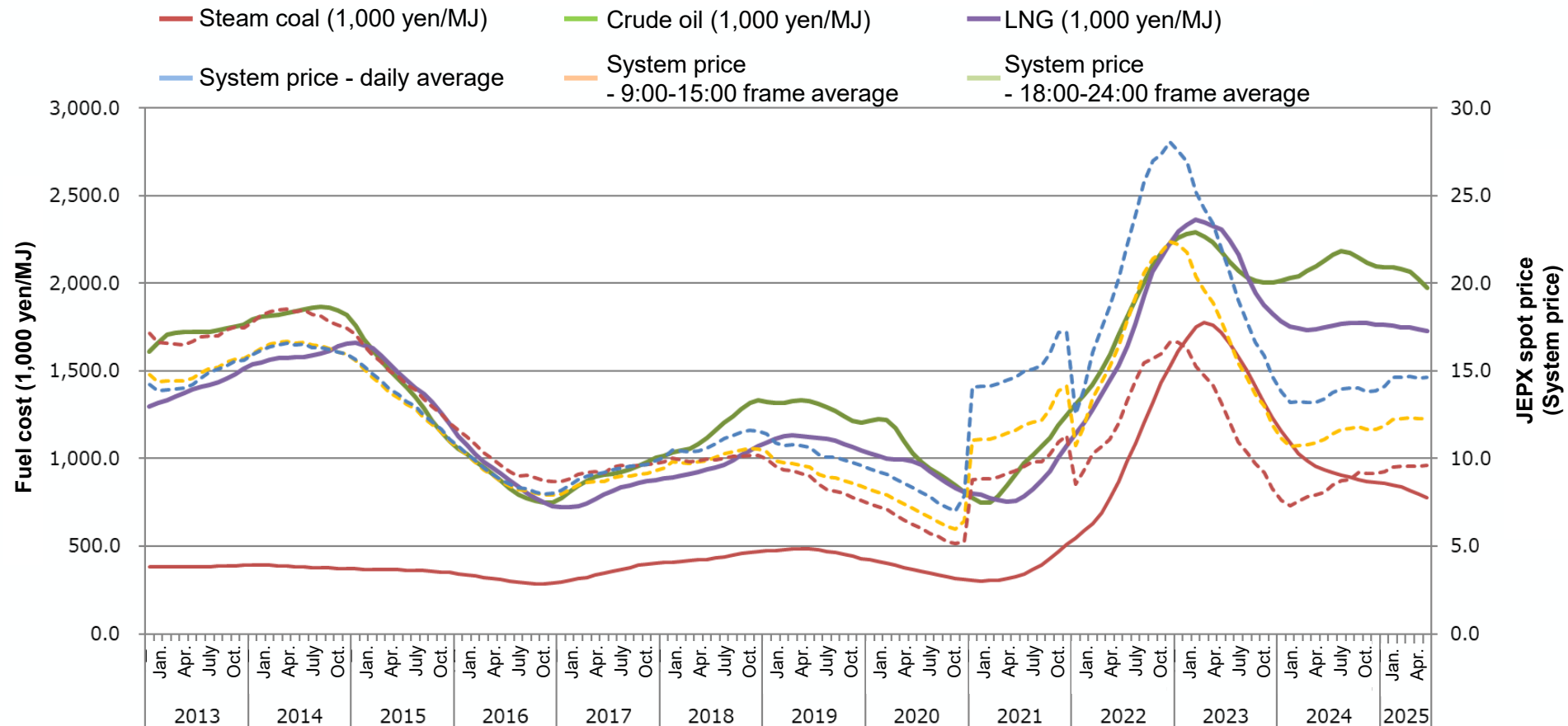
* Monthly splitting occurrence rate (12-month moving average): The 12-month moving average of the monthly sum of the percentage of the frames in which different area prices were observed between adjacent areas, among all 30-minute frames in the day-ahead market.

* Spot transaction in the Hokkaido area was suspended from September 7 to 26, 2018, due to the effects of the 2018 Hokkaido Eastern Ibari Earthquake. Calculations excluded the period of suspension.

JEPX spot price and fuel cost

- Over the long term, the trend of JEPX spot prices has been close to that of LNG and crude oil prices.
- Fuel costs maintained a downward trend since the beginning of 2023, but recent LNG prices have leveled and are closest to spot prices in terms of price trends.

**Trends in JEPX spot prices and fuel costs (12-month moving average)
(January 2013 to June 2025)**



Source: Prepared by the Electricity and Gas Market Surveillance Commission based on the Trade Statistics of Japan, Ministry of Finance (as of May 7, 2025)

* Fuel costs are import CIF prices aggregated based on the calorific values shown in the thermal power generation fuel results in the Electricity Survey Statistics.

* The system price plummeted in January 2022 because the 12-month moving average from February 2021 to January 2022 was used, and thus a spike in the single monthly price for January 2021 was not included in the calculation.

* Imports of C heavy oil were zero for many months since April 2024, and therefore the price trend has been replaced with that of crude oil starting from the April to June 2025 period.

【 Quarterly report 】

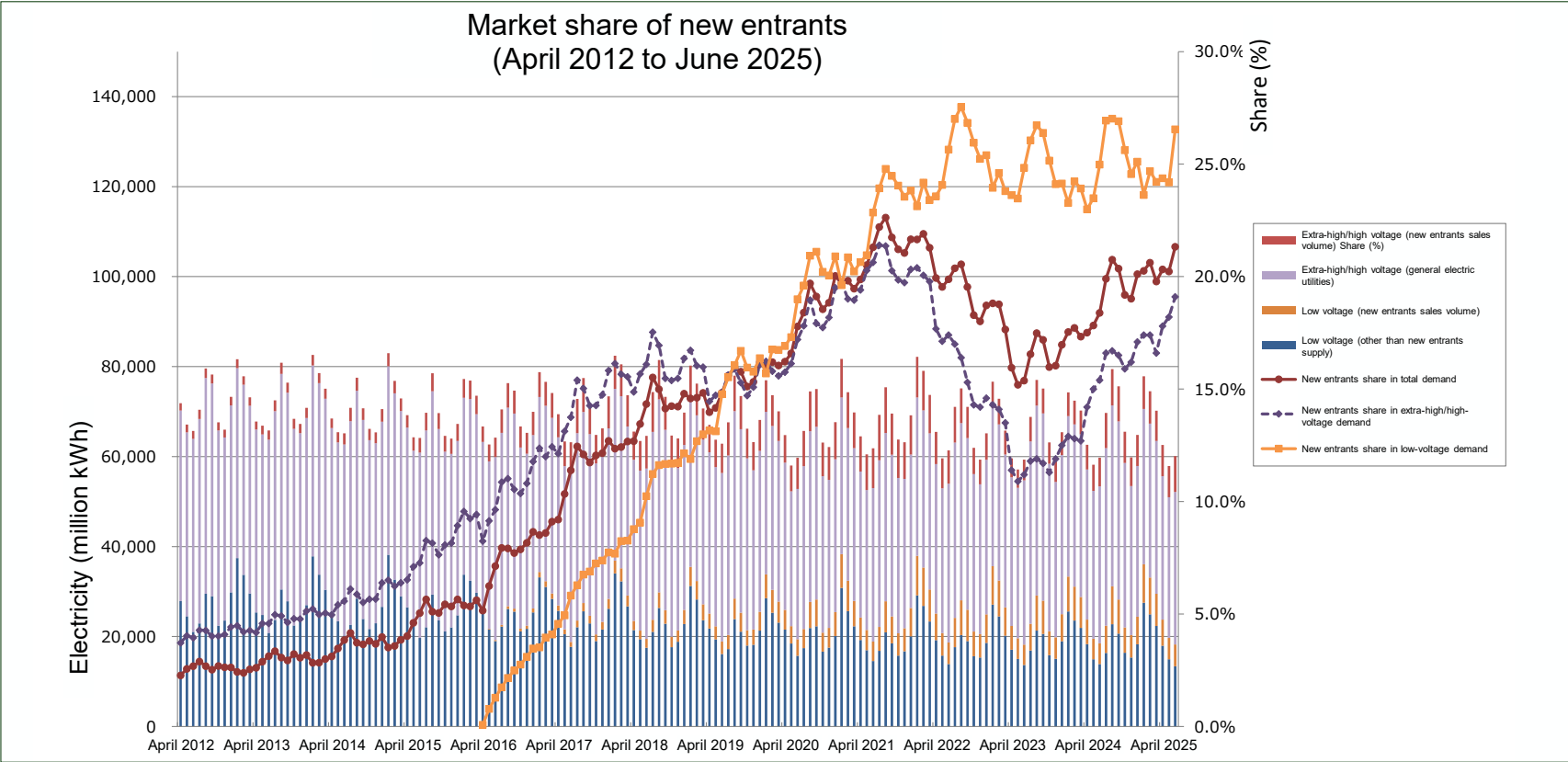
- **Wholesale electricity market**
 - JPEX market
 - Day-Ahead market
 - Intraday market
 - Forward transaction market
- **Voluntary efforts by general electric utilities, etc.**
 - Supply of surplus electricity to JEPX market
 - Trading status and sell bid withdrawal status in the intraday market
 - Status of block selling bidding
 - Supply of power source to the market for wholesale electricity utilities
 - Status of bidding, etc. for public hydroelectricity business
 - Status of OTC transactions

