

Calculation of Fuel Cost Adjusted Unit Price and Electricity Rates for February 2013

1. Average Fuel Price Calculation

Calculate a 3-month average fuel prices by fuel types (crude oil, LNG, and coal).

Calculate average fuel price using above three figures and conversion factor.

(trade statistics prices published by Ministry of Finance Japan)

	Jan.-Mar. 2012 (Rate Revision)	Aug. - Oct. 2012 (for Dec. 2012)	Sep. 2012 - Nov. 2012 (for February 2013)			
			Average	Sep. 2012	Oct. 2012	Nov. 2012
Crude Oil (JPY/kl)	57,802	54,040	56,241	55,104	56,919	57,176
LNG (JPY/ t)	67,548	68,158	64,918	68,433	62,878	63,200
Coal (JPY/ t)	11,452	9,906	9,833	9,990	9,819	9,686
Average Fuel Price(JPY/kl)	44,200	43,400		(fixed)	(fixed)	(flash)

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

Crude Oil Price	56,241 JPY/kl	×	0.1970 (α)	
LNG Price	64,918 JPY/ t	×	0.4435 (β)	
Coal Price	9,833 JPY/ t	×	0.2512 (γ)	
<div style="display: flex; justify-content: space-between;"> ↓ (rounded off to 100 JPY) (compared with the previous period: -1100Y/kl) </div>				
Average Fuel Price	42,300 JPY/kl			

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

$$\begin{aligned}
 \text{Fuel Cost Adjusted Unit Price} &= (\text{Average Fuel Price} - \text{Basic Fuel Price}) \times \frac{\text{Basic Unit Price}}{1,000} \\
 &= (42,300 \text{ JPY/kl} - 44,200 \text{ JPY/kl}) \times \frac{0.222 \text{ JPY/kWh}}{1,000} \\
 &= -0.4218 \text{ JPY/kWh} \\
 &\downarrow \text{ (rounded off to the hundredth) } \\
 &= \boxed{-0.42 \text{ JPY/kWh}}
 \end{aligned}$$

3. Electricity Rates Calculation for February 2013 (averaged 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 Charge	+	Energy Charge 18.89 JPY/kWh × 120 kWh 25.19 JPY/kWh × 170 kWh + Fuel Cost Adjustment Fuel Cost Adjusted Unit Price × Consumption <div style="border: 1px dashed black; padding: 2px; display: inline-block;"> -0.42 JPY/kWh × 290 kWh </div>	+	Renewable Energy Promotion Surcharge 63 JPY	+	Solar Surcharge 17 JPY	-	Account Transfer Discount 53 JPY	
819.00 JPY									= 7,273 JPY/kl

* tax included