

The Calculation of the Fuel Cost Adjustment Unit Price and the Electricity Rates for May 2018 (Kanto Area)

1. The calculation of the Average Fuel Price

Calculate the 3-month average fuel price for each fuel type (i.e. crude oil, LNG, and coal).

Multiply the average fuel prices in above by the respective conversion factors, and add all the numbers together.

(Below are the prices provided in the Trade Statistics of Japan published by the Ministry of Finance Japan)

	Jan. - Mar. 2012 (at the time of rate revision)	Nov. 2017 - Jan. 2018 (for April 2018)	Dec. 2017- Feb. 2018 (for May 2018)			
			Average	Dec. 2017	Jan. 2018	Feb. 2018
Crude Oil (JPY/kl)	57,802	43,713	45,503	44,204	45,681	46,925
LNG (JPY/ t)	67,548	48,207	49,826	47,459	50,381	51,544
Coal (JPY/ t)	11,452	11,811	11,946	11,863	11,838	12,151
Average Fuel Price(JPY/kl)	44,200	33,000				

(detailed data) (detailed data) (preliminary data)

< Conversion Factor >
Crude Oil Conversion Factor
× Caloric Component Ratio

	Crude Oil Price	45,503	JPY/kl	×	0.1970	(α)
	LNG Price	49,826	JPY/ t	×	0.4435	(β)
	Coal Price	11,946	JPY/ t	×	0.2512	(γ)
+)						
	Average Fuel Price	34,100	JPY/kl	(Maximum unit: 100 JPY) Rounded off to the nearest 10 (compared with the previous period: +1,100JPY/kl)		

2. The calculation of the Fuel Cost Adjustment Unit Price (in the case of Low-Voltage Supply)

$$\begin{aligned}
 \text{Fuel Cost Adjustment Unit Price} &= \left(\frac{\text{Average Fuel Price}}{34,100 \text{ JPY / kl}} - \frac{\text{Basic Fuel Price}}{44,200 \text{ JPY / kl}} \right) \times \frac{\text{Basic Unit Price}}{1,000} \\
 &= \frac{-230.28 \text{ JPY/kWh}}{1,000} \\
 &\downarrow \text{(rounded off to two decimal places)} \\
 &= \frac{-2.30 \text{ JPY/kWh}}{1,000}
 \end{aligned}$$

3. The calculation of the Electricity Rates for May 2018 (in the case of the average model)

*The fuel cost adjustment price, which is calculated by multiplying the fuel cost adjustment unit price by the amount of power consumed, is included in the electricity rates.

Example: For the customers of 30A meter-rate lighting B with 260kWh of electricity consumption per month.

Automatic bank transfer discount included.

Demand Charge 842.40 JPY	+	<table style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;">Energy Charge</td> </tr> <tr> <td style="text-align: right;">19.52 JPY/kWh</td> <td style="text-align: left;">× 120kWh</td> </tr> <tr> <td style="text-align: right;">26.00 JPY/kWh</td> <td style="text-align: left;">× 140kWh</td> </tr> <tr> <td colspan="2" style="text-align: center;">+</td> </tr> <tr> <td colspan="2" style="text-align: center;">Fuel Cost Adjustment</td> </tr> <tr> <td style="text-align: right;">Fuel Cost Adjustment Unit Price</td> <td style="text-align: left;">Consumption</td> </tr> <tr> <td style="border: 1px dashed black; text-align: right;">-2.30 JPY/kWh</td> <td style="border: 1px dashed black; text-align: left;">× 260kWh</td> </tr> </table>	Energy Charge		19.52 JPY/kWh	× 120kWh	26.00 JPY/kWh	× 140kWh	+		Fuel Cost Adjustment		Fuel Cost Adjustment Unit Price	Consumption	-2.30 JPY/kWh	× 260kWh	+	Renewable Energy Promotion Surcharge 754 JPY	-	Automated Bank Transfer Discount 54 JPY
Energy Charge																				
19.52 JPY/kWh	× 120kWh																			
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-2.30 JPY/kWh	× 260kWh																			
						= 6,926 JPY														

- The calculated electricity rates above include a consumption tax and other costs.
- The result rate is calculated by the fuel cost adjustment and the new renewable energy power promotion surcharge unit price.
(From May 2018 to April 2019: 2.90yen / kWh [Released by Ministry of Economy, Trade and Industry, on March 23, 2018.])