【Medium- to long-term trend report】

- **Wholesale electricity market**
 - JPEX market
 - Trends in contracted volume
 - Trends in contracted price
 - Trends in the market splitting occurrence rate
 - JEPX spot price and fuel cost
- **Retail market**
 - Trends in new entrants share by area
 - Market share by area
 - Trends in electricity unit price
 - Trends in switching
 - Average unit price of low-voltage rates
- **Gas market**
 - Status of OTC transactions of general gas utilities
 - Usage status of Start-up wholesale measure

Trends in new entrants share

- The share of new entrants in total electricity demand on the electricity sales volume basis has recently shown an upward trend.
- As of June 2025, the share of new entrants in total demand was approximately 21.3%, their share in extra-high/high-voltage demand was approximately 19.1%, and their share in low-voltage demand was approximately 26.6%.

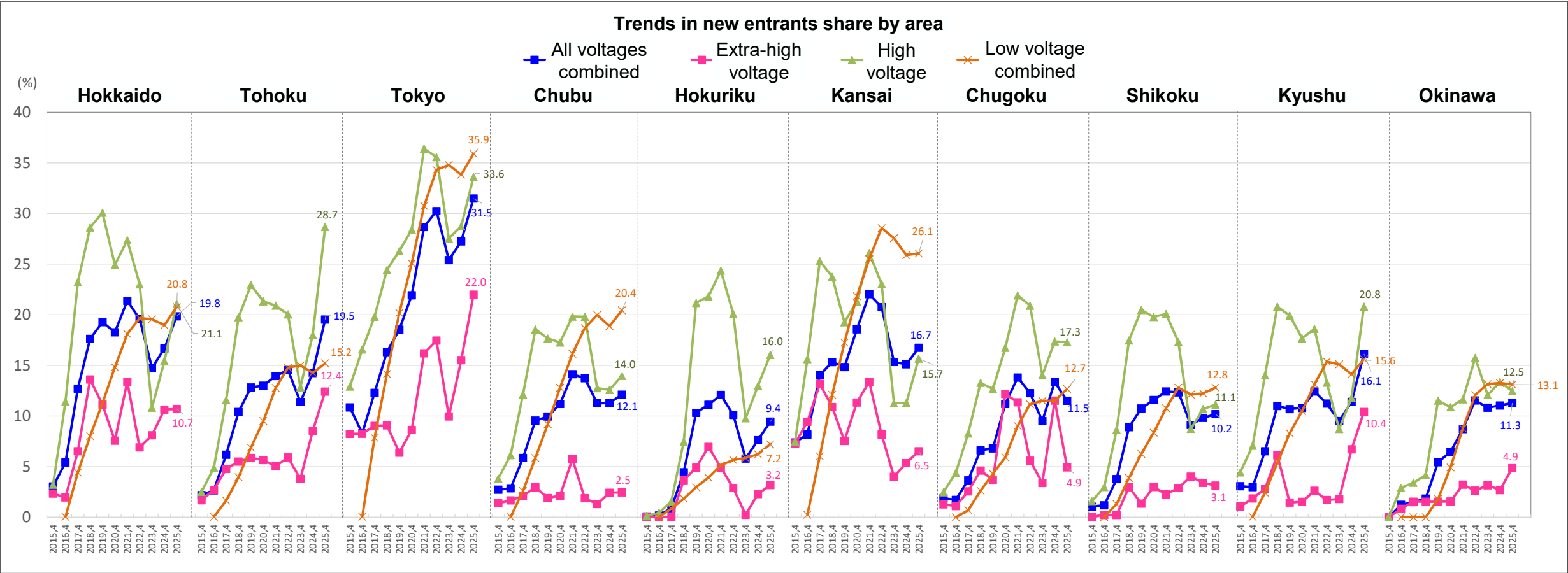


* “New entrants” refers to electricity retailers other than general electric utilities. Subsidiaries of general electric utilities are also included in new entrants.
(Source: Monthly electricity generation/reception report, Electricity Trading Report)

	2012/4	2013/4	2014/4	2015/4	2016/4	2017/4	2018/4	2019/4	2020/4	2021/4	2022/4	2023/ 4	2024/4	2025/4	2025/6
New entrants share in total demand	2.3%	2.6%	3.1%	4.0%	5.2%	9.2%	12.7%	14.0%	16.2%	19.9%	19.9%	16.0%	17.5%	20.3%	21.3%
New entrants share in extra-high/high-voltage demand	3.7%	4.2%	5.0%	6.5%	8.2%	12.1%	14.9%	14.5%	15.8%	19.4%	17.7%	11.4%	14.2%	17.8%	19.1%
New entrants share in low-voltage demand	-	-	-	-	0.1%	4.6%	8.8%	13.2%	16.9%	20.6%	23.6%	23.6%	23.0%	24.4%	26.6%

Trends in new entrants share by area (by fiscal year)

