

Calculation of Fuel Cost Adjusted Unit Price and Electricity Rates for June 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)	Dec 2013 - Feb 2014 (for May 2014)	Jan - March 2014 (for June 2014)			
			Average	Jan 2014	Feb 2014	Mar 2014
Crude Oil (JPY/kl)	57,802	72,768	72,356	74,630	71,716	70,838
LNG (JPY/ t)	67,548	88,103	89,064	90,049	89,026	88,098
Coal (JPY/ t)	11,452	10,851	10,858	10,900	10,861	10,810
				(fixed)	(fixed)	(flash)
Average Fuel Price(JPY/kl)	44,200	56,100				
	(basic fuel price)			< Conversion Factor > Crude Oil Conversion Factor × Caloric Component Ratio		
Crude Oil Price	72,356	JPY/kl	×	0.1970	(α)	
LNG Price	89,064	JPY/ t	×	0.4435	(β)	
Coal Price	10,858	JPY/ t	×	0.2512	(γ)	
+)						
Average Fuel Price				(Maximum unit: 100 JPY) Rounded off to nearest 10 (compared with the previous period: + 400 Y/kl)		
				56,500	JPY/kl	

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

$$\begin{aligned}
 \text{Fuel Cost Adjusted Unit Price} &= \left(\frac{\text{Average Fuel Price}}{56,500 \text{ ¥/kl}} - \frac{\text{Basic Fuel Price}}{44,200 \text{ ¥/kl}} \right) \times \frac{\text{Basic Unit Price}}{0.228 \text{ JPY/kWh}} \\
 &= \frac{2.8044 \text{ JPY/kWh}}{1,000} \\
 &\downarrow \text{(rounded off to the hundredth)} \\
 &= \boxed{2.80 \text{ JPY/kWh}}
 \end{aligned}$$

3. Electricity Rates Calculation for June 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="padding: 2px;">Energy</td> <td style="padding: 2px;">×</td> <td style="padding: 2px;">Consumption</td> </tr> <tr> <td style="padding: 2px;">19.43 JPY/kWh</td> <td style="padding: 2px;">×</td> <td style="padding: 2px;">120kWh</td> </tr> <tr> <td style="padding: 2px;">25.91 JPY/kWh</td> <td style="padding: 2px;">×</td> <td style="padding: 2px;">170kWh</td> </tr> <tr> <td colspan="3" style="text-align: center; padding: 2px;">+</td> </tr> <tr> <td colspan="3" style="text-align: center; padding: 2px;">Fuel Cost Adjustment</td> </tr> <tr> <td style="padding: 2px;">Fuel Cost Adjusted Unit Price</td> <td style="padding: 2px;">×</td> <td style="padding: 2px;">Consumption</td> </tr> <tr> <td style="padding: 2px;">2.80 JPY/kWh</td> <td style="padding: 2px;">×</td> <td style="padding: 2px;">290kWh</td> </tr> </table>	Energy	×	Consumption	19.43 JPY/kWh	×	120kWh	25.91 JPY/kWh	×	170kWh	+			Fuel Cost Adjustment			Fuel Cost Adjusted Unit Price	×	Consumption	2.80 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																					
= 8,567 JPY/kl																													

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