

Calculation of Fuel Cost Adjusted Unit Price and Electricity Rates for July 2014

1. Average Fuel Price Calculation

- ① Calculate 3-month average fuel prices by fuel type (crude oil, LNG, and coal).
- ② Calculate average fuel price using three figures and conversion factor.

(trade statistics prices published by Ministry of Finance Japan)

	Jan - Mar 2012 (Rate revision)	Jan - Mar 2014 (for June 2014)	February - April 2014 (for July 2014)			
			Average	Feb 2014	Mar 2014	Apr 2014
Crude Oil (JPY/kl)	57,802	72,356	71,039	71,716	70,891	70,486
LNG (JPY/ t)	67,548	89,064	88,842	89,026	88,098	89,479
Coal (JPY/ t)	11,452	10,858	10,708	10,861	10,818	10,404
Average Fuel Price(JPY/kl)	44,200	56,500		(fixed)	(fixed)	(flash)

	(basic fuel price)		< Conversion Factor > Crude Oil Conversion Factor × Caloric Component Ratio
Crude Oil Price	71,039 JPY/kl	×	0.1970 (α)
LNG Price	88,842 JPY/ t	×	0.4435 (β)
Coal Price	10,708 JPY/ t	×	0.2512 (γ)
+)			
Average Fuel Price	56,100 JPY/kl	(Maximum unit: 100 JPY) Rounded off to nearest 10 (compared with the previous period: + 400 Y/kl)	

2. Fuel Cost Adjusted Unit Price Calculation (Low-Voltage Supply)

$$\begin{aligned}
 \text{Fuel Cost Adjusted Unit Price} &= \left(\frac{\text{Average Fuel Price}}{56,100 \text{ ¥/kl}} - \frac{\text{Basic Fuel Price}}{44,200 \text{ ¥/kl}} \right) \times \frac{\text{Basic Unit Price}}{0.228 \text{ JPY/kWh}} \\
 &= \frac{2.7132 \text{ JPY/kWh}}{1,000} \\
 &\downarrow \text{(rounded off to the hundredth)} \\
 &= \boxed{2.71 \text{ JPY/kWh}}
 \end{aligned}$$

3. Electricity Rates Calculation for July 2014 (Average Model)

The fuel cost adjusted price, which is the fuel cost adjusted unit price multiplied by consumption, is added to calculate the electricity rate.

In case of 30A meter-rate lighting B and 290kWh of electricity consumption per month.

A reduction by automatic bank transfer discount included.

Demand	+	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Energy</td> <td style="width: 50%;"></td> </tr> <tr> <td>19.43 JPY/kWh × 120kWh</td> <td></td> </tr> <tr> <td>25.91 JPY/kWh × 170kWh</td> <td></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="border: 1px dashed black; padding: 2px;">Fuel Cost Adjusted Unit Price</td> <td style="border: 1px dashed black; padding: 2px;">Consumption</td> </tr> <tr> <td style="border: 1px solid black; text-align: center;">2.71 JPY/kWh</td> <td style="text-align: center;">× 290kWh</td> </tr> </table>	Energy		19.43 JPY/kWh × 120kWh		25.91 JPY/kWh × 170kWh		+		Fuel Cost Adjustment		Fuel Cost Adjusted Unit Price	Consumption	2.71 JPY/kWh	× 290kWh	+	Renewable Energy Promotion Surcharge	+	Solar Surcharge	-	Account Transfer Discount
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842.40 JPY				217 JPY		14 JPY		54 JPY														
= 8,541 JPY/kl																						

* The calculation above includes consumer taxes and other related costs.