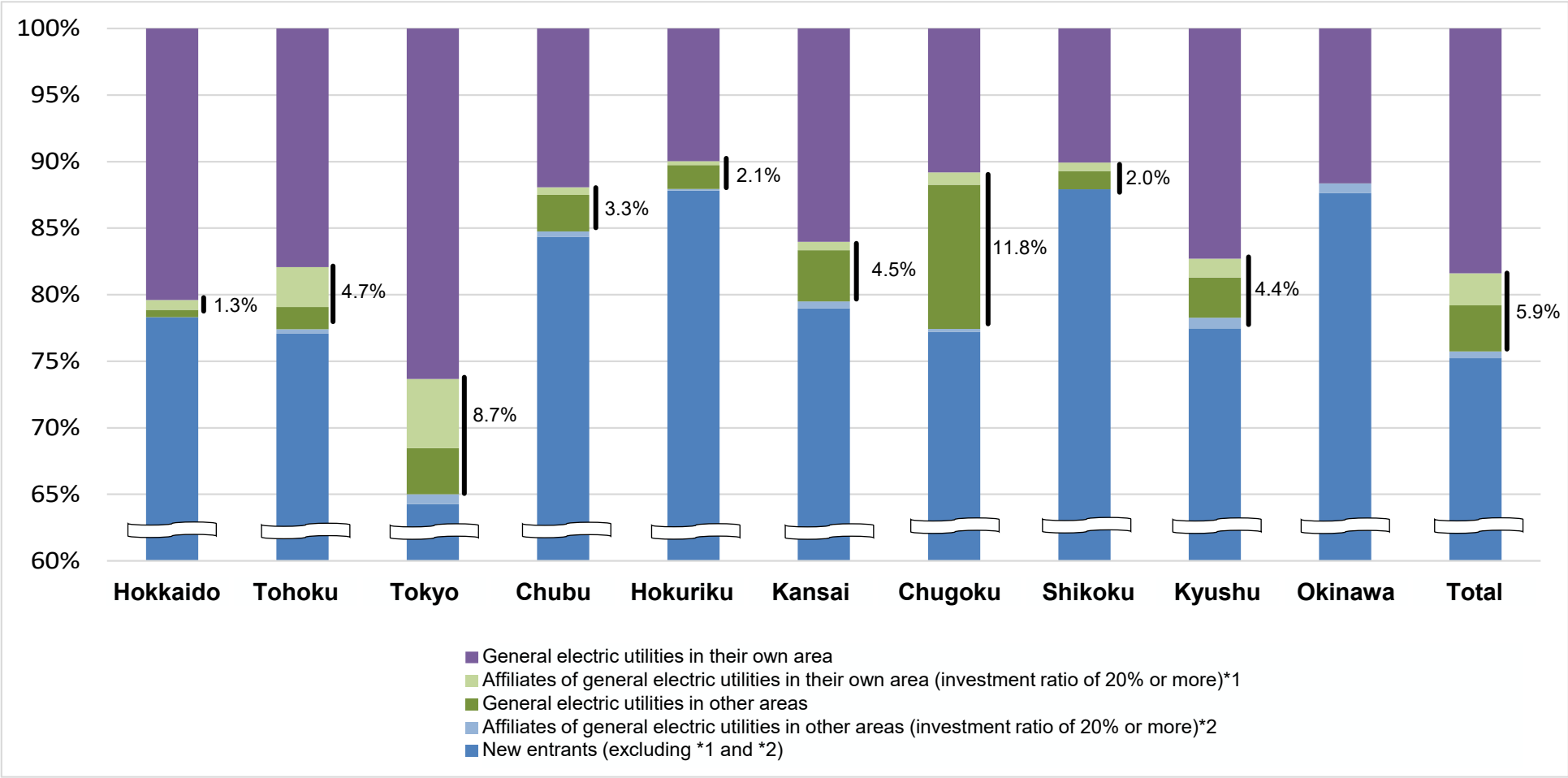
- Looking at the share of new entrants in electricity sales by area for all voltages combined, an upward trend has been observed recently in areas other than Chugoku. Tokyo is one of the areas where new entrants hold a high share of electricity sales.



Market share by area

- Supply by general electric utilities and their affiliated companies to areas outside their service areas was approximately 5.9% of the total. As of March 2025, the figure stood at 4.1%, showing an upward trend.

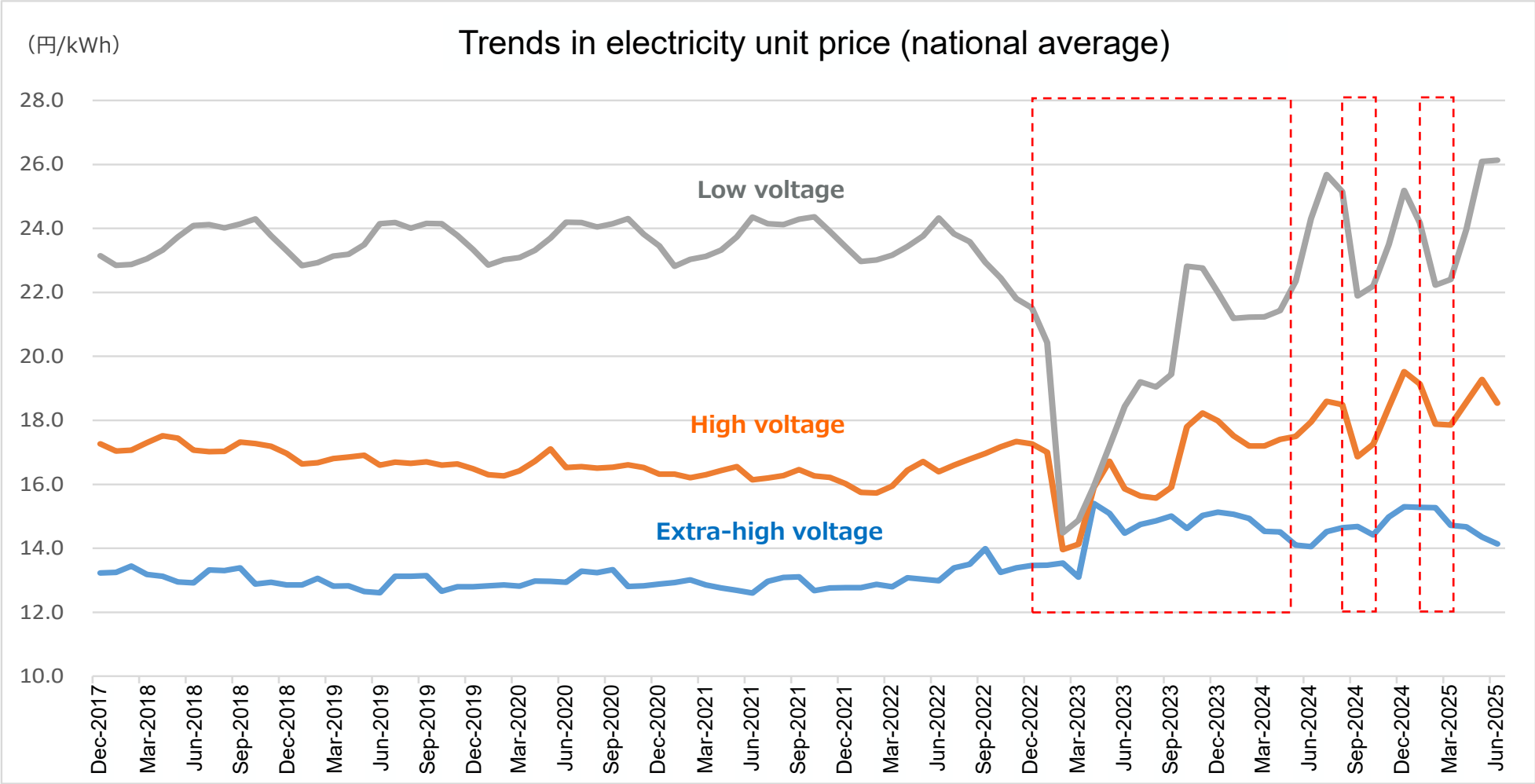
Market share by area (June 2025)



(Source) Electricity Trading Report
(Note) Based on electricity sales volume

Trends in electricity unit price (national average)
(excluding fuel cost adjustment unit price, FIT levy and consumption tax)

- After electricity liberalization, the unit price of electricity (excluding fuel cost adjustment unit price, FIT levy, and consumption tax) has recently fluctuated due to the impact of the drastic change mitigation project, but shown an upward trend in the long term.



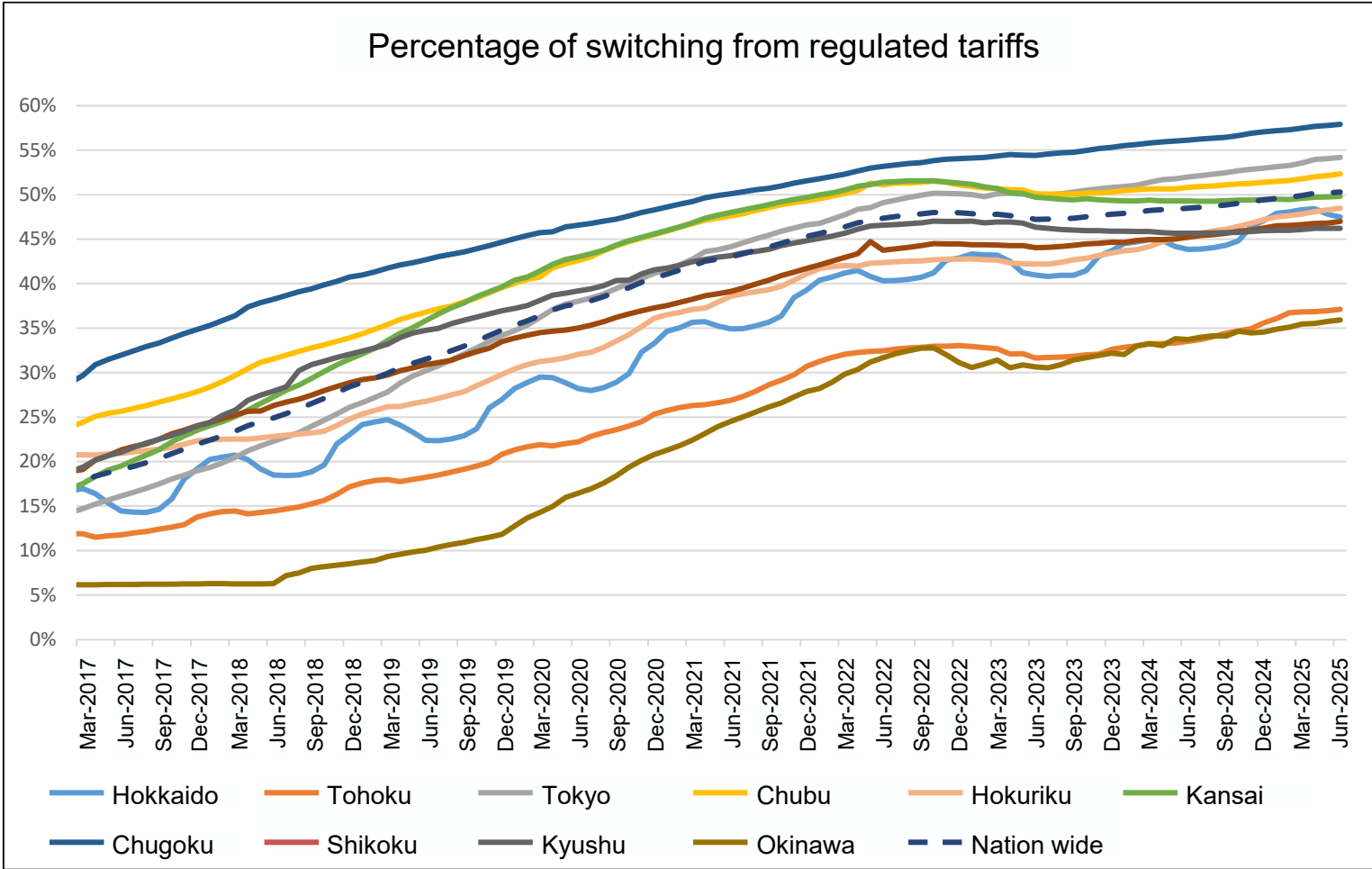
(Notes)
•Excluding fuel cost adjustment unit price, FIT levy, and consumption tax
(For exclusion of the fuel cost adjustment unit price [yen/kWh], the meter-rate figures published by the general electricity utility in each area are used for all electricity retailers.)
(Source)
Prepared by the Electricity and Gas Market Surveillance Commission Secretariat from Electricity Trading Reports

Drastic change mitigation (low voltage): Subsidy (per 1 kWh)	
•January to August 2023:	7.0 yen
•September 2023 to April 2024:	3.5 yen
•May 2024:	1.8 yen
•August to September 2024:	4.0 yen
•October 2024	2.5 yen
•January to February 2025	2.5 yen
•March 2025	1.3 yen

 Drastic change mitigation project

Trends in switching (low voltage) (1)

- Switching from the regulated tariff menu of general electric utilities to voluntary rate menus and new entrants has been on an upward trend since 2016, but the upward curves have been tapering off. As of June 2025, the nationwide switching rate was 50.3% (increased by 0.4 pt from March 2025).



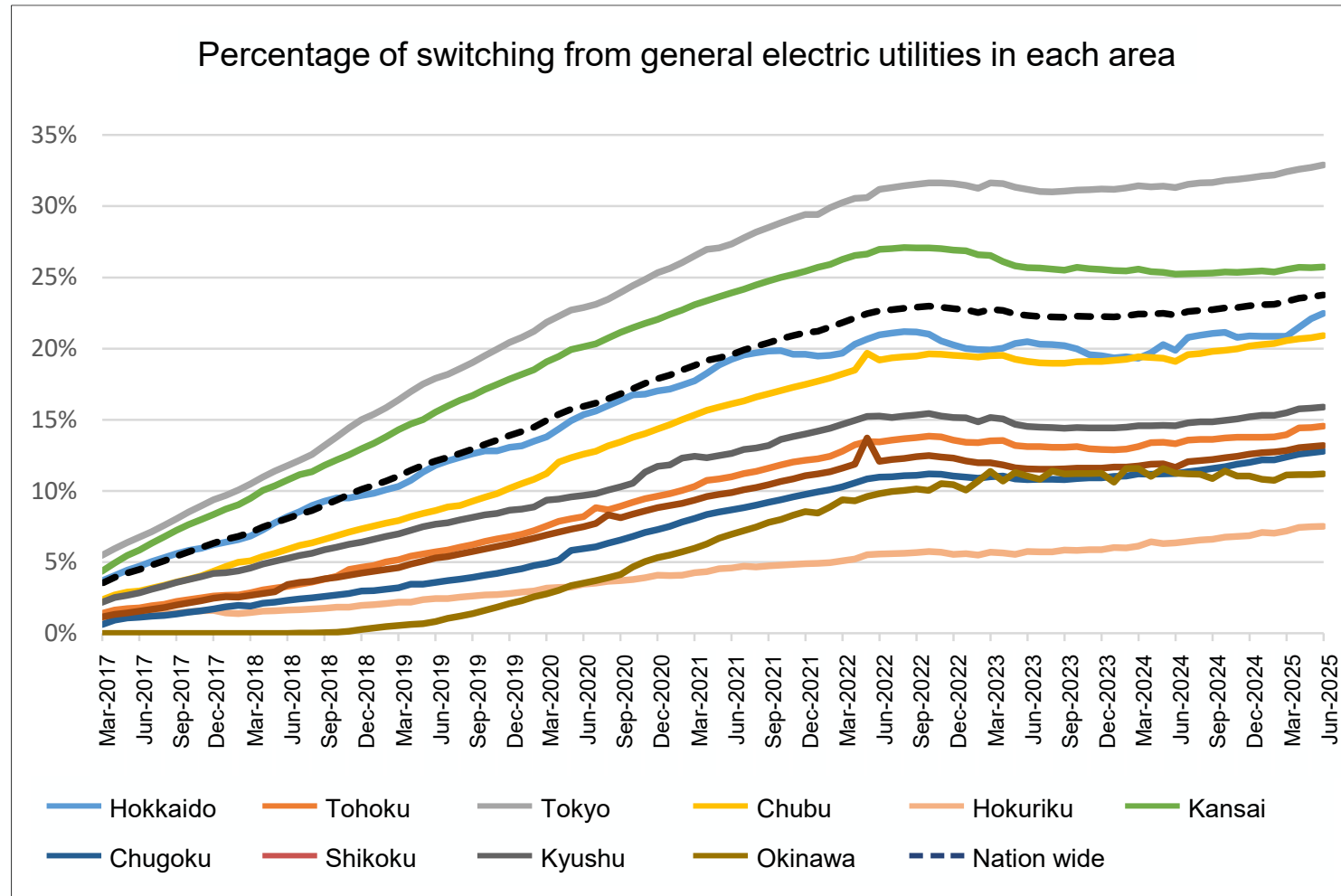
	June 2025
Hokkaido	47.5%
Tohoku	37.1%
Tokyo	54.2%
Chubu	52.3%
Hokuriku	48.5%
Kansai	49.8%
Chugoku	57.9%
Shikoku	47.0%
Kyushu	46.2%
Okinawa	35.9%
Nationwide	50.3%

(Source) Monthly electricity generation/reception report, Electricity Trading Report
(Note) Low voltage: Calculations are based on the number of contracts.

* For Okinawa, calculations are based only on low-voltage electricity (switching in high-voltage electricity is not included).

Trends in switching (low voltage) (2)

- The rate of switching from general electric utilities in each area to new entrants and other business operators (including general electric utilities that supply electricity outside their areas) continues to show no major fluctuations. As of June 2025, the nationwide switching rate was 23.8% (marginally increased by 0.5 pt from March 2025).



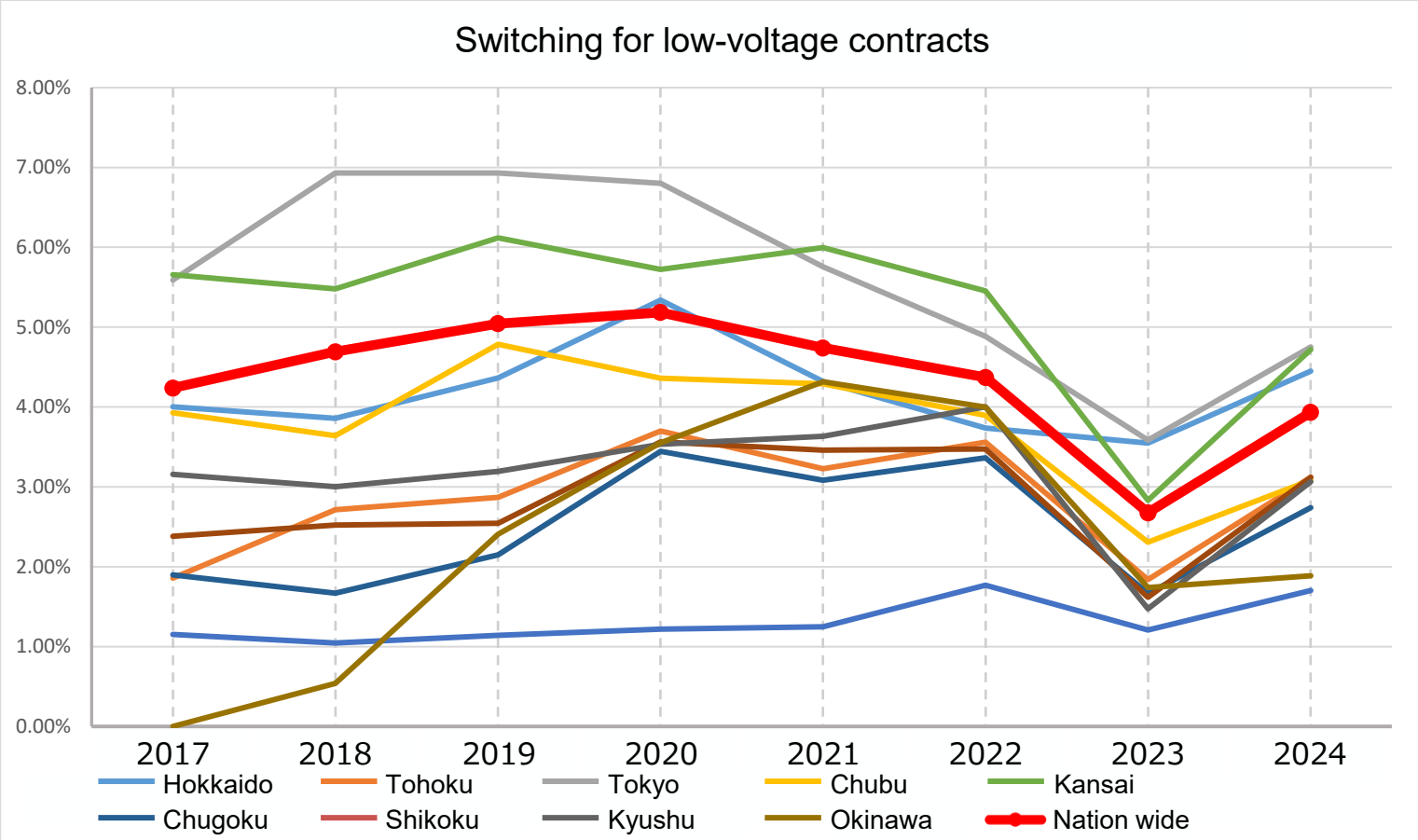
	June 2025
Hokkaido	22.5%
Tohoku	14.6%
Tokyo	32.9%
Chubu	20.9%
Hokuriku	7.5%
Kansai	25.7%
Chugoku	12.8%
Shikoku	13.2%
Kyushu	15.9%
Okinawa	11.2%
Nationwide	23.8%

(Source) Electricity Trading Report

(Note) Low voltage: Calculations are based on the number of contracts.

Trends in switching (low voltage) (3): Trends in the switching rate by fiscal year

- Observation of switching rates over years had continuously indicated a decline up to FY2023, but in FY2024 it reversed course, showing an increase of about 2 pt compared with the previous year. Although new services from emerging power suppliers have appeared, it should be noted that multiple large-scale business transfers among group companies have had a significant impact on this trend.



	FY2024
Hokkaido	4.5%
Tohoku	3.1%
Tokyo	4.8%
Chubu	3.1%
Hokuriku	1.7%
Kansai	4.7%
Chugoku	2.7%
Shikoku	3.1%
Kyushu	3.1%
Okinawa	1.9%
Nationwide	3.9%

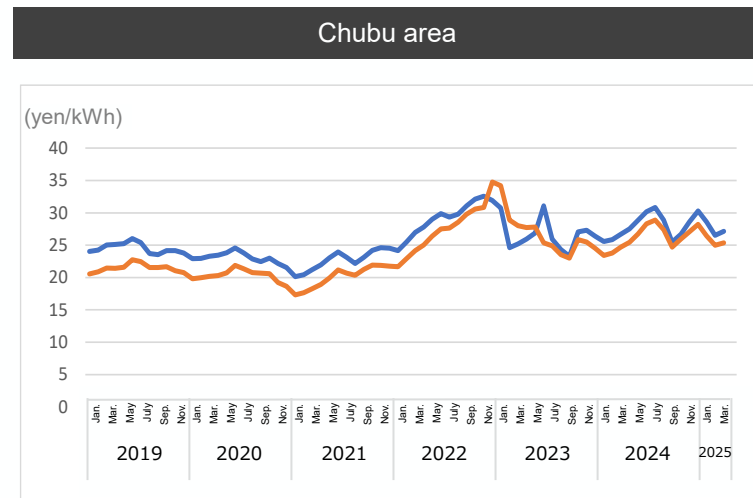
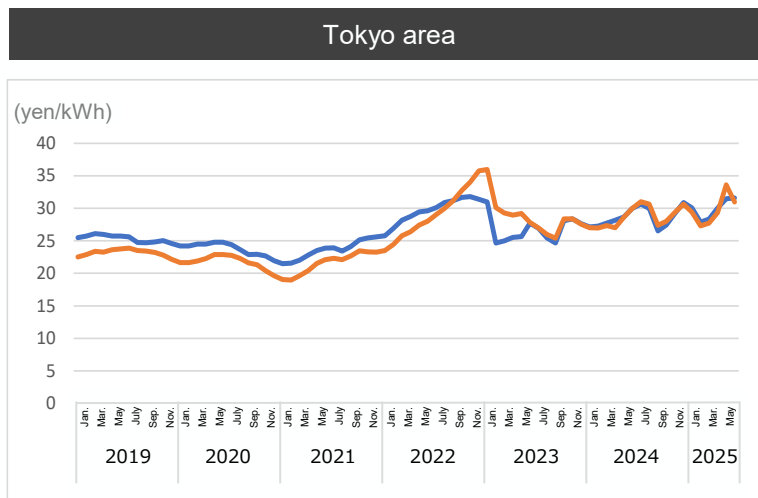
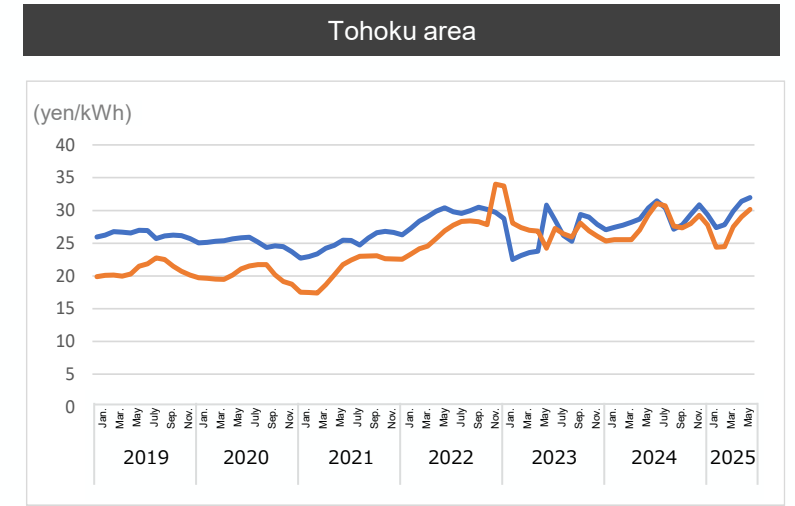
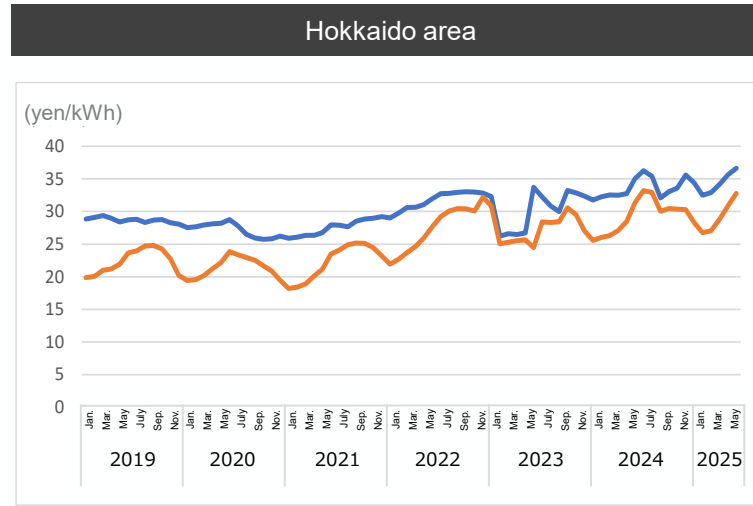
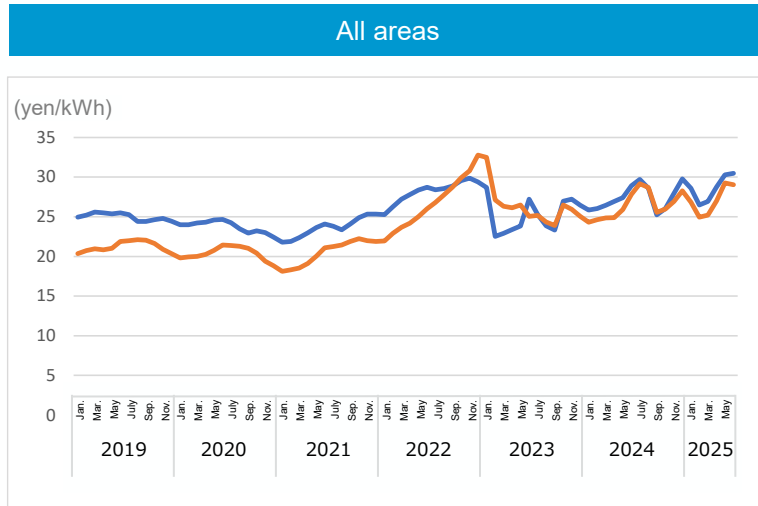
(Source: Electricity Trading Report)

(Note 1) Low voltage: Calculations are based on the number of contracts (sum of the monthly numbers of switched contracts for the fiscal year ÷ monthly average number of low-voltage contracts for the fiscal year × 100).

(Note 2) The data on switching is based on the sum of the number of contracts that have been switched in different combinations, such as from general electric utilities to new entrants, etc., from new entrants, etc. to general electric utilities, and from new entrants, etc. to new entrants, etc.

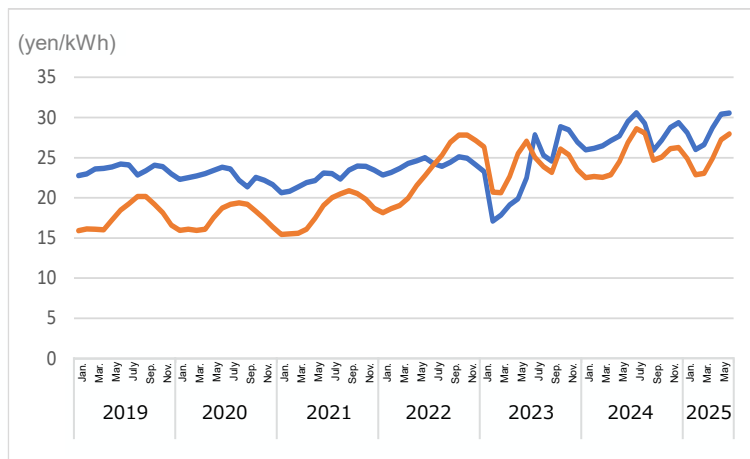
Trends in average unit price of low-voltage rates (by area) (1)

- Trends in regulated tariffs and voluntary rates continuously show that regulated tariffs have recently been at the same level as or higher than voluntary rates in all areas, since the regulated tariffs were revised upward in 2023.

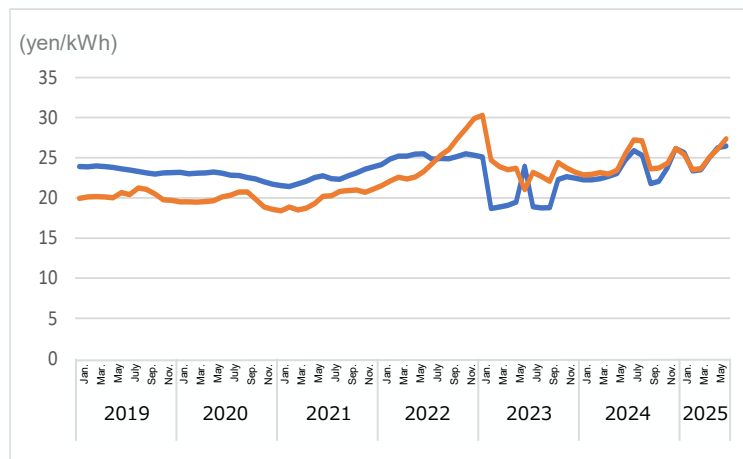


Trends in average unit price of low-voltage rates (by area) (2)

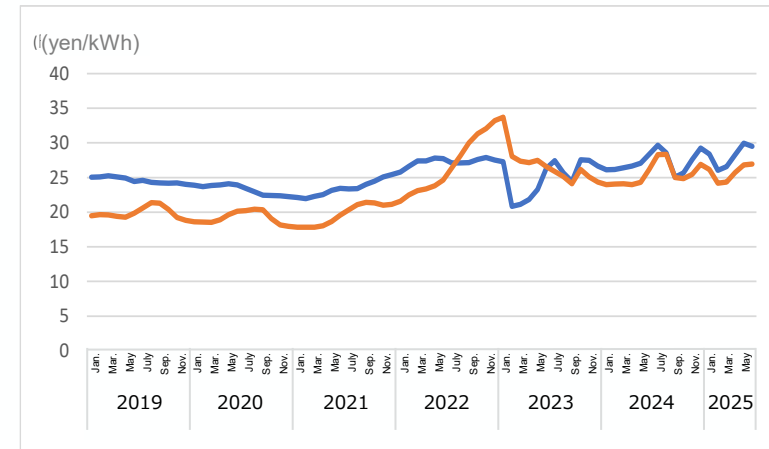
Hokuriku area



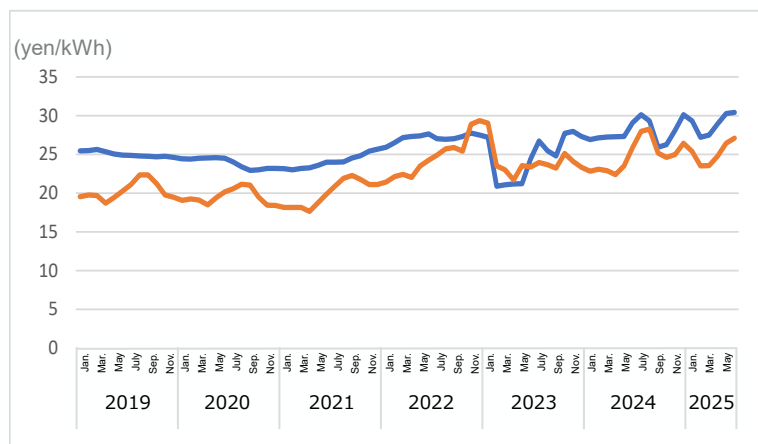
Kansai area



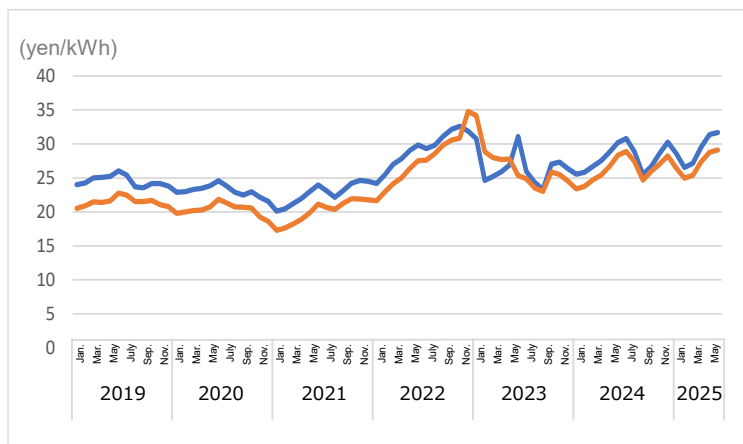
Chugoku area



Shikoku area



Kyushu area



Legend — Voluntary rates — Regulated tariffs

【 Quarterly report 】

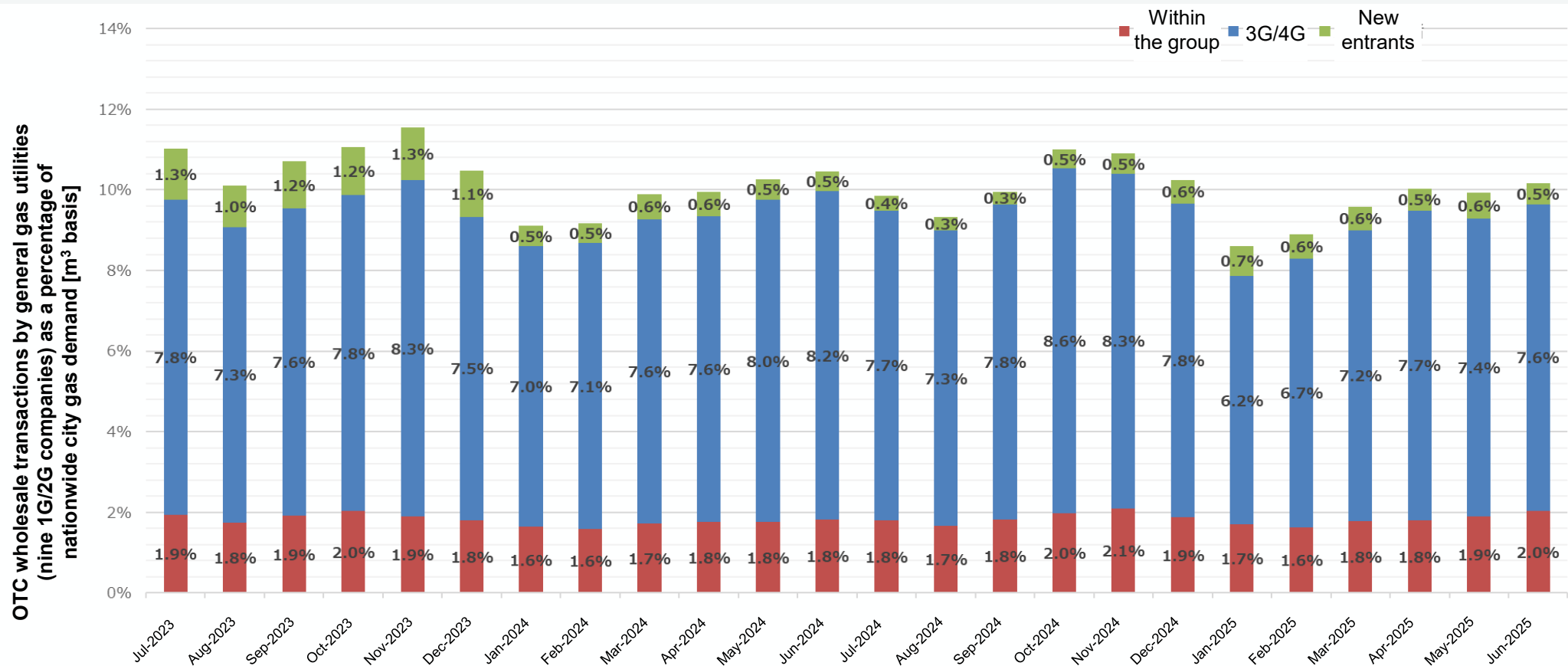
- **Wholesale electricity market**
 - JPEX market
 - Day-Ahead market
 - Intraday market
 - Forward transaction market
- **Voluntary efforts by general electric utilities, etc.**
 - Supply of surplus electricity to JEPX market
 - Trading status and sell bid withdrawal status in the intraday market
 - Status of block selling bidding
 - Supply of power source to the market for wholesale electricity utilities
 - Status of bidding, etc. for public hydroelectricity business
 - Status of OTC transactions

【Medium- to long-term trend report】

- **Wholesale electricity market**
 - JPEX market
 - Trends in contracted volume
 - Trends in contracted price
 - Trends in the market splitting occurrence rate
 - JEPX spot price and fuel cost
- **Retail market**
 - Trends in new entrants share by area
 - Market share by area
 - Trends in electricity unit price
 - Trends in switching
 - Average unit price of low-voltage rates
- **Gas market**
 - Status of OTC transactions of general gas utilities
 - Usage status of Start-up wholesale measure

Status of OTC transactions of general gas utilities (9 companies: 1G/2G)

- In order to understand the actual status of wholesale transactions in the city gas sector, gas wholesale transactions of nine 1G/2G companies*¹ were monitored (covering data from January 2020 and showing data for the last two years available, from July 2023).
- As of the end of June 2025, the ratio of OTC wholesale supply of 1G/2G*³ to the retail supply of city gas nationwide*² was approximately 10%.
- The ratio of OTC wholesale supply to new entrants (companies that are not general gas utilities) was approximately 0.5% (The share of retail sales volume by new entrants was approximately 18.4% [as of the end of June 2025]).



*1 1G: TOKYO GAS, Osaka Gas, Toho Gas 2G: Hokkaido Gas, Gas Bureau, City of Sendai, SHIZUOKA GAS, HIROSHIMA GAS, Saibu Gas, Nihon Gas (Kagoshima)
 *2 Based on 45 MJ.
 *3 Includes terminal exit wholesale, pipe connection point wholesale, demand point wholesale (One-touch wholesale/Start-up wholesale), and liquid wholesale (lorry, etc.) Regarding liquid wholesale, conversions were made on the assumption that 1 ton of liquefied natural gas ≈ 1,220 m³, and do not take into account calorific value adjustments, etc.
 *4 3G/4G companies refer to general gas utilities that primarily receive wholesale gas supply from other business operators and provide retail supply through their own pipeline network.
 *5 Group companies are defined as companies with a capital relationship of 20% or more.

Usage status of Start-Up Wholesale measure (as of the end of June 2025)

- To contribute to the goal of the gas system reform, the nine general gas utilities (1G/2G) began a voluntary initiative called “Start-Up Wholesale” in FY2020 to support the entry of new business operators.
- Regarding the Start-Up Wholesale, the number of inquiries made to wholesalers, the number of contracts concluded, the number of contract negotiations underway, and the number of contract negotiations completed are as follows (as of the end of June 2025).

Wholesaler name	No. of inquiries	Contracts concluded	Contracts under negotiation	Contract negotiations completed*
Tokyo Gas	24 cases	4 cases	0 case	20 cases
Osaka Gas	16 cases	5 cases	1 case	9 cases
Toho Gas	15 cases	2 cases	3 cases	10 cases
Hokkaido Gas	17 cases	2 cases	3 cases	12 cases
Shizuoka Gas	18 cases	6 cases	3 cases	9 cases
Saibu Gas	17 cases	4 cases	1 case	12 cases
Hiroshima Gas	6 cases	1 case	0 case	5 cases
Gas Bureau, City of Sendai	9 cases	0 case	3 cases	6 cases
Nippon Gas	5 cases	1 case	0 case	4 cases
Total	127 cases	25 cases	14 cases	87 cases

* The number of contract negotiations completed includes negotiations that were explicitly discontinued due to failure to reach an agreement, and cases in which an inquiry was received from a business operator considering use, but did not lead to negotiations. The number also includes cases in which there was no further contact, no initiation of contract negotiations, or no progress in negotiations for more than three months from the inquiry